

CORRELATION OF FEEDBACK COMMENTS WITH STUDENT ATTAINMENT ON AN OPEN UNIVERSITY MODULE

L. Robson

The Open University (UNITED KINGDOM)

linda.robson@open.ac.uk

Abstract

A key aspect of good student support is giving personalised feedback to students on their performance, and supporting them to bridge the gap between their attainment and the desired level of achievement (Ramaprasad, 1983). This project looked at the feedback provided by four tutors on a work based learning module: T227 Change, Strategy and Projects at Work, at the Open University UK.

Walker (2009) reported that many students do not understand comments on their work, or are unable to apply that feedback to their future learning and assessments. This project builds on Walker's work to investigate any variation in the feedback students with different attainment levels are being offered. 1899 individual feedback comments from 48 student assignments were analysed, to look for any variation in the type and style of feedback given to students achieving different levels of attainment. The comment analysis was undertaken using a variation of Brown and Glover's (2006) feedback classification system, to identify the motivational category (positive, neutral, negative) and practical category (indication, correction, explanation) of each feedback comment provided to the student.

The analysis showed a correlation between assignment grade and positive comments, and a negative correlation between assignment grade and negative comments. However, despite a bigger attainment gap on the scripts which scored lower there was no correlation between assignment grade and number of comments, or any correlation between negative and correction comments. Many comments were classified as indication, but did not offer any explanation of exactly what was good or bad within the student work.

Keywords: feedback, assessment

1 CONTEXT

The Open University UK (OU), is a distance learning institution with over 173,000 students [1]. As there are no entry requirements for students wishing to study with the OU, there is a high level of diversity amongst the student cohort in terms of prior experience and qualifications. The majority of students have taken a break from formal education before joining the OU and it is frequently their first experience of distance education. There is a particularly high proportion of disabled students. Approximately 21,000 OU students have declared a disability and many of those receive additional support to help them with their studies. The OU model of distance learning is to provide student with pre-prepared module materials which may be in print or electronic format, supplemented by a range of other resources including either face to face or online tutorials, home experiment kits, online simulations and in some instances residential schools. Each student is allocated to an Associate Lecturer who marks their work and provides individual feedback on their performance, as well as academic and pastoral support. The individualised feedback on assessment is considered to be a key aspect of the teaching and, when successful, forms part of an ongoing dialogue between the student and their Associate Lecturer.

2 RATIONAL

Ramaprasad [2] explored the concept of feedback, in the context of Higher Education, and identified that for a communication to be considered feedback it must bridge the gap between the students'

attainment and the desired level of achievement. That is to say that the receiver should be able to identify the fault or omission and have an understanding of how it could be rectified or improved. This was developed further by Ramsden [3] who identified one of the key characteristics of quality teaching to be effective feedback comments on student's work. More recently Scott [4] identified feedback as "something that teachers give to students in order for them to understand the result they have received and to improve their future work" (p49). There is an implicit assumption in all these definitions that all students have a desire to improve and to achieve maximum marks in their assignments. This may not be the case for all students as some may be striving to achieve "good enough" rather than to excel. Consequently "the gap" referred to by Ramaprasad [2] may not be perceived in the same way by both student and Associate Lecturer, and there will be variation in student aspirations and hence their perception of "the gap". There is much literature on differentiation in student aspiration and expectation according to personal characteristics (race, economic status, parental education etc) which would influence the student perception of desired level of achievement [5]. Whilst acknowledging this issue, the assumption of this project is that students want to achieve the highest marks possible.

Walker [6] worked within the OU context to investigate how usable students find the comments their Associate Lecturers provide as feedback on their assignments. That work has informed a significant amount of academic development for Associate Lecturers around assessment feedback within the OU, particularly in the Maths, Computing and Technology faculty, where she was based. In interviews with students, Walker found the top two most common responses students had to comments were; they didn't understand the comment or needed further explanation or more positively that the comment was useful for future work. This was in line with the findings of other studies around the student experience of feedback which reported students find it lacking specificity [7], difficult to understand [8] and confidence reducing [9]. This suggests that whilst there is much feedback being offered to students by their tutors, frequently the comments provided are not being understood, are not motivating the students or do not comply with the Ramaprasad [2] definition, that feedback should bridge the performance gap.

