Peer Assessment in an EFL Context: Attitudes and Correlations

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1. Introduction

Peer assessment has received much attention in recent years due to the growing focus on learner independence and autonomy. Despite the growing popularity of peer assessment, this idea is still novel to most English teachers and students in Taiwan where traditional assessment is still dominant. Universities put emphasis on measuring learning achievement and knowledge through tests (i.e. multiple-choice, essays, short-answer tests and the like). Alternative assessment methods such as portfolios, interviews and journals are not widely used in language classrooms. Furthermore, since some colleges' graduation requirements demand that students achieve a certain level on General English Proficiency Test (GEPT),[1] Test of English for International Communication (TOEIC), or Test of English as a Foreign Language (TOEFL), standardized tests remain a central measure for assessment. Besides this problem, students' grades are usually determined solely by the judgment of teachers. In this case, the assessment culture is quite narrow in the sense that teachers do not collect diverse sources of learning samples as some researchers (Huba & Freed, 2000; Shohamy, 1992) recommended and students have no say regarding their assessments.

Peer assessment is a process of a group of individuals grading their peers in which may or may not involve an agreed criteria among teachers and students (Falchikov, 1995). More specifically, Topping (1998) defined peer assessment as "an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status" (p. 250). The process of peer assessment ought to involve students grading and/or giving feedback on their peers' work, and being judged for the quality of the appraisals they made (Davies, 2006). Such an assessment method is usually associated with group work in which students wish to separate the assessment of individual contributions from the assessment of the groups' final products. According to Patri (2002), in a situation where learners are able to assess their own quality and level of performance and those of their peers, it is very likely that they will be capable of understanding the assessment criteria. Brown (2004) said that both self and peer assessment involve students in their own destiny, encourage autonomy, and increase motivation. Cheng and Warren (2005) maintained that involvement in and control over the methods, procedures, and outcomes of assessment as well as understanding the underlying rationale are crucial for both teachers and students. Peer assessment is an alternative that has significant pedagogical value because it enables learners to take part in the evaluation process and gives learners opportunities to participate in and evaluate their peers' learning process and products.

Validity and reliability of peer assessment may be an issue for those who are interested in using peer assessment. Skeptics about this assessment method ignore the fact that reaching high validity and reliability is not the main goal of peer assessment. Devenney (1989) noted, the functions and roles of peer and teacher assessment are different; the former is a formative assessment tool focusing on the ongoing learning process while the latter is a summative assessment tool for judging learning

[1] In 1999, the Taiwanese Government commissioned the Language Training and Testing Center in Taipei to develop the GEPT. GEPT offers five levels of testing that include elementary, intermediate, high-intermediate, advanced, and superior. Test takers are to select a testing level according to their English ability. GEPT puts all four language skills of listening, speaking, reading, and writing to the test.

outcomes. Topping (1998) argued that peer assessment is not a substitute for traditional assessment but it may add value to the learning process. Patri (2002) echoed the idea that peer assessment and assessment involvement have vital pedagogical value. Most peer assessment advocates proposed using it as a formative assessment tool rather than a summative one. More specifically, it is a supplementary assessment method for involving and empowering students rather than a substitution for teacher assessment.

Students often make the assumption that evaluations made by teachers are more accurate, which may not always be true (Orsmond & Merry, 1996). Falchikov and Goldfinch (2000) raised concerns about the potential bias of teacher assessment. Since teacher assessment is not always the most valid method, it would be more appropriate to triangulate learning achievement via different sources such as peer assessment. Moreover, according to past studies, the agreement between teacher and student grading was close (Falchikov & Goldfinch, 2000; Topping, 1998). Freeman (1995), Fry (1990), and Stefani (1994) revealed similar results while Kwan and Leung (1996), Mowl and Pain (1995), Orsmond and Merry (1996), and Stefani (1992) observed otherwise. Marcoulides and Simkin (1991, 1995) described high reliabilities of peer assessment in written projects whereas Cheng and Warren (1999, 2005) reported the opposite for group projects in the area of English as a Foreign Language (EFL).

The influence of peer assessment on language learning is promising, but its effective use seems to depend on a wide range of factors including students' attitudes, language levels, and critical thinking skills. This study investigates students' attitudes towards peer assessment and correlations between the peers' and teacher's scores as well as evaluates peer assessment as a viable alternative assessment method at the tertiary level in Taiwan.

2. Benefits and weaknesses

2.1. Benefits

It is important to learn the benefits and weaknesses of peer assessment before implementing it in classrooms. Peer learning and assessment are quite effective in terms of developing students' critical thinking, communication, lifelong learning and collaborative skills (Nilson, 2003). Integrating peer and self assessment into teaching has the benefit of connecting teacher feedback with student learning (Orsmond, Merry & Reiling, 2000). Topping (1998) noted that not only can peer assessment increase the amount of feedback, but it can also promote higher order thinking (Cheng & Warren, 2005; Nilson, 2003; Oliver & Omari, 1999; Orsmond & Merry, 1996; Sivan, 2000). The direct involvement in the learning process enhances students' sense of ownership, responsibility (Sivan, 2000) and students' motivation. It promotes active and autonomous learners (Orsmond & Merry, 1996; Sivan, 2000). Moreover, owing to the increasing use of group projects in higher education (Li, 2001), peer assessment becomes very useful because it can prevent the effect of free-riders; in other words, it is a good way to distinguish individual contributions from group products (Cheng & Warren, 2000; Goldfinch, 1994; Goldfinch & Raeside, 1990; Johnston & Miles, 2004; Li, 2001). Since peer assessment often takes place in the context of group work (Falchikov, 2005), Brown (2004) identified that the most evident characteristic of peer assessment is cooperative learning, which is advantageous to students. Additionally, Williams' (1992) study showed that most of the students found self and peer assessment useful, interesting, and fun.

2.2. Weaknesses

On the other hand, students expressed dislike in criticizing friends and getting arbitrary markings. Cheng and Warren (2005) reported that students felt neither comfortable nor confident evaluating their peers due to their own perceptions of inability. A similar result was found in Orsmond and Merry's (1996) research. Freeman (1995) emphasized the importance of appropriate training and practice in peer assessment for achieving objectivity. Patri (2002) echoed this sentiment, stating that in order to ensure the effectiveness of peer assessment, training and experience are necessary. In other words, peer assessment is time-consuming because training, preparation, and monitoring are needed (Cheng &

Warren, 1997, 1999, 2005; Falchikov, 2005; Topping, 1998). Brown (2004) identified subjectivity as the primary weakness of peer assessment which needs to be resolved. Two possible situations may occur. One is that students may either be too critical on themselves or too rodomontade. The other is that they simply do not know how to make an adequate assessment. It is also possible that students may feel anxious and resistant (at least in the beginning) toward peer assessment (Falchikov, 2005; Topping, 1998).

3. Purpose of the study

Despite the potential value in incorporating peer assessment in EFL classes, peer assessment is little known in the EFL field. A number of peer assessment studies were undertaken in Taiwan; nevertheless, few examined this form of assessment from the perspective of English language learners. This study aims to broaden the knowledge of peer assessment by exploring proficiency differences in students' attitudes and score correlations between teacher and peer assessments. The study focuses on oral presentation since relatively few studies were devoted to examining this facet. It attempts to promote the idea of involving students in the assessment process and encourages educators to collect multiple sources of language samples by using methods such as peer assessment. Because peer assessment is a viable option to enhance independent and autonomous learning, the research also intends to provide EFL teachers with a promising alternative assessment method for the tertiary level. It proposes using peer assessment as a way to provide more options in language assessment. This study answers the following questions and sub-questions:

RQ1: What are college EFL learners' attitudes towards peer assessment?

