

THE EFFECT OF PEER REVIEW ON ENGLISH WRITING SELF-EFFICACY AMONG CHINESE UNIVERSITY STUDENTS

Zhihao Dong¹ and Siti Maziha Mustapha²

¹*Hubei Normal University, China*

²*Infrastructure University Kuala Lumpur, Malaysia*

ABSTRACT

In this study, the English Writing Self-efficacy Inventory was used to compare 175 non-English majors between the experimental group and control group in order to examine the effect of peer review on College English writing self-efficacy. The results showed that peer review can significantly improve college students' self-efficacy in English writing, and the improvement of female students' self-efficacy is higher than the male students. The result also indicated that College English writing self-efficacy of students with low English proficiency level showed more improvement than the students with high English proficiency level.

Keywords:

Peer review; English writing; Self-efficacy.

INTRODUCTION

English writing is not only an important means of language communication, but also an important indicator of English comprehensive ability. For a long time, English writing has been a bottleneck restricting the effectiveness of English teaching at all levels. How to construct an effective and scientific method of English writing is also a topic for English teachers and researchers to explore. As an important part of process writing and multi-feedback mechanism, peer review or peer feedback is "the input provided by the readers for the authors, and its purpose is to provide information for the authors to modify their articles" (Keh, 1990: 294), is the social interaction paradigm presented during the process of consultation and co-construction of writing between the authors and the readers, and is the core of the writing process. Peer review, which has different value with teacher evaluation, plays an important role in improving students' English writing ability and autonomous learning ability (Yang Miao, 2006; Deng Yiming, Cen Yue, 2010).

BACKGROUND OF RESEARCH

Since the 1970s, a large number of studies have shown that learners' emotional state is one of the most important factors affecting the success or failure of foreign language learning. Positive emotions can make language learning more effective and fun, while negative emotions can hinder learners' progress. Self-efficacy is a major affective factor and the core of self-regulation system (Bandura, 1977). Self-efficacy has been the focus in the field of educational research because of the well tested empirical relationship between self-efficacy beliefs, motivation, and behavior (Mills, 2014).

Self-efficacy in learning activities refers to learners' judgment and understanding of their ability to carry out and complete an action or task. It refers to learners' confidence in their ability to compete in a learning activity, confidence and expectation of their success in completing a task, and potential