

Having second thoughts: Student perceptions before and after a peer assessment exercise

WINNIE CHENG and MARTIN WARREN

English Department, The Hong Kong Polytechnic University, Hong Kong

ABSTRACT *This paper describes part of a research project conducted in the English Department of the Hong Kong Polytechnic University. Within the project an attempt was made to gauge the students' attitudes towards peer assessment. This was a two-fold process: the students' attitudes were canvassed both prior to the peer assessment exercise and at the end of it. This paper focuses on those students who had second thoughts about peer assessment and the reasons given for these shifts in attitude. The implications of the findings for implementing peer assessment on undergraduate courses are then discussed.*

Introduction

In the English Department at the Hong Kong Polytechnic University (HKPU), all first year undergraduates study English for Academic Purposes (EAP). Midway through this subject, students work together in groups on an integrated project which comprises three components: a seminar, an oral presentation, and a written report.

While the value of group project work is widely accepted, it can be problematic for teachers to determine grades for individual group members rather than simply, and possibly unfairly, awarding the same grade to group members. The introduction of

peer assessment to the assessment procedures is one way of solving this kind of problem (see for example, Burnett and Cavaye, 1980, pp. 273-278; Orpen, 1982, pp. 567-572; Earl, 1986, pp. 60-69; Falchikov, 1986, pp. 146-166; Goldfinch and Raeside, 1990, pp. 210-231; Williams, 1992, pp. 45-58; Conway *et al.*, 1993, pp. 45-56; Miller and Ng, 1994, pp. 41-56).

Peer assessment itself has additional benefits. Falchikov (1986, p. 147) reports 'increased student responsibility and autonomy' as a result of the scheme of peer assessment; and her students found it 'challenging, helpful and beneficial', making them 'think more, learn more, and become more critical and structured' (Falchikov, 1986, p. 161). The peer assessment system can provide a simulated collaborative environment where students work professionally with one another (Earl, 1986, p. 68). Williams (1992, p. 55) states that his students showed enthusiasm in peer assessment because they have 'more say in how they approach their learning and its assessment'. Most of the studies on peer assessment to date have native speakers of English as subjects. There have been, however, few studies carried out in situations where English is learned as a second or foreign language. In Hong Kong, for example, a few studies have examined the outcomes of peer assessment being employed in various activities related to English language instruction (see for example, Green, 1995, pp. 114-125; Miller and Ng, 1994, pp. 41-56; Garrat, 1995, pp. 97-118; Forde, 1996, pp. 34-47). Nonetheless, no attempt had been made in Hong Kong to implement the practice of peer assessment within a language instruction programme, and afterwards to obtain student feedback systematically.

A research project was devised to determine the extent to which students are able to usefully assess their peers and to examine the students' attitudes towards this form of assessment. This paper is primarily concerned with those students who changed their

attitudes, in either a positive or negative direction, as a result of the peer assessment exercise and the reasons behind those changes. It was hoped that by focusing on these students, future attempts to incorporate peer assessment into programmes and courses at departmental and institutional levels would be better informed and thus more successful.

Preparation for peer assessment

The study was conducted in 1995/96 and involved 52 first year Electrical Engineering undergraduates in three classes. Students were given training in peer assessment which comprised discussions of the advantages and disadvantages of peer assessment, examining the assessment criteria for the integrated group project, and practice in peer assessment.

Procedures for peer assessment

Students and teacher assessed each group seminar and oral presentation against a set of criteria designed by the EAP materials writers. Similarly, they assessed the group written reports, with the teacher assessing all of them and the students assessing all but their own. Finally, students rated the contribution of fellow group members to tasks relating to the preparation and execution of the integrated group project. Only the students were involved in this part of the assessment procedure because only they were in a position to assess the contributions of their fellow group members.