(a) To what extent do students change their perceptions after experiencing this assessment method in the context of oral presentation?

(b) What are the reasons for changing attitudes?

RQ2: Are there any language proficiency differences in peer assessment in terms of attitudes and score correlations?

(a) Do high-intermediate students have more positive attitudes towards peer assessment compared to low-intermediate ones?

(b) Are peer assessments done by high-intermediate students more similar to the teacher assessments than low-intermediate students?

4. Methods

4.1. The university

The study was conducted at a university in northern Taiwan, which has approximately 15,000 students and 800 full-time faculty members. The school comprises seven colleges and 27 departments. All freshmen have to take a three-credit year-long English course which meets three hours per week. Within different colleges such as the college of Business and Engineering, students, regardless of their majors, are divided into different classes according to their English proficiency levels, which are determined by the English test results as part of the Academic Aptitude Test (AAT) and Joint College Entrance Examination (JCEE).[2]

[2] There are multiple ways to get college admissions in Taiwan. One of the ways is to pass the AAT and JCEE. The AAT is the first step; it intends to test whether or not students have basic knowledge to enter college. Students have to meet a certain standard in order to take the JCEE, which is the second step. The purpose of the JCEE is to meet the demand of selecting suitable students for diverse universities. It evaluates whether students have related knowledge in various fields. It includes nine subjects (i.e., Chinese, English, Mathematics A, Mathematics B, Physics, Chemistry, Biology, Geography and History). Departments in different schools can appoint prospective students to take three to six subjects according to their specific requirements. Chinese and English are usually required by all schools (College Entrance Examination Center, 2008).

4.2. Participants

4.2.1. Students

One class of high-intermediate English learners (n = 43) and one class of low-intermediate students (n = 45) took part in the study. The organization of participants is shown in Table 1. All participants were taught by the same teacher, Kathy (pseudonym). Participating students' majors included Business Administration, Accounting, International Trade, Finance, Management Information Systems and Applied Chinese. The classes met twice a week (i.e., Tuesday for one hour and Thursday for two hours).

Table 1. *The Organization of the Participants*

Class & proficiency level	Number of participants	Teacher	Program
High-intermediate (HI)	43	Kathy	Various majors
Low-intermediate (LI)	45	Kathy	Various majors

4.2.2. Teacher

Kathy received a Master of Science in Teaching English to Speakers of Other Languages (TESOL) from the University of Southern California. She taught part-time in various universities in northern Taiwan and had about seven years of EFL teaching experience at the tertiary level at the time of the study. Prior to the study, the researcher and teacher exchanged emails and met in person several times to discuss the implementation of peer assessment in the HI and LI classes.

4.3. Training materials

The researcher developed the training materials for peer assessment. They were designed to fit the research context and presented in the form of questions and answers. The questions are (a) What is peer assessment? (b) Why do I need peer assessment? (c) How do I participate in assessing my peers? (d) What criteria should I use to assess my peers? (e) What should I do when I encounter problems or difficulties? (f) Who will monitor the process of peer assessment? The answers were included in the training materials. Before the peer assessment exercises, the participants had several opportunities to practice evaluating their peers in group activities.

4.4. Instruments and procedures

4.4.1. Five-point Likert scale survey

A five-point Likert scale survey was used to investigate college students' perceptions towards peer assessment. The survey was adopted from Wen, Tsai and Chang's (2006) study, which was based on the results of some relevant studies such as Brindley and Scoffield (1998), Cheng and Warren (1997) and Falchikov (1995). It contains two scales, general peer assessment (PA) and online peer assessment. I only adopted the scale of general peer assessment since online peer assessment is beyond the scope of the current research. Wen et al. reported that Cronbach alpha reliability for the general peer assessment was .84. I also added a few questions relating to students' learning of English speaking to the survey. The survey was translated into Chinese to prevent any language barriers as well as fit the research context. The participants were asked to fill out the same survey at the beginning (pre-survey) and end of the semester (post-survey) for making comparisons.

4.4.2. Semi-structured interview

Semi-structured interviews were used to explore why students changed their attitudes about peer assessment, students' experiences with peer assessment and other aspects of this assessment form. The data obtained from the interviews provided in-depth information that the five-point Likert scale survey

could not offer. In week 19 or 20, after the final exam, twenty percent of the students in HI and LI class were interviewed by the researcher, in other words, every fifth person on the roster was selected as an interviewee.

4.4.3. Peer evaluation and feedback form and within-group peer assessment form

In week three, students had the opportunity to discuss and negotiate assessment criteria for the oral presentations and designed Peer Evaluation and Feedback Form with the teacher (see Appendix A). The assessment criteria from Cheng and Warren's (2005) study served as an example for the discussion. A number of studies (Falchikov & Magin, 1997; Freeman, 1995; Lin, Liu & Yuan, 2001; Patri, 2002) found that having peer feedback or a discussion before peer evaluation could yield strong relationships between teacher and peer assessment. Thus, while a group was presenting, the rest of the students seated in groups jotted down comments for the presenting group using the Peer Evaluation and Feedback Form. Then, they had a few minutes to discuss the performance they just saw and assigned a grade as a group to the presenting group. Group discussion was a technique to increase validity of the peer assessments. After a group project, the students had a chance to evaluate their group members' individual contributions using the Within-group Peer Assessment Form (see Appendix B). The results of this assessment form counted as part of the grade of the oral presentations. The exact percentage, 20%, was decided by both the teacher and students.

4.4.4. Types of peer assessment

There are two main parts to the assessment process, that is, within-group and group-to-group peer assessment. Group members assessed individuals' contributions within a group while each group evaluated other groups' oral presentations; the outline is shown in Figure 1.

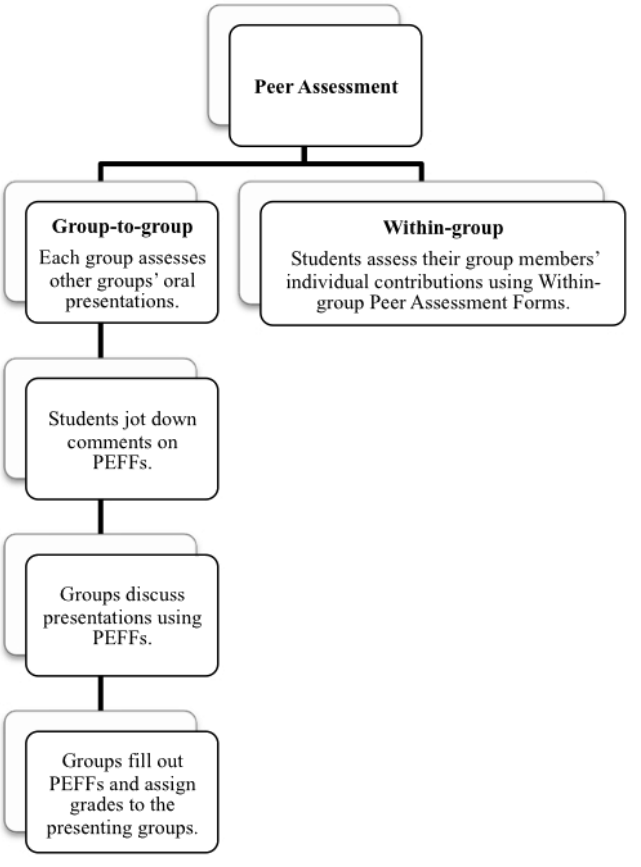

Figure 1. The outline of the peer assessments (PEFF stands for peer evaluation and feedback form).

