



Blurring the Boundaries: The Impact of Formative Feedback on Summative Assessment

Dr John Boereboom Academic Developer Lincoln University Dr Kevin Moore Associate Professor Lincoln University

New Zealand's specialist land-based university



Dr John Boereboom

Academic Developer

Lincoln University

Christchurch New Zealand

Aim of Study

The aim of the research was to see if providing students with detailed formative feedback and an opportunity to resubmit their essay would improve various aspects of their essay writing skills and achievement.

To investigate the impact of feedback on achievement in various criteria



Background

Essays are one of the principal academic activities that encourage:

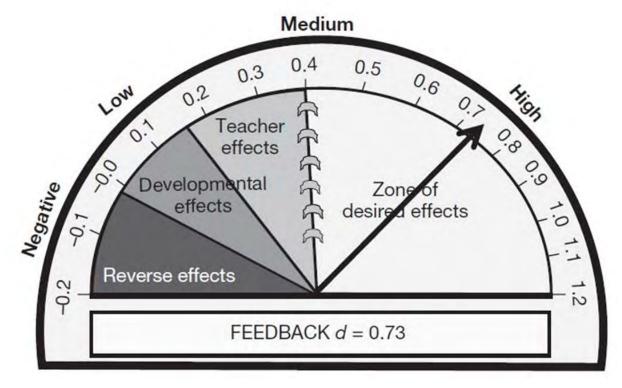


- formal expression of comprehensive knowledge (Brennan, 1995)
- analytical skills (Chanock, 2000)
- writing skills in general (Madigan & Brosamer, 1990).

The experience of completing the first major writing assignment presents itself as an ideal opportunity to make a difference in students' early educational experiences with a view to proactively integrating them into the academic context. (Kraus, 2001)

Feedback is one of the most powerful influences on student achievement

The provision of feedback fell in the top five to ten highest influences on achievement in Hattie's (1999) synthesis of over 500 meta-analyses investigating factors which led to an increase in educational achievement.



What is feedback?

"Feedback is information with which a learner can confirm, add to, overwrite, tune, or restructure information" (Winne and Butler, 1994)

Summative feedback



Formative feedback

The provision of formative feedback and written comments is more effective in leading to an improvement in student achievement than providing grades (Black & William, 1998; Crooks, 1988)

Usually formative feedback is provided on low stakes, non graded, formative assessment *for* learning.



This study is unusual in that we provide formative feedback on summative high stakes graded assessment.

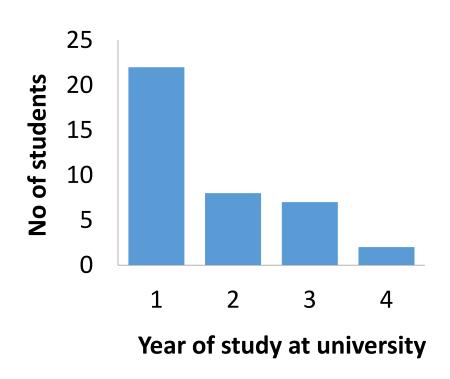
The current study

- Aims to blur the boundaries between formative and summative assessment by introducing a two stage submission process for an essay writing assignment.
- On the first submission the lecturer provides detailed formative feedback on a range of criteria and records a shadow grade which is not communicated to the student.
- After students have addressed the feedback the assignment is resubmitted and the paper gets a final summative grade.
- This enables a quantitative analysis of the relative impact and effectiveness of feedback on student achievement against a range of criteria.

Participants

- 39 first-year psychology students at Lincoln University.
- 56 % of the participants were female

Age	No of students	%
< 20	19	48.7
20- 25	19	48.7
>25	1	2.6



Method

- Students enrolled in a first year psychology course, were required to submit an essay worth 25% of the final grade.
- First and second essay submissions were marked by the same marker (the second author on this paper)
- Both essays were marked using a specially designed rubric using five categories.
- Each category was graded on a five point scale (excellent, good, adequate, improvement required, unsatisfactory).
- Individual feedback was provided to each student on strengths and areas to work on.

The rubric

Category	Components
Conceptualisation	Essential content material
	 Evidence of reading
Argument	 Substantiated argument
	 Logical consistency/validity
	 Depth of analysis
Development and Evidence	 Appropriate choice of examples
	 Appropriate use of references
	 Explicit links made between ideas
Structure	 Clarity of writing
	 Organisation of thought
	 Introduction
	 Conclusion
Presentation	 Spelling and punctuation
	Grammar
	 Appropriate expression
	 Format of referencing / bibliography
	 Overall format and appearance