In the intervening years since Walker's research, the OU have encouraged Associate Lecturers to develop their feedback style to include more explanations and examples, pointing out that their efforts in providing feedback are wasted if the student does not understand them or is unable to act upon them.

If the purpose of feedback is to bridge the gap between attainment and target achievement then it might be expected that more feedback would be given where there is a bigger gap to bridge. Thus, it might be expected that the volume and or type of comments provided to students might differ by level of attainment, as measured by grade awarded. Therefore, this project sought to analyse the feedback given on written assessments to high and low achieving students to identify any patterns or differences.

3 METHODOLOGY

This project looked at feedback given to students studying on a second level OU module T227: Change, Strategy and projects at work. This 30 credit module requires students to submit three assignments roughly equally spaced through the 20 weeks of the module presentation. In total 48 student scripts were analysed, which had been marked and commented on by four of the module Associate Lecturers. The sample was composed of the two highest and two lowest scoring scripts from each of the 3 assignments as marked by each of the four Associate Lecturers.

Analysis of the script comments was carried out using an adaption of the Brown and Glover [10] classification system which was also used by Walker [6].

Brown and Glover identified 6 different sorts of feedback comments:

- **content** – that is, comments that relate to the substance of the answer, to the appropriateness of what the student has chosen to include, to the quality and/or accuracy of the material, to omissions, etc.;
- **skills development** – that is, comments about the structure of the answer (whether text, diagram or mathematical argument), about

whether the question has been properly addressed, about the student's communication skills, etc.;

- **motivating** – that is, praise, encouragement and other comments designed to motivate the student;
- **de-motivating** – that is, using harsh language, judgemental;
- a mention of **future study**;
- a reference to a **resource** the student could use.

Brown and Glover [10] also classified the feedback comments in terms of depth; being indication, correction or justification.

For this project the classification was simplified. Each comment was categorised as motivating, demotivating or neutral, and indication, correction or explanation. The motivating comments were also subdivided as indication, amplification or explanation. It is recognised that there is some subjectivity in the categorisation of comments so all the scripts were analysed by a single researcher in order to maintain consistency. Feedback at the OU is provided both on the student assignment script and in a summary cover sheet. Both on script comments and coversheet feedback were included in the analysis.

4 FINDINGS

An initial analysis of the data has been undertaken. More detailed analysis will be reported on at a later date. In total 1899 comments were analysed from the 48 scripts. The average number of comments per script was 40 (range 18-97).

The vast majority of comments were either motivating or neutral (Fig 1).

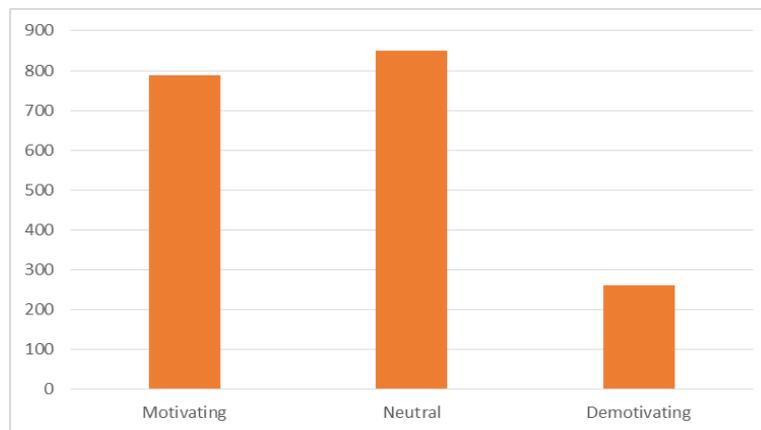


Figure 1: Number of comments classified as motivating, neutral or demotivating.