5. Results and discussion

5.1. Research question one

5.1.1. Students' attitudes towards peer assessment

Forty-one low-intermediate (LI) students filled out the pre- and post-surveys while 43 high-intermediate (HI) students filled out the pre-surveys and 41 turned in the post-surveys. Only those who completed both the pre- and post-surveys were included in the *t*-test analysis (HI: $N = 41$, LI: $N = 41$). The results of the *t*-tests reveal that students' responses, regardless of their language proficiency levels, were higher than the neutral score (3.00). In the pre-survey, the mean scores were 3.52 (HI class) and 3.59 (LI class) while the mean scores in the post-survey were 3.96 (HI class) and 3.94 (LI class). Generally speaking, the students reacted positively before and after the peer assessment activities. The detailed information is shown in Table 2. Beforehand, the LI class had more positive perceptions of peer assessment than the HI class. The outcomes were reversed after the peer assessments; in other words, the high-intermediate students had somewhat more favorable responses than their LI counterparts. The HI class's mean scores increased from 3.52 to 3.96 ($t(40) = 5.62$, $p < .01$) while the LI class's mean difference between pre- and post-surveys was 0.35 ($t(40) = 3.42$, $p < .01$). Both classes' attitudes towards peer assessment became significantly more positive after the exercises. Effect sizes were calculated to see the significance of the score differences between the pre- and post-surveys. The effect sizes are 1.04 and 0.8 respectively which are considered to be large according to Cohen's (1988) definition. Overall, both classes' attitudes towards peer assessment changed in a positive direction with the HI class's mean value being slightly higher than the LI class.

Table 2. *Descriptive Information and Scale-score Differences between the High- and Low-Intermediate Students*

Proficiency level	Pre-survey		Post-survey		$N = 41$	
	Mean	*SD*	Mean	*SD*	*t*	*d*
High-intermediate (HI)	3.52	.52	3.96	.30	5.62**	1.04
Low-intermediate (LI)	3.59	.55	3.94	.29	3.42**	0.80

Note. **$p < .01$

Table 3 illustrates the detailed comparisons on score differences for all 12 items between pre- and post-surveys. The items in the pre- and post-surveys can be grouped into several broad categories. Items 1 and 2 are about learning in general while items 4, 5 and 6 pertain to social interaction. Item 7 relates to students' eligibility to assess their peers; items 8, 9 and 10 refer to speaking. The students could respond to motivation in items 3 and 11 as well as to assessment in item 12. The HI and LI class regarded peer assessment as a way to improve their oral presentation skills (item 10) and created more opportunities to speak in English (item 9). They also believed that peer assessment increased their group participation (item 11) as well as interaction between the teacher and students (HI, item 4) and among students (LI, item 6). Moreover, peer assessment was useful to the HI class's learning (item 1) while it motivated the LI class to speak more. Both classes posited that within-group peer assessment was an ideal way to separate individual contributions from group products (item 12). The *t*-values for the aforementioned items all reached a statistically significant level at $p < .05$ while the remaining items did not.

Table 3. *The Paired t-values of Individual Items for the High- and Low-Intermediate Students' Responses*

Item category	HI class ($N = 41$) t-value	LI class ($N = 41$) t-value
Learning		
1. PA is helpful to your learning.	2.43*	1.06
2. PA makes you understand more about teacher's requirement.	0.46	1.28
Social Interaction		
4. PA activities increase the interaction between the teacher and the students.	2.64*	-0.34
5. PA helps you develop a sense of participation.	1.65	1.39
6. PA activities increase interaction among students.	1.43	2.15*
Students' Eligibility		
7. I think students are eligible to assess their peers' performance.	1.86	-0.66
Speaking		
8. PA stimulates you to make more effort to speak.	0.17	3.83**
9. PA creates more opportunities for you to converse in English.	4.31**	6.45**
10. PA betters your oral presentation skills.	5.90**	6.03**
Motivation		
3. PA activities motivate you to learn.	1.13	0.52
11. Being graded by peers motivates you to participate more in your group.	4.77**	3.45**
Assessment		
12. Within-group assessment is a good way to distinguish individual contributions from the group products.	4.87**	2.34*

Note. PA = peer assessment; *$p < .05$, **$p < .01$

5.1.2. High-intermediate students

Table 4 displays the descriptive statistics of the combined survey results and t-values (paired t-test) of the high-intermediate students' attitudes regarding peer assessment. The overall mean for the item responses for the HI class was 3.74, which is greater than three (the neutral score). This suggests that the students held somewhat positive attitudes. Items 9, 10, 11 and 12 exhibit the greatest score differences between the pre- and post-surveys. In other words, for those items, the HI group's attitude changes were large enough to be statistically significant at $p < .01$ level. After the peer assessment activities, the HI class indicated that peer assessment created more opportunities for them to speak in English (item 9; $t(40) = 4.31$), improved their oral presentation skills (item 10; $t(40) = 5.90$), and motivated them to participate (item 11; $t(40) = 4.77$). They also believed that within-group peer assessment was a good way to separate individual effort from group work (item 12; $t(40) = 4.87$). In addition, 90.3%[3] of the HI students considered that peer assessment increased student-student interaction (item 6) and augmented the group participation (item 5). The score differences for items 1 and 4 reached statistical significance at $p < .05$. The HI group reacted less favorably to the helpfulness of peer assessment to their learning ($M = 3.73$ on the pre-item 1), but their responses became more positive ($M = 4.00$ on post-item 1; $t(40) = 2.43$). The average score on teacher-student interaction (item 4) increased from 3.76 in the pre-survey to 4.15 in the post-survey ($t(40) = 2.64$). For item 8, no student strongly agreed that peer assessment created more incentive for them to speak. Their opinions seemed to be split on this item.

[3] The percentage indicates the participants who chose either 'agreeing' or 'strongly agreeing.'