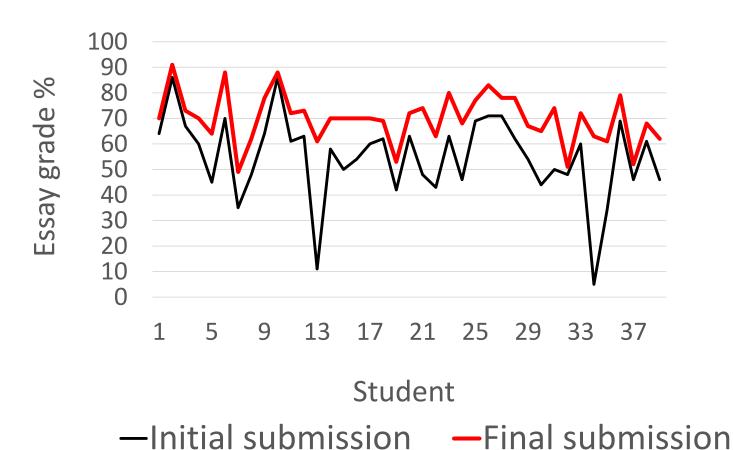
Analysis

- A comparison of the student shadow grades for the initial submission and the final grades for the resubmitted essay was carried out.
- Comparisons were made using double tailed paired student t-tests to determine the statistical significance of any changes in achievement in the overall grade and the various categories of criteria on the marking rubric

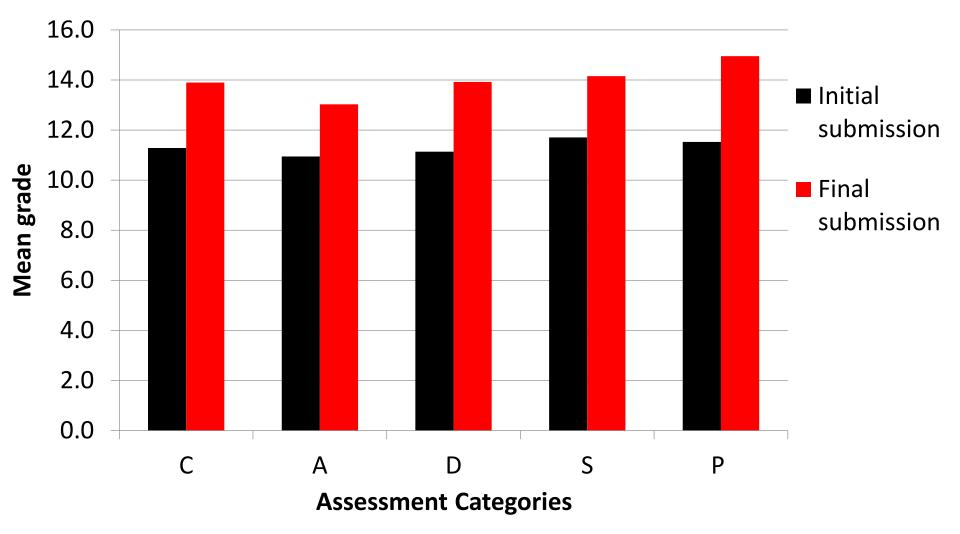
Results

- All of the 39 students in the study who resubmitted their essay and addressed the feedback achieved a higher grade.
- Eleven students who had received a grade of less than 50% for their initial submission and who resubmitted their essay achieved a mark of 50% or higher for their final essay.
- The mean for the final submission of the essay was 15.1% higher than that obtained for the initial submission of the essay. (t (38) =8.49, $p \le 0.0001$)

Results



Impact of feedback in different categories



Conceptualisation, Argument, Development Evidence, Structure, Presentation

The impact of the feedback was......

 greatest in the presentation category. The feedback in this category relates to aspect of grammar, spelling and punctuation, referencing and citation and layout which are relatively easy for students to address

• least in the argument category. The feedback in this category relates to the depth of analysis and the logical consistency, validity and substantiation of the argument. These are higher level cognitive requirements which are perhaps more difficult for students to address in the short term.

Student Comments

- I found the feedback very constructive and easy to respond to. It gave me a clear idea of what was required to bring my essay up to standard. I wish this process was in place for all our essays at Lincoln.
- I found the rubric a clear indicator of exactly what areas were poor, needs further development, satisfactory, good and excellent. The hand written comments gave me a clear overview of what was required.
- It was easy to respond to some aspects of the feedback because they were small mistakes of spelling, grammar and layout. Other aspects were more difficult because it needed a better explanation of theories or in depth conclusion.

Discussion

This study shows that the provision of detailed feedback followed by an opportunity to address it and resubmit the assessment is a useful tool to enable formative feedback to be provided for a summative assessment and utilise it as an assessment *for* learning rather than an assessment *of* learning.

This process is particularly useful for first year courses to support students in making the transition from secondary school to meeting the assessment requirements for academic writing at university level.

Work load is high but it is worth it!

Questions or feedback?