Students' attitudes towards peer assessment

We were interested in students' attitudes towards peer assessment from a variety of perspectives. We were interested in monitoring general shifts in attitude before and after the exercise and whether students' attitudes towards specific assessment criteria (language versus layout and presentation, for example) differed significantly (Cheng and Warren, 1996, pp. 61-75). We were also interested to discover more precisely the reasons behind shifts in attitude after participating in peer assessment, whether in a positive or negative direction, in order to better inform the implementation of peer assessment in the future.

Pre- and post-questionnaires

At the start of the study, a questionnaire was completed by the students. This pre-questionnaire is partly based on a questionnaire used by Burnett and Cavaye (1980) at the end of a study of 175 surgery students in Australia who participated in a peer assessment exercise. However, unlike Burnett and Cavaye, this study administered pre- and post-questionnaires.

Interviews

Once the questionnaire data had been analysed, students who had displayed a marked change in responses and attitudes were interviewed. A marked change in response refers to those students who had responded differently in at least three out of the four questions asked. Logistical considerations prevented us from interviewing more than this group. As a result, seventeen of the 52 students were interviewed.

Discussion of findings

Pre-and post-peer assessment questionnaires

The data are in tables which cross-tabulate the responses to each of the four questions in the pre- and post- questionnaires. Thus, it is possible not only to obtain the raw scores and percentages for each response, but also to examine shifts in attitude between administering the questionnaires. Such shifts were important to detect if we were to analyse more accurately the students' responses and the reasons which lay behind them.

Prior to the exercise, almost two-thirds of the subjects thought that students should participate in peer assessment, a figure which remained unchanged at the end (see Table I).

Q. 1 (Pre and post) Do you think students should take part in assessing their peers?

Table I Cross-tabulation of student responses to Pre Q. 1 and Post Q. 1

Post	Yes	No	Not sure	
Pre				Row total
Yes	24	5	4	33 (63.5%)
No	6	5	0	11 (11.2%)
Not sure	3	1	4	8 (15.4%)
Column total	33 (63.5%)	11 (21.2%)	8 (15.4%)	

Superficially, there would appear to be no shift in attitudes. However, the cross-tabulation of the responses reveals that while the overall totals remain unchanged, there was considerable movement by individual students. Five of the students who answered *Yes* in the pre-questionnaire answered *No* in the post-questionnaire, and four students changed from *Yes* to *Not sure*. More than half of those who responded

negatively (six out of eleven) shifted to *Yes*, while half of the *Not sure* respondents shifted with three changing to *Yes* and one to *No*.

The students were therefore generally positive towards the notion of peer assessment, both before and after the exercise, but the experience of participating in the exercise was not consistently positive. The reasons for this phenomenon will be discussed below.

In terms of year of study and conducting peer assessment in a responsible manner, there was a very different response prior to the exercise. The largest group of students were not sure with the rest divided between *Yes* and *No* (Table II). By the end of the exercise, there was still substantial uncertainty, but the number of positive responses had risen.

Q 2 (Pre and post) Do you believe a First Year student should be able to assign grades to peers in a responsible manner?

Table II Cross-tabulation of student responses to Pre Q. 2 and Post Q. 2

Post	Yes	No	Not sure	
Pre				Row total
Yes	7	2	8	17 (32.7%)
No	6	8	2	16 (30.8%)
Not sure	9	3	7	19 (36.5%)
Column total	22 (42.3%)	13 (25.0%)	17 (32.7%)	

The cross-tabulation of the responses to Q. 2 reveals a greater degree of complexity than a simple swing in a positive direction. Almost 60% of the students who originally answered *Yes* moved in a negative direction, two changed to *No* and eight to *Not sure*. Half of those who originally answered *No* switched to *Yes* (six out of sixteen) or *Not sure* (two out of sixteen). Twelve of the nineteen students who began as uncertain also changed their minds in both directions with nine now answering *Yes* and three *No* in the end.