Table 4. *Pre- and Post-survey Results of the High-intermediate Students (N = 41)*

	Item	1 Strongly disagree (%)	2 Disagree (%)	3 Neutral (%)	4 Agree (%)	5 Strongly agree (%)	Mean	Median	Mode	*SD*	*t*
1	pre	0.0	0.0	29.3	68.3	2.4	3.73	4	4	.50	2.43*
	post	0.0	0.0	12.2	75.6	12.2	4.00	4	4	.50	
2	pre	0.0	0.0	31.7	58.5	9.8	3.78	4	4	.61	0.46
	post	0.0	4.9	24.4	51.2	19.5	3.85	4	4	.79	
3	pre	0.0	0.0	31.7	56.1	12.2	3.80	4	4	.64	1.13
	post	0.0	0.0	24.4	53.7	22.0	3.98	4	4	.69	
4	pre	0.0	2.4	41.5	34.1	22.0	3.76	4	3	.83	2.64*
	post	0.0	0.0	7.3	70.7	22.0	4.15	4	4	.53	
5	pre	0.0	0.0	12.2	70.7	17.1	4.05	4	4	.55	1.65
	post	0.0	0.0	9.8	53.7	36.6	4.27	4	4	.63	
6	pre	0.0	0.0	14.6	61.0	24.4	4.10	4	4	.63	1.43
	post	0.0	4.9	4.9	41.5	48.8	4.34	4	5	.79	
7	pre	0.0	0.0	22.0	61.0	17.1	3.95	4	4	.63	1.86
	post	0.0	0.0	9.8	56.1	34.1	4.24	4	4	.62	
8	pre	0.0	48.8	39.0	12.2	0.0	2.63	3	2	.70	0.17
	post	0.0	4.9	43.9	51.2	0.0	3.46	4	4	.60	
9	pre	0.0	34.1	51.2	14.6	0.0	2.80	3	3	.68	4.31**
	post	0.0	9.8	39.0	48.8	2.4	3.44	4	4	.71	
10	pre	0.0	34.1	53.7	12.2	0.0	2.78	3	3	.65	5.90**
	post	2.4	2.4	29.3	58.5	7.3	3.66	4	4	.76	
11	pre	0.0	9.8	48.8	41.5	0.0	3.32	3	3	.65	4.77**
	post	0.0	2.4	17.1	61.0	19.5	3.98	4	4	.69	
12	pre	0.0	0.0	51.2	46.3	2.4	3.51	3	3	.55	4.87**
	post	0.0	0.0	12.2	63.4	24.4	4.12	4	4	.60	

Note. *p < .05, **p < .01

For illustrative purposes, below are some HI students' responses for some of the items that are statistically significant. The students responded to the survey and interview questions either in English or Chinese. In most cases, they chose to respond in Chinese; the researcher then translated their responses into English.

Item 1: PA is helpful to your learning.

How did the peer assessment activities help your learning?

- If I encountered any vocabulary, I would look it up.

Were the peer assessments helpful to your learning?

- It somewhat helped me. When assessing other groups' presentation, we could identify our own weaknesses. Now we know better how to attract our peers' attention.

Item 4: PA activities increase the interaction between the teacher and the students.

Did the peer assessments raise teacher-student interaction?

- Yes. I asked the teacher some questions.
- Sometimes, if topics were not clear to me, I asked the teacher.

Item 9: PA creates more opportunities for you to converse in English.

In what ways did the peer assessment activities assist in your learning?

- Listening and speaking.

Did the peer assessment activities improve your speaking?

- Yes, I would rehearse before the presentations.

Item 10: PA betters your oral presentation skills.
Do you think the peer assessments help your oral presentation skills?

- I divided the content of my presentation into parts, and then I kept practicing before the presentation.
- Yes, through seeing others' presentations, I could identify their strengths and weaknesses. Then I could improve.

5.1.3. Low-intermediate students

The combined survey results of the low-intermediate students are illustrated in Table 5. The LI class had positive attitudes towards peer assessment with an overall mean of 3.77. In terms of changing attitudes, the low-intermediate students did not agree that peer assessment could stimulate speaking at first (item 8), but changed their views later ($t(40) = 3.83$, $p < .01$). They also changed their perceptions of having more chances to converse in English (item 9; $t(40) = 6.45$, $p < .01$) as well as bettering their oral presentation skills (item 10; $t(40) = 6.03$, $p < .01$) through peer assessment. It is worth noting that the only two decreases of mean value from the pre-survey to post-survey were the participants' reactions to teacher-student interaction (item 4) and whether students were competent to evaluate their peers (item 7). Although the means dropped from 3.98 to 3.93 (item 4) and 3.90 to 3.78 (item 7), most LI students still reacted favorably to these two items (73.2% and 65.9%). After the peer assessment exercises, 82.9% of the students reported that peer assessment was helpful to their learning (item 1) and developed a sense of participation (item 5, 85.3%). About 90% of the participants stated that peer assessment enhanced interaction among students (item 6; $t(40) = 2.15$, $p < .05$) and group participation (item 11; $t(40) = 3.45$, $p < .01$) while over 80% of them thought this assessment method separated individual contributions (item 12; $t(40) = 2.34$, $p < .01$). Some of the examples of LI students' responses for the items that reached a statistically significant level ($p < .01$ or $.05$) are below.

Item 6: PA activities increase interaction among students.
Did the student-student interaction increase because of the peer assessments?

- Yes, we discussed more things.
- I got to know a lot of people through the peer assessments.

Item 8: PA stimulates you to make more effort to speak.
In what ways, did the peer assessments help your learning?

- I was willing to speak. Because everybody was good; this made me look weak. The situation boosted my fighting spirit. I wanted to be better because they were good. I wanted to make more effort.

Item 9: PA creates more opportunities for you to converse in English.
In what ways, the peer assessments helped your learning?

- Peer assessment improved my speaking, for example, reciting and memorizing the scripts. When I worked hard to memorize the scripts, I learned some English.

Item 10: PA betters your oral presentation skills.
Did the peer assessments improve your oral presentation skills?

- Yes. I dared not to speak before.

Item 11: Being graded by peers motivates you to participate more in your group.
Do you think the within-group peer assessments motivated participation?

- The peer assessments made us actively participate in the activities.
- Peer assessment increased my participation. When doing group work, some people have no desire to contribute but at the end we share the same score. In this case, I don't think it's fair.

- Everyone would participate in [the activities]. I like this kind of feeling. When doing group projects, sometimes some people do nothing but share the same grade with other group members. That upsets every one of us. This is bad.

Item 12: Within-group assessment is a good way to distinguish individual contributions from the group products.

What do you think about the within-group peer assessments?

- Peer assessment made the process of finishing the group projects more smooth. Due to the within-group peer assessments, those who usually did not participate would …The process [of completing the projects] was more smooth and quicker.

Table 5. *Pre- and Post-survey Results of the Low-intermediate Students (N = 41)*