803 of the comments were classified as indicating; they indicated a good or bad point only with no further elaboration. 401 comments offered a correction. 695 gave an explanation of why the identified part of the work was good or bad.

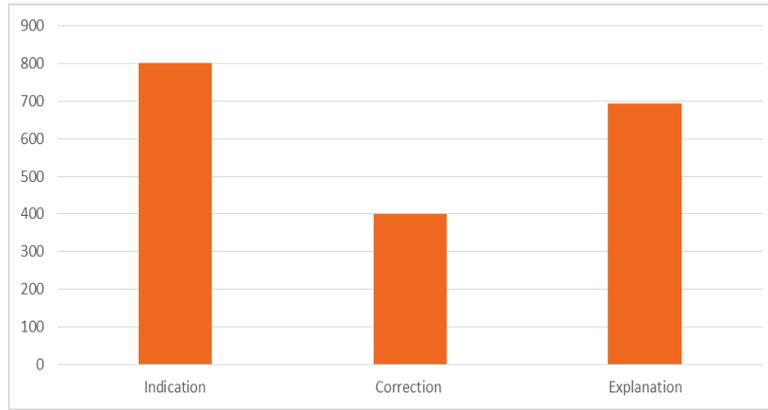


Figure 2: Number of comments classified as indication, correction or explanation.

Further analysis was carried out to look for data correlation, using the correlation function in Microsoft Excel based on the formula:

$$r = \frac{1}{n-1} \sum_{i=1}^n \left(\frac{x_i - \bar{x}}{s_x} \right) \left(\frac{y_i - \bar{y}}{s_y} \right)$$

A positive correlation was observed between the assignment grade and the number of motivating comments ($r=0.736775$) and conversely a negative correlation between grade and demotivating comments ($r=-0.76917$). However, there was no correlation between assignment grade and total number of comments ($r=-0.27818$).

A similar level of correlation was observed when the data was split into the high grade and lower grade groups.

Further correlation analysis was carried out to look for any relationship between the motivation classification and the comment depth. The only statistically significant correlation observed was with neutral comments and correction.

Table 1: Correlation between comment motivation classification and depth classification.

Comment types	Correlation $r=$
Demotivating : explanation	0.445172
Demotivating : correction	0.173706
Neutral : explanation	0.256198
Neutral : correction	0.870205
Motivating : explanation	0.000562
Motivating : correction	-0.260423

5 DISCUSSION

As might be expected, there was a positive correlation between assignment grade and motivating comments, as these would include comments such as “well done” and “excellent answer”. It is perhaps disappointing that there was also a correlation between lower assignment grade and demotivating comments. Although there is, by definition, a greater attainment gap to bridge where an

assignment has achieved a lower grade, these students are likely to need greater amounts of encouragement and motivation in order to achieve the module aims. This potentially indicated a need to consider the language used in the feedback to provide less criticism and be more motivating towards weaker students. Carless [11] has previously observed that “if feedback is negative it can be threatening to a student’s self-perception”(p221) so there is a potential concern regarding how weaker students are likely to react to demotivating language used in the feedback comments. Whilst there is a need for errors to be highlighted in order to give constructive feedback and facilitate future improvements, care needs to be taken to ensure the overall experience for the student is still motivating in order to ensure they are retained and able to develop in their studies.

42% of the comments were classified on depth as indicating. This raises some concerns as the absence of explanation means that the student may not be aware of exactly the nature of the omission, inaccuracy or in the case of positive indication comments, precisely what should be repeated in future assignments. This is again in line with the report of Carless [11] and Walker [6] where students frequently report feedback does not give enough detail on the improvements which are needed.

There was no correlation between the overall number of comments and the assignment score. This was surprising as it might be expected for there to be more comments on lower marked scripts, because there was a bigger gap, or multiple gaps, between attainment and target, and hence more things to correct or explain than on the stronger scripts. This may be explained by some Associate Lecturers being concerned that too many comments on a weak script may overwhelm a student. Instead of giving feedback on every issue the comments may target a few key improvement areas for students to concentrate on. At the other end of the grading scale, there may also be an element of taking the opportunity to add stretching comments to the stronger scripts, encouraging the students to go above and beyond the requirements of the assignment set and to stretch their learning.