This indicates a difference in attitude compared to the overall response to Q. 1. Q. 1 showed that the majority of the students had a positive attitude towards peer assessment in principle, whereas Q. 2 revealed that the majority of students were either unsure of or negative towards the idea of first year students actually participating in peer assessment.

Q. 3 in the pre-questionnaire asked the students whether they thought they would feel comfortable in making peer assessments. A clear majority answered *No* with the remainder fairly evenly divided between *Yes* and *Not sure* (see Table III). Once they

had assessed their peers, however, there was a clear shift in opinion with almost half answering *Yes* and just over one third answering *No*

Q. 3 (Pre) Do you think you will feel comfortable in making peer assessments?

(Post) Did you feel comfortable when you made peer assessments?

Table III Cross-tabulation of student responses to Pre Q. 3 and Post Q. 3

Post	Yes	No	Not sure	
Pre				Row total
Yes	9	2	0	11 (21.2%)
No	8	16	6	30 (57.7%)
Not sure	8	1	2	11 (21.2%)
Column total	25 (48.1%)	19 (36.5%)	8 (15.4%)	

A closer look at the shifts in attitude of individual students confirms the general picture, but there were exceptions. Two of the eleven students who began by feeling comfortable about assessing their peers changed from *Yes* to *No*. Similarly, one of the students who was unsure before the exercise answered *No* at the end.

The overall shift towards feeling more comfortable would seem to suggest that more opportunities for peer assessment could reduce the number who remained uncomfortable. However, the exceptions, even if few in number, suggest that participating in peer assessment by no means guarantees a favourable response.

The students who answered *No* or *Not sure* in the post-questionnaire did not award marks which were significantly different from those students who answered *Yes*.

A positive shift in opinion was also found in Q.4. Before assessing their peers, nineteen of the students thought that they would make a fair and responsible assessment of their peers with an almost equal number unsure (see Table IV). After the exercise, the number of students answering *Yes* rose, while those answering *No* fell.

Q. 4 (Pre) Do you think you will make a fair and responsible assessment of your peers?

(Post) Do you think you have made a fair and responsible assessment of your peers?

Table IV Cross-tabulation of student responses to Pre Q. 4 and Post Q. 4

Post	Yes	No	Not sure	
Pre				Row total
Yes	11	4	4	19 (36.5%)
No	5	1	6	12 (23.1%)
Not sure	7	3	11	21 (40.4%)
Column total	23 (44.2%)	8 (15.4%)	21 (40.4%)	

The cross-tabulation shows that a lot of students had second thoughts and did not always shift in a positive direction. Of those nineteen students who began by answering *Yes*, eight subsequently moved in a negative direction with four answering *No* and four *Not sure*. The twelve students who began by answering *No* to this question were the most volatile group. At the end of the exercise only one still

responded *No*, five changed to *Yes* and six to *Not sure*. Out of the 21 students who were unsure whether they could assess their peers fairly and responsibly at the outset, seven moved in a positive direction, but three changed to *No*.

It is worth pointing out that even though the students had participated in the peer assessment exercise, they were not in a position to confirm whether or not their assessments were more or less fair and reasonable than anyone else's since the procedures were carried out anonymously and the grades awarded by individual students were not revealed. It is interesting to note that there was in fact no significant difference between the grades awarded by those who believed they had been fair and reasonable and those who believed they had not.

Post-peer assessment interviews

The least problematic part of accounting for students' having second thoughts was in cases where the shift in attitude was in a positive direction. Movement in a positive direction was also the most common trend and this suggests that implementation of peer assessment alone goes some way in dispelling students' initial reservations.

The students who switched from being positive, or unsure, to subsequently responding negatively offered a number of reasons for their change of heart.

1. It was suggested that asking learners of English to assess one another's language proficiency was expecting too much from those 'unqualified' to carry out such work and that in practice the students' own shortcomings in the English language made it difficult for them to judge others.
2. Some students doubted their own objectivity when assessing peers, claiming that they felt compelled to award a higher score to those who they were more friendly with.