Item		1 Strongly disagree (%)	2 Disagree (%)	3 Neutral (%)	4 Agree (%)	5 Strongly agree (%)	Mean	Median	Mode	*SD*	*t*
1	pre	0.0	0.0	22.0	70.7	7.3	3.85	4	4	.53	1.06
	post	0.0	2.4	14.6	63.4	19.5	4.00	4	4	.67	
2	pre	0.0	2.4	34.1	58.5	4.9	3.66	4	4	.62	1.28
	post	0.0	4.9	17.1	65.9	12.2	3.85	4	4	.69	
3	pre	0.0	0.0	19.5	63.4	17.1	3.98	4	4	.61	0.52
	post	0.0	2.4	24.4	36.6	36.6	4.07	4	4/5	.85	
4	pre	0.0	2.4	19.5	56.1	22.0	3.98	4	4	.72	-0.34
	post	0.0	2.4	24.4	51.2	22.0	3.93	4	4	.76	
5	pre	0.0	0.0	14.6	61.0	24.4	4.10	4	4	.63	1.39
	post	0.0	0.0	14.6	39.0	46.3	4.32	4	5	.72	
6	pre	0.0	4.9	14.6	53.7	26.8	4.02	4	4	.79	2.15*
	post	0.0	0.0	9.8	41.5	48.8	4.39	4	5	.67	
7	pre	0.0	2.4	24.4	53.7	19.5	3.90	4	4	.74	-0.66
	post	2.4	7.3	24.4	41.5	24.4	3.78	4	4	.99	
8	pre	0.0	26.8	51.2	22.0	0.0	2.95	3	3	.71	3.83**
	post	0.0	7.3	39.0	51.2	2.4	3.49	4	4	.68	
9	pre	0.0	51.2	43.9	4.9	0.0	2.54	2	2	.60	6.45**
	post	0.0	9.8	29.3	56.1	4.9	3.56	4	4	.74	
10	pre	0.0	43.9	43.9	12.2	0.0	2.68	3	2/3	.69	6.03**
	post	0.0	7.3	24.4	63.4	4.9	3.66	4	4	.69	
11	pre	0.0	0.0	36.6	61.0	2.4	3.66	4	4	.53	3.45**
	post	0.0	2.4	9.8	56.1	31.7	4.17	4	4	.70	
12	pre	0.0	0.0	36.6	56.1	7.3	3.71	4	4	.60	2.34*
	post	0.0	2.4	17.1	48.8	31.7	4.10	4	4	.77	

Note. *p < .05, **p < .01

5.1.4. Students' attitudes prior to the peer assessment exercises

A summary of the students' reactions prior to the peer assessment exercises is displayed in Table 6. The students were in favor of peer assessment even before they had experienced it. Nevertheless, the high-intermediate students and the low-intermediate students had somewhat different perceptions. The HI class thought peer assessment might enhance learning motivation while the LI class believed it might increase group participation. Friendship effects were described by the HI class whereas the LI class indicated that peer assessment could be a new learning opportunity. The high-intermediate students realized the necessity of peer assessment to prevent peers from taking advantage of group work; their counterparts, however, assumed peers' comments and suggestions might be useful. Sentiments like peer assessment might enhance learning and interaction were shared by both classes.

Table 6. *A Summary of the Students' Attitudes before the Peer Assessments*

High-intermediate (HI class)	Low-intermediate (LI class)
1. PA may enhance learning motivation.	1. PA may improve learning.
2. Never thought about this.	2. PA may motivate me to participate in group projects.
3. PA may improve learning.	3. PA may increase interaction among peers.
4. No needs to do PA.	4. No comments.
5. PA may promote interaction among students.	5. PA may offer a chance to know about comments and suggestions relating to presentations.
6. PA may be hard, especially evaluating friends.	6. Never thought about this.
7. PA may be necessary to avoid free-riders.	7. PA may be another kind of learning.
8. PA may be troublesome.	8. No needs to do PA.

Note. Reasons are listed in order of frequency with number 1 being most frequent.

5.1.5. Students' attitudes after the peer assessment exercises

Based on the *t*-test results, as presented previously, the increase of score differences between the pre- and post-surveys are statistically significant. Both HI and LI students' opinions of peer assessment became more positive. As to why they changed their views, below are some favorable reasons:

HI students:

- I realized that within-group peer assessment made evaluation fairer. (post-survey)
- Peer assessment helped me understand others' thoughts about me. (post-survey)
- I came to like peer assessment more because we had a lot of group projects, but the teacher couldn't see our preparations. Through peer assessment, everybody could see how much effort you really made. (interview)

LI students:

- Through peer assessment, I can voice my opinions. It's great. (post-survey)
- Comments and suggestions are helpful to improve my performance in the future. (post-survey)
- Peer assessment gave pressure to those who normally took advantage of group work and forced them to contribute. (interview)

On the contrary, some students were still unsure about this assessment form. Here are their comments:

HI students:

- It's hard to evaluate my friends. I feel obligated to reward them good grades. (post-survey)
- Sometimes peer assessment is subjective. (post-survey)

LI students:

- People may have different standards; for instance, some peers may give me 80 points thinking that it's a good grade while I think otherwise. (post-survey)
- Peer assessment is troublesome. (interview)

In summary, the positive reasons for changing attitudes include the increase of motivation and participation, separation of individual effort from group products, usefulness of peers' comments and suggestions, and enjoyment of voicing opinions. The negative reasons include difficulty of assessing friends and different interpretations of grades (i.e., some people thought 80 points out of 100 was a good grade while others perceived the opposite).

5.2. Research question two

5.2.1. Language proficiency differences in terms of attitudes

In the pre-surveys, the high-intermediate students reacted less favorably to peer assessment than their counterparts; the means were 3.52 and 3.59 respectively. Nevertheless, the situation was reversed in the post-surveys. The HI class held somewhat more positive attitudes than the LI class with mean values of 3.96 and 3.94, respectively. There was nearly no language proficiency differences regarding the students' attitudes between HI and LI group. Both classes had positive reactions to peer assessment.

5.2.2. Language proficiency differences in the within-group peer assessments

The students seemed to award high grades when evaluating their group members' individual contributions to group work. Comparisons between the group-to-group and within-group peer assessments are shown in Table 7. The means of the group-to-group peer assessments for the HI group were 69.7 for the first peer assessment and 63.4 for the second peer assessment, while the means of within-group were 80.1 and 80.6. As for the LI group, the means were 68.7 and 66.2 for the group-to-group peer assessments, and 85.2 and 85.9 for within-group. It is obvious that the grades for within-group peer assessments are much higher than the ones for group-to-group peer assessments. The within-group peer assessments done by both classes seemed to be somewhat influenced by friendship effects. The LI class seemed to be more generous in the within-group peer grading than their high-intermediate counterparts (85.6 vs 80.4 on average).

Table 7. *Comparisons between the Peer Assessments and Within-group Peer Assessments*

	1st PA	1st WPA	2nd PA	2nd WPA	PA Average	WPA Average
HI class ($N = 43$)	69.7	80.1	63.4	80.6	66.6	80.4
LI class ($N = 45$)	68.7	85.2	66.2	85.9	67.5	85.6

Note. PA = peer assessment; WPA = Within-group peer assessment; Full credit is 100.

5.2.3. Correlations between the teacher and peer assessments

Comparing the similarities between peer and teacher assessment is to check validity of peer assessment whereas comparing peer assessment with different groups or the same group over time is to examine the reliability of peer assessment (Topping, 1998). Descriptive information and correlations between the teacher and peer assessments are presented in Table 8. Generally speaking, the students' scores correlated well with the teacher's. In the first peer assessment, the HI class's peer assessment did not correlate to statistical significance ($r = .51$) with the teacher assessment; on the other hand, the LI class's correlation was not only large but statistically significant ($r = .97$). In the second peer assessment, the r value between the HI class and the teacher was .86 while LI class's grading also agreed with the teacher's ($r = .81$). Thus, correlation coefficients were both high and statistically significant for the two classes. The low-intermediate students had a higher correlation with the teacher in the first peer assessment (in fact the highest among the four comparisons) while their counterparts' grading was closer with the teacher in the second peer assessment (but not by much).