On the basis that a negative comment usually indicates an omission, it was expected that there would be a correlation of negative comments with explanation and correction comments. But we can see the only statistically significant correlation was that between neutral and correction comments. The more neutral comments that were made the more corrections the student received. This was unexpected it was expected for there to be a correlation between negative and correction comments – along the lines of “you have x wrong, it should be Y”. This suggests that where a correction is needed the Associate Lecturers are skilled in putting these comments into neutral language. This would explain why in the basic data only about 13% of the comments were negative, because the practice is not to use negative language when possible.

The lack of correlation between positive comments and explanation or correction matches up with the earlier finding that nearly half the comments are positive and nearly half are indication – so frequently we have comments such as “good” or “well done” on the script which are motivating but do not give the student any indication of what in particular was good or well done. In total, 803 of the comments were classified as indicating; which means that they indicated a good or bad point but did not elaborate. This is a concern as regardless of whether the comment is positive or negative it is important that the student can understand what the comment is communicating. A tick or a good is nice to receive and may be motivating, but it may not be clear to the student what was good, and importantly what should be repeated in future assignments.

In light of the findings of this small research project, it is recommended that greater consideration be given to how appropriate and useful the feedback comments provided on assignments might be to the receiving students. The significant number of indication comments observed indicates potential for misunderstanding by the student of the specifics of what needed further work, or which aspects should be replicated in future assignments.

Further in-depth analysis of the data needs to be carried out to obtain a greater understanding of the variation in feedback given to higher and lower achieving students.

The scope of this project has been limited to considering the variation in feedback which the Associate Lecturers have provided on the scripts. There has not been any attempt to measure the effectiveness or impact of the feedback offered. Future study is planned to include measurement of individual student performance throughout a module in response to the feedback, in addition to repeating some of the work Walker [6] carried out to investigate if improved awareness of feedback within the institution has resulted in better outcomes for students.

REFERENCES

- [1] Open University "Annual report 2014/15" 2015 Retrieved from <http://www.open.ac.uk/about/main/sites/www.open.ac.uk.about/main/files/files/Annual%20Report%202014%2015.pdf>
- [2] A. Ramaprasad, "On the definition of feedback," *Behavioural Science*, vol. 28, pp. 4–13, 1983.
- [3] P. Ramsden, *Learning to teach in higher education* (2nd ed), London: Routledge Falmer. 2003.
- [4] S.V. Scott, "Practicing what we preach: towards a student-centred definition of feedback" *Teaching in Higher Education*, vol. 19, No.1, pp. 49-57, 2014.
- [5] L. Delaney, C. Harmon, and C. Redmond, "Parental education, grade attainment and earnings expectations among university students" *Economics of Education Review*, vol. 30, pp. 1136-1152, 2011.
- [6] M. Walker, "An investigation into written comments on assignments: do students find them usable?" *Assessment and Evaluation in Higher Education*, vol. 34, No. 1, pp. 67 – 78, 2009.
- [7] R. Higgins, "'Be more critical': rethinking assessment feedback" in *British Educational Research Association Conference, 2000*. Retrieved from <http://www.leeds.ac.uk/educol/documents/00001548.htm>
- [8] K. Chanock, "Comments on essays: do students understand what tutors write?" *Teaching in Higher Education*, vol. 5, No. 1, pp. 95-105, 2000.
- [9] D. James, "Making the graduate: Perspectives on student experience of assessment in Higher Education" in *Assessment: social practice and social product* (A. Filer, ed.), pp. 151-168, London and New York, Routledge Falmer 2000.
- [10] E. Brown, and C. Glover, "Evaluating written feedback" in *Innovative assessment in Higher Education* (C. Bryan and K. Clegg, eds.) pp. 81-91. Abingdon, Routledge 2006.
- [11] D. Carless, "Differing perceptions in the feedback process" *Studies in Higher Education*, vol. 31, No. 2, pp. 219-233, 2006.