Supporting Feedback Uptake in Online Peer Assessment

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Abstract:
Starting point for the present study were students' problems in academic writing. The goal of the study is to improve students' writing in a peer assessment setting. Sixty-seven students participated in an online writing task. We investigate whether providing sense-making support during feedback reception leads to increased feedback uptake, better revisions of the original text, and improved writing skills, as compared to a condition without sense-making support.

Introduction

Writing and revising scientific texts is a challenging task for university students. The main challenges for inexperienced writers are to detect errors in the text and to find appropriate ways to revise the text (Hayes, 2004). Receiving feedback early on in the writing process is important, but often students fail to capitalize on the feedback they receive as they do not take it up (Van der Pol, Van den Berg, Admiraal, & Simons, 2008). Problems with understanding the feedback and lack of reflecting on the feedback can be cited as reasons for the lack of feedback uptake. Support is needed to help students in making sense of feedback with the goal to prevent rejection of the feedback, to increase elaboration and understanding of the feedback, and thus to improve feedback uptake.

Peer assessment scenarios can help to meet the challenges of academic writing, because peer feedback can be provided more timely and more frequently than feedback of the course instructor (Falchikov & Goldfinch, 2000). Typically, peer assessment starts with a task asking the assessee to create a product (i.e. an academic text). Secondly, the product is reviewed by one or several assessors resulting in feedback provision. Thirdly, assessees receive feedback. And lastly, assessees revise their own product based on the feedback of the assessors. Unfortunately, peer assessment activities do not necessarily lead to learning (Kollar & Fischer, 2010). Major problems during peer assessment are related to the assessee's failure of feedback uptake (Van der Pol et al., 2008). Feedback uptake refers to changes made to the assessee's product during revision that are clearly based on and related to received feedback. Feedback in academic writing typically includes comments about problems in the text and suggestions for revision. But even if students receive comments that point toward errors in the text, they have problems to capitalize on the feedback. Writers often reject feedback upfront without engaging in sense-making processes or have problems with managing the feedback (Boero & Novarese, 2012). Sense-making processes are crucial, however, because understanding the problems is decisive for improving performance in peer assessment (Schunn & Nelson, 2009).

We expect that providing assessees with sense-making support during feedback reception will improve feedback uptake. The hypothesis with regard to academic writing is that better feedback uptake would lead to better revisions of the original text and yield improved writing skills. This hypothesis is investigated in the present study.

Method

Altogether, 67 students (13 male, 54 female) served as participants. The students were recruited from three courses of the bachelor program in educational sciences at a major German university. Students participated in the study as part of their regular course activities. The study followed an experimental design with sense-making support as independent variable. Students were randomly assigned to one of two conditions: Sense-Making Support condition and No-Sense-Making Support condition. The sense-making support aimed at encouraging the student to reflect on the feedback. Students were asked to rank and to judge received feedback and to plan their corresponding revisions (Figure 1).

Comment	I understand the comment.		I agree with the comment.		I am going to use the comment to revise my text.		I am going to improve my essay by doing the following:
	Yes	**No**	**Yes**	**No**	**Yes**	**No**	
Comment 1	☐	☐	☐	☐	☐	☐	
Comment 2	☐	☐	☐	☐	☐	☐	
General Questions							
In my opinion the main points of critique are…							

Figure 1. Sense-Making Support

The writing task was embedded in an online peer assessment activity that was conducted over a period of 10 days. The activity consisted of three phases. During phase (1) Essay Writing, participants created an essay of 600 words, in MS Word. The content of the essay was related to identity formation, a well-known concept in psychology. During phase (2) Feedback Reception, each student received comments on their essay from an assessor (Figure 2). The feedback included 12 comments on five writing criteria for mistakes that frequently occur in students' written products: Sequence/Logic of Argument, Transition Words, Nested Sentences, Direct/Clear Reference and Filler Words. Students were told that the feedback was given to them by a peer, however, in reality the feedback was given by the first author of this paper and by trained tutors in order to control for the amount and kind of feedback. Note that all participants only took the role of the assessee. The experimental variation (Sense-Making Support vs. No Sense-Making Support) was implemented during the Feedback Reception phase. During phase (3) Revision, students revised their essays based on the comments they had received. We used Moodle (Moodle, 2013) to distribute instructions and questionnaires. Also, students submitted their essays and revised essays to this platform. Feedback uptake, improvement of text quality and writing skills (Pre-Post) were assessed as dependent variables.
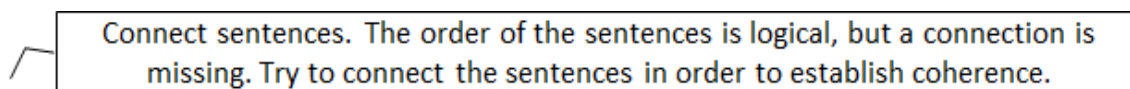
> Connect sentences. The order of the sentences is logical, but a connection is missing. Try to connect the sentences in order to establish coherence.

Figure 2. Sample comment given to the students as peer feedback

Analysis & Results

The data are currently being analyzed. Feedback uptake is assessed by analyzing quantity of revisions, quality of revisions, and self-perception of feedback use. Improvement of text quality is assessed by comparing the quality of the original essays to the quality of the revised essays. Writing skills are assessed using parallel pre- and posttest versions. The pre- and posttests assessed two distinct skills related to academic writing: problem detection and problem correction. The test consisted of a text with 10 erroneous passages. For assessing problem detection skills, students had to highlight and label the problems in the text. For assessing problem correction skills, participants were asked to correct erroneous text passages. Errors were again related to the 5 writing criteria representing common mistakes. By analyzing the relationship of feedback uptake, on the one hand and improvement of text quality and writing skills on the other hand, we will be able to evaluate the benefits of feedback uptake with regard to improving student procedural and declarative writing skills. Results will be presented at the conference.

Significance and Contribution of Research

The present study will contribute to theory building in the area of online peer assessment and to research on the acquisition of writing skills in university settings. On the practical side, our findings will provide university teachers with guidelines for supporting students in the assessee role in online peer assessment scenarios.

Acknowledgments

References

Boero, R., & Novarese, M. (2012). Feedback and Learning *Encyclopedia of the Sciences of Learning* (pp. 1282-1285).

Falchikov, N., & Goldfinch, J. (2000). Student peer assessment in higher education: A meta-analysis comparing peer and teacher marks. *Review of Educational Research, 70*(3), 287-322.

Hayes, J.R. (2004). What triggers revision? In L. Allal, L. Chanquoy & P. Largy (Eds.), *Revision: Cognitive and instructional processes.* (pp. 9–20). Dordrecht, The Netherlands: Kluwer.

Kollar, I. & Fischer, F. (2010). Peer assessment as collaborative learning: A cognitive perspective. *Learning and Instruction, 20*(4), 344-348.

Moodle Pty. Ltd. (2013). Moodle (Version 2.3.3) [Learning environment software]. Retrieved from https://moodle.org/.

Nelson, M.M. & Schunn, C.D. (2009). The nature of feedback: how different types of peer feedback affect writing performance. *Instructional Science, 37*, 375-401.

Van der Pol, J., Van den Berg, B. A. M., Admiraal, W. F., & Simons, P. R. J. (2008). The nature, reception, and use of online peer feedback in higher education. *Computers and Education, 51*, 1804-1817.