3. Relying on students to evaluate one another was described as 'unfair and risky' because of doubts raised in students' minds regarding the seriousness and objectivity of their fellow students.
4. The distribution of marks for the integrated group project was evenly split between the teacher and the students; this was felt to place too much responsibility onto the shoulders of students. A ratio of 75:25 in favour of the teacher was suggested as a fairer distribution.
5. The students claimed to have received no training in peer assessment and only three had very limited and informal experience of assessing their peers in upper secondary school. This last point, even if contradicted by the teachers responsible for administering the exercise, suggests that students felt unprepared for the task.

In line with other studies (for example, Burnett and Cavaye, 1980, p. 276; Earl, 1986, p. 68; Williams, 1992, p. 55; Garrat, 1995, p. 102), this study found students to be generally favourably disposed to participating in peer assessment on their undergraduate programmes. Similarly, the disparity between students feeling comfortable about peer assessment and students feeling that they had made a fair and responsible assessment of their peers was not unexpected. Burnett and Cavaye (1980, p. 276) reported that 80% of the students in their study felt they had assessed their peers fairly and responsibly, but those feeling comfortable about doing so was 55%.

However, such findings are not consistent throughout the literature. For example, Miller and Ng (1994, p. 51) found Hong Kong students' attitudes to be generally negative. In this study, students listed subjectivity, unfairness, inadequate experience, being time-consuming; and above all, loss of face as contributing to their negative attitudes. Loss of face here is 'the exercise of poor judgement, criticism of others' (Bruner and Wang, 1988, p. 31) and is seen as a potential threat to both the assessor

and the person being assessed respectively. In this study, some of the reasons given by students whose attitudes changed in a negative direction were similar to those uncovered by Miller and Ng (1994). However, in this study, students were generally favourably disposed towards peer assessment and the role of face, for instance, does not appear to have affected the results when they are compared with other studies (see for example, Burnett and Cavaye, 1980, pp. 273-278; Falchikov 1986, pp. 146-166; Goldfinch and Raeside, 1990, pp. 210-231; Liftig, 1990, pp. 62-65).

An important consideration with issues such as the maintenance of face is the assessment procedure. In this study the scores were assigned anonymously and merged with those of the teacher before being awarded to the students. This meant that the potential face loss for all concerned was minimised and face was maintained by not exposing mistakes publicly and by not criticising directly (Bruner and Wang, 1988, p. 35). There is clearly scope in future studies for cross-cultural factors to loom larger than they did in this study which had a homogenous group of Hong Kong Chinese as its subjects and which did not compare the current subjects with a group of students from a different cultural background.

The subject discipline of the students involved and the assignment or activity being assessed may also influence the attitudes of the participants to the notion and practice of peer assessment and this requires cross-disciplinary studies to examine whether differences may exist.

Conclusions and Recommendations

Students were mostly in favour of peer assessment, yet less than half of them thought that First Year students were able to conduct peer assessment in a fair and responsible manner. Initially, students were not entirely comfortable or confident in their ability

to assess their peers. After the exercise, however, there was a positive shift overall in both attitudes and confidence.

There is cause for concern, however, when considering the substantial minority who became or remained negative towards the notion of peer assessment. The comments of these students indicate that student involvement is crucial at every stage of a peer assessment exercise. There are good reasons, both pedagogical and psychological, for giving systematic and comprehensive training to students, involving students in discussing and establishing the assessment criteria (see for example, Ford, 1996, p. 41; Williams, 1992, pp. 52-55), agreeing on an appropriate weighting of the final grade/mark between the teacher and students, and building up a sense of awareness and responsibility in the group of students. These measures should go towards ensuring that the peer assessment exercise is administered fairly and responsibly as well as helping students to feel more comfortable.

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Correspondence Ms Winnie Cheng and Dr Martin Warren, English Department, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong. E-mail: egwcheng@polyu.edu.hk, egwarren@polyu.edu.hk.

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