Consequently, in terms of grading, it seems that there were no language proficiency differences in peer assessment. In other words, the peer assessments done by the high-intermediate students did not have more similarities with the teacher assessments than the peer assessments done by the low-intermediate students. One explanation could be the gap of language proficiency between the two classes was not large enough to detect a difference. According to the teacher, another possible explanation could be that even though the high-intermediate students' had relatively better English ability, the low-intermediate students were more cooperative throughout the whole process and serious about the teacher's instructions. Simply put, the LI class's general learning attitudes were better. More comparisons with the same two language proficiency levels as well as other proficiency levels need to

be done to further examine the consistency of peer assessments and similarities between teacher and peer assessment.

In terms of group-to-group peer assessment, it is worth mentioning that the teacher grading was consistently higher than that of the students. This result contradicted some previous studies such as Sluijsmans, Dochy, and Moerkerke's (1999) study, which indicated peers' over-marking. However, for within-group peer assessments, due to friendship effects, the students tended to reward their group members higher grades. The finding that the students felt obligated to give higher grades even when the assessments were done anonymously is similar to a finding in Cheng and Warren's (1997) study.

Table 8. *Correlations between the Teacher and Peer Assessments*

	1st PA			2nd PA		
	PA Mean	TA Mean	*r*	PA Mean	TA Mean	*r*
High-intermediate (HI) (*N* = 43)	69.7 (9.8)	76.5 (7.2)	.51	63.4 (6.8)	81.2 (6.7)	.86*
Low-intermediate (LI) (*N* = 45)	68.7 (14.6)	75.7 (8.5)	.97**	66.2 (3.1)	76.1 (5.6)	.81*

Note. The numbers in the parentheses are standard deviations. Full credit is 100. *p < .05 level (two-tailed). **p < .01 level (two-tailed).

6. Pedagogical implications

Based on Falchikov's (2005) generic pattern of using self and peer assessment as well as taking the findings of the current research into account, an implementation process scheme is proposed (see Figure 2). This process scheme can be divided into three phases, pre-implementation phase, implementation phase and post-implementation phase. It provides EFL teachers who are interested in integrating peer assessment into EFL classrooms with the following procedures and suggestions.

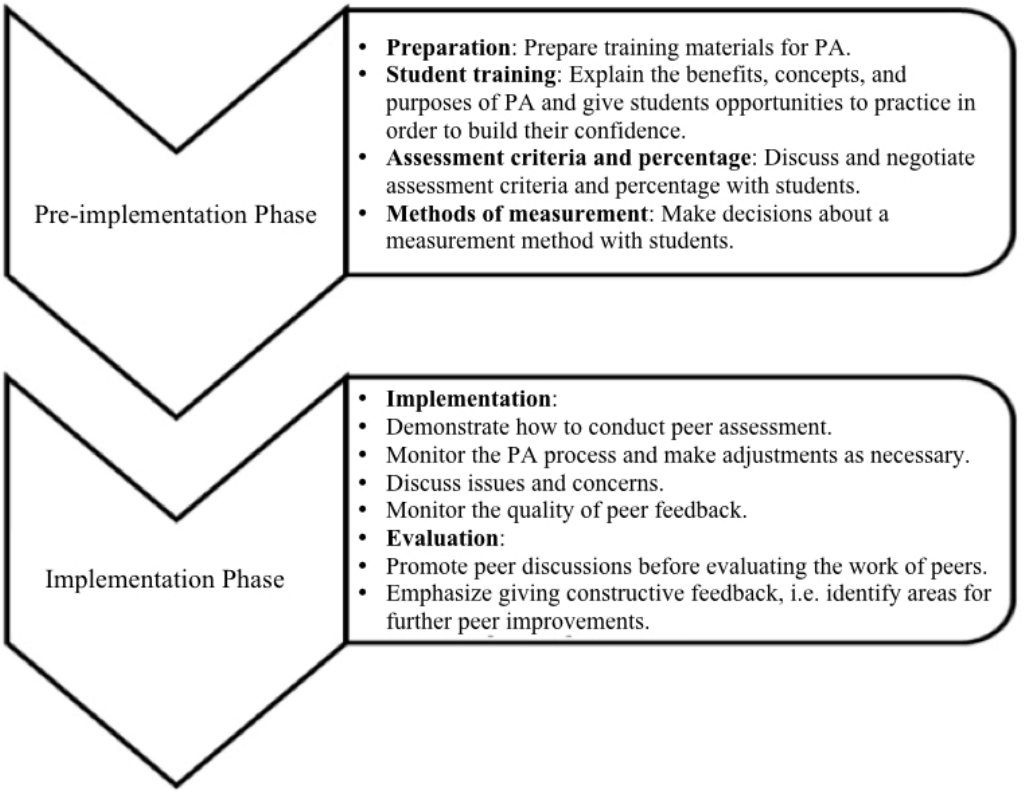

Figure 2. Implementation process scheme for peer assessment.

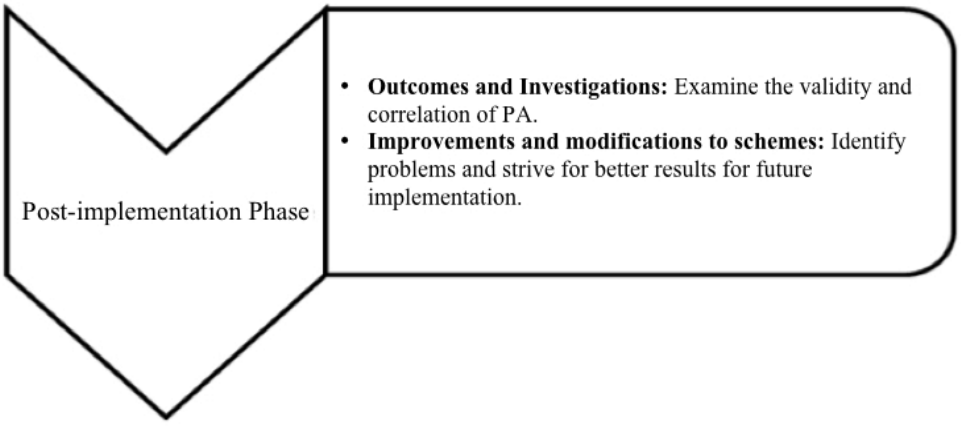

Figure 2. Implementation process scheme for peer assessment (continued).

6.1. Pre-implementation phase

1. Preparation and technology: Prepare training materials for peer assessment. In this study, most of the students had no experience with this assessment method. It was crucial to explain and teach them how to evaluate their peers. Additionally, the past research emphasizes the importance of training (Falchikov, 2005; Freeman, 1995; Patri, 2002).
2. Student training: Explain the benefits, concepts, and purposes of peer assessment in training sessions and give students opportunities to practice to build their confidence. Help students understand that integrating peer assessment into classrooms is a way to empower them in the assessment process. A majority of the students (70% of the interviewees) indicated that the peer assessment activities helped them to be more independent; moreover, they liked the idea of being able to (have the power) assess their peers.
3. Assessment criteria and percentage: Discuss and negotiate assessment criteria with students for the purpose of increasing validity (Cheng & Warren, 1997, 1999, 2005; Falchikov & Goldfinch, 2000; Sivan, 2000). Owing to the large class size of the HI and LI class, it was time-consuming to do the peer assessments. Therefore, in order to be time efficient, it is recommended to use only a few assessment criteria. As to percentage, due to students' general lack of experience, the researcher suggests keeping peer assessment under 40% of the grade. If doing a group project, count within-group peer assessment as a part of the grade so that individual effort can be separated, but handicap peer grades since over-marking occurred in the within-group peer assessments. For example, decrease the percentage of within-group peer assessment in a project grade or subtract 10 points (whatever point is reasonable in a specific context) from the assigned peer scores.
4. Methods of measurement: Once the criteria are set, make decisions about a measurement method with students, for instance, forms, checklists, rating scales and so on. Some of the participants complained that, even with peer assessment training, at the beginning of the activities, they sometimes were not sure how to evaluate their peers' oral presentations. Providing a rubric may compensate for the lack of experience and understanding of the requirements. Anonymous assessment is recommended to reduce friendship effects because a few students were concerned that assigning low grades would jeopardize their friendship. Another alternative is to ask students to submit within-group peer assessment forms via email to protect confidentiality.

6.2. Implementation phase

5. Implementation:
   - Demonstrate how to conduct peer assessment to strengthen students' confidence as well as lower their anxiety. The participants indicated that the more they used peer assessment, the more they felt confident of evaluating their peers.
   - Monitor the peer assessment process and make adjustments as necessary. It took a long time to complete the first peer assessment because the teacher asked the students to use English to give feedback. The students' English proficiency was not advanced enough to provide suggestions in a short time; some of them struggled with this and gave superficial comments such as 'good, very good, not good and no comment.' To solve this problem, the teacher allowed the students to give suggestions in Chinese to improve the quality of peer feedback. This also saved some class time.
   - Discuss issues and concerns that emerge from the peer assessment process and provide solutions. Some participants had a concern of unfair grading in peer assessment. Therefore, the teacher emphasized that the peer assessments only counted as a part of the grade for oral presentations (20% in group-to-group peer assessment; 20% in within-group peer assessment). The course grade was also determined by other criteria such as mid-term, final and participation.
   - Monitor the quality of peer feedback. As mentioned earlier, the teacher gave permission to the students giving feedback in their first language (L1) so that the quality and usefulness of feedback could be increased.
6. Evaluation:
   - The students' work is assessed by both teachers and students.
   - Promote peer discussions before evaluating the work of peers (assigning grades). Seventy-five percent of the interviewees expressed that the group discussion helped them to be more objective about other groups' performance.
   - Emphasize giving constructive feedback (i.e., identify areas for further peer improvements). Most of the participants said that they learned a lot from their peers' suggestions.
   - Collect peer assessment forms and review students' feedback.
   - Combine teacher and peer feedback and return it to students.

6.3. Post-implementation phase

7. Outcomes and Investigations: Examine the relationship between teacher and student grades (validity). In this research, the peer scores were similar to the teacher's (see Table 8).
8. Improvements and modifications to schemes: Identify problems and strive for better results for future implementation. Several students stated that although the peer assessments were done anonymously, somehow they still worried that awarding low grades might hurt their friends' feelings. A possible solution is to ask students to submit the forms via email to secure confidentiality.
9. Re-modifications to schemes: Modify the scheme according to participants' suggestions. For example, include a rubric to compensate for students' lack of experience with peer assessment.

7. Limitations

There were two limitations in the study. First, the students' language proficiency levels might be too close. Also, there were no records of TOEFL equivalent (or other well-known tests) to the placement test (English test results of Academic Aptitude Test and Joint College Entrance Examination) used in this study. If the TOEFL equivalent is provided, the readers may have a better understanding of the participants' language proficiency. Second, this study used a relatively small (88 students) convenient sample; thus generalization should be made with caution.

8. Suggestions for future studies

As stated earlier, there is a lack of literature on both general and online/computer assisted peer assessment in ESL/EFL with various applications. Future research could explore EFL learners' and teachers' perceptions about online peer assessment. Some studies discussed online/computer-assisted peer assessment systems (Davies, 2000; Lin et al., 2001; Ngu, Shepherd, & Magin, 1995; Rushton, Ramsey, & Rada, 1993; Tsai, Liu, Lin, & Yuan, 2001); however, not in the field of ESL/EFL. With the wide access of Internet and email, online/computer-assisted peer assessment would be very promising (Topping, 1998); future researchers could examine various aspects of online peer assessment.

The current research found that peers' grading was somewhat affected by friendship (even with anonymous evaluation). Future studies could explore to what extent friendship effects influence peer assessment and whether confidential online environment would reduce or eliminate friendship effects. In terms of peer grading, this research did not discover language proficiency differences in peer assessment. Future studies are recommended to conduct a similar study with groups of different proficiency levels (e.g., advanced vs intermediate) as well as with a bigger sample size. Another suggestion is to examine consistency of peer evaluation.

9. Conclusions

Peer assessment has great potential and is becoming a prominent tool in various subject areas at the tertiary level (Falchikov & Goldfinch, 2000; Falchikov, 2005). However, it is not widespread in college EFL programs in Taiwan. The results of the pre- and post-surveys suggested that even though most of the students had no peer assessment experience prior to the study, regardless of their proficiency levels, the students held positive attitudes towards peer assessment before and after the peer assessment exercises. The findings reveal no significant differences in terms of attitudes between the high- and low-intermediate students. In general, the peer grading correlated closely with the teacher's grades. All the interviewees (20) wished to have peer assessment in the future. With the support of the students' favorable reactions and high correlations between teacher and peer grading, this study concludes that peer assessment is a viable alternative to involve students in the assessment process and serve as a way to diversify the assessment culture in higher education in Taiwan.

Appendixes

Appendix A. Peer evaluation and feedback form

Presenting group: _____
Topic: _____

Assessing your peers is not an easy task. You need to try to be fair and objective. Use the following scale when assessing your fellow students. While a group is presenting, jot down comments to the presenting group for future improvement.

1 = poor 2 = below average 3 = average 4 = above average 5 = excellent

	Criteria	**Comments**	**Scores**
Content	Structure of the Presentation		
	Evidence of Rehearsal		
	Pronunciation & Clarity of Expression		
	Appropriate/Accuracy Use of Grammar and Vocabulary		
	Quality of the Content		

(Continued)

	Criteria	Comments	Scores
Delivery	Visual Aids		
	Interaction with the Audience		
	Confidence		
	Timing and Pacing		
	Eye Contact/Voice/Gestures/ Movements		

Appendix B. Within-group peer assessment form

Group: _____
Topic: _____

Please take a few minutes and objectively assess, apart from yourself, your group members' contributions to the presentation. There are five criteria, and each criterion is worth 20%. This evaluation form will be kept confidential.

Group Member (Name) / Criteria						
Brainstorming ideas for the presentation (20%)						
Organizing the presentation (20%)						
Participating throughout the process (20%)						
Interacting and cooperating with group members (20%)						
Preparing visual aids for the presentation (20%)						
Total Score						

References

Brindley, Clare & Scoffield, Susan (1998). Peer assessment in undergraduate programmes. *Teaching in Higher Education*, *3*(1), 79-89.

Brown, Douglas (2004). *Language assessment: Principles and classroom practice*. New York: Longman.

Cheng, Winnie & Warren, Martin (1997). Having second thoughts: Student perceptions before and after peer assessment exercise. *Studies in Higher Education*, *22*(2), 233–239.

Cheng, Winnie & Warren, Martin (1999). Peer and teacher assessment of oral and written tasks of a group project. *Assessment and Evaluation in Higher Education*, *24*(3), 310–314.

Cheng, Winnie & Warren, Martin (2000). Making a difference: Using peers to assess individual students' contributions to a group project. *Teaching in Higher Education*, *5*(2), 243–255.

Cheng, Winnie & Warren, Martin (2005). Peer assessment of language proficiency. *Language Testing*, *22*(1), 93–121.

Cohen, Jacob (1988). *Statistical power analysis for the behavioral sciences*. Hillsdale, NJ: Lawrence Erlbaum Associates

Davies, Phil (2000). Computerized peer assessment. *Innovations in Education and Training International*, *37*(4), 346-355.

Davies, Phil (2006). Peer assessment: Judging the quality of students' work by comments rather than marks. *Innovations in Education and Teaching International*, *43*(1), 69–82.

Devenney, Raymond (1989). How ESL teachers and peers evaluate and response to students writing. *RELC Journal*, *20*(1), 77–90.

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

Falchikov, Nancy & Magin, Douglas (1997). Detecting gender bias in peer marking of students' group process work. *Assessment and Evaluation in Higher Education*, *22*(4), 385–396.

Falchikov, Nancy (1995). Peer feedback marking: Developing peer assessment. *Innovations in Education and Training International*, *32*(2), 175187.

Falchikov, Nancy (2005). *Improving Assessment through student involvement: Practical solution for aiding learning in higher and further education*. New York: RoutledgeFalmer.

Freeman, Mark (1995). Peer assessment by groups of group work. *Assessment and Evaluation in Higher Education*, *20*(3), 289–300.

Fry, Stuart. A. (1990). Implementation and evaluation of peer marking in higher education. *Assessment and Evaluation in Higher Education*, *15*(3), 177–189.

Gatfield, Terry (1999). Examining student satisfaction with group projects and peer assessment. *Assessment and Evaluation in Higher Education*, *24*(4), 365–377.

Goldfinch, Judy & Raeside, Robert (1990). Development of a peer assessment technique for obtaining individual marks on a group project. *Assessment and Evaluation in Higher Education*, *15*(3), 210–231.

Goldfinch, Judy (1994). Further development in peer assessment of group projects. *Assessment and Evaluation in Higher Education*, *19*(1), 29–35.

Huba, Mary E. & Freed, Jann E. (2000). Learner-centered assessment on college campuses: Shifting the focus from teaching to learning. Needham Heights, MA: Allyn & Bacon.

Johnston, Lucy & Miles, Lynden (2004). Assessing contributions to group assignments. *Assessment and Evaluation in Higher Education*, *29*(6), 751–768.

Kwan, Kam-Por & Leung, Roberta (1996). Tutor versus peer group assessment of student performance in a simulation training exercise. *Assessment and Evaluation in Higher Education*, *21*(3), 205–214.

Li, Lawrence K. Y. (2001). Some refinements on peer assessment of group projects. *Assessment and Evaluation in Higher Education*, *26*(1), 5-18.

Lin, Sunny, Liu, Zhi-Feng, & Yuan, Shyan.-Ming (2001). Web-based peer assessment: Feedback for students with various thinking-styles. *Journal of Computer Assisted Learning*, *17*, 420–432.

Marcoulides, George, A. & Simkin, Mark. G. (1991). Evaluating student papers: The case for peer review. *Journal of Education for Business*, *67*(2), 80–83.

Marcoulides, George, A. & Simkin, Mark. G. (1995). The consistency of peer review in student writing projects, *Journal of Education for Business, 70*(4), 220-223.

Mertens, Donna, M. (2005). *Research and evaluation in education and psychology: Integrating diversity with quantitative, qualitative, and mixed methods*. Thousand Oaks: Sage Publications.

Mowl, Graham & Pain, Rachel (1995). Using self and peer assessment to improve students' essay writing: A case study from Geography. *Innovations in Education and Teachintig International*, *32*(4), 324–335.

Ngu, Ann. H. H., Shepherd, John, & Magin, Doug (1995). Engineering the 'Peers' system: The development of a computer-assisted approach to peer assessment. *Research and Development in Higher Education*, *18*, 582-587.

Nilson, Linda, B. (2003). Improving student peer feedback. *College Teaching*, *51*(1), 34–38.

Oliver, Ron & Omari, Arshad (1999). Using online technologies to support problem based learning Learners' responses and perceptions. *Australian Journal of Educational Technology*, *15*(1), 58–79.

Orsmond, Paul & Merry, Stephen (1996). The importance of marking criteria in the use of peer assessment. *Assessment and Evaluation in Higher Education*, *21*(3), 239–250.

Orsmond, Paul, Merry, Stephen, & Reiling, Kevin (2000). The use of student derived marking criteria in peer and self-assessment. *Assessment and Evaluation in Higher Education*, *25*(1), 23–38.

Patri, Mrudula (2002). The influence of peer feedback on self- and peer-assessment of oral skills. *Language Testing*, *19*(2), 109–131.

Race, Phil, Brown, Sally, & Smith, Brenda (2005). *500 tips on assessment*. New York: RoutledgeFalmer.

Rushton, Christopher, Ramsey, Phillip, & Rada, Roy (1993). Peer assessment in a collaborative hypermedia environment: A case study. *Journal of Computer-based Instruction*, *20*(3), 73-80.

Shohamy, Elana (1992). New modes of assessment: Connection between testing and learning. In Elana Shohamy & Ronald Walton (Eds.), *Language assessment for feedback: Testing and other strategies* (pp. 7-28). Dubuque, IA: Kendall/Hunt.

Sivan, Atara (2000). The implementation of peer assessment: An action research approach. *Assessment in Education: Principles, Policy & Practice*, *7*(2), 193–213.

Sluijsmans, Dominique, M. A., Dochy, Filip, J. R. C., & Moerkerke, Geroge (1999). Creating a learning environment by using self-, peer- and co-assessment. *Learning Environments Research*, *1*, 293–319.

Sluijsmans, Dominique. M. A., Moerkerke, George, Merrienboer, Jeroen G., & Dochy, Filip, J. R. C. (2001). Peer assessment in problem based learning. *Studies in Educational Evaluation*, *27*(2), 153–173.

Stefani, Lorraine A. J. (1992). Comparison of collaborative self, peer and tutor assessment in a Biochemistry Practical. *Biochemical Education*, *20*(3), 148–151.

Stefani, Lorraine A. J. (1994). Peer, self and tutor assessment: Relative reliabilities. *Studies in Higher Education*, *19*(1), 69–76.

Topping, Keith (1998). Peer assessment between students in colleges and universities. *Review of Educational Research*, *68*(3), 249–276.

Tsai, Chin-Chung, Liu, Zhi-Feng, Lin, Sunny, & Yuan, Shyan-Ming (2001). A networked peer assessment system based on a Vee Heuristic. *Innovations in Education and Teaching International*, *38*(3), 220-230.

Wen, Mei-chun, Tsai, Chin-Chung, & Chang, Chun-Yen (2006). Attitudes towards peer assessment: A comparison of the perspectives of pre-service and in-service teachers. *Innovations in Education and Teaching International*, *43*(1), 83-92.

Willaims, Eira (1992). Students attitudes towards approaches to learning and assessment. *Assessment and Evaluation in Higher Education*, *17*(1), 45–58.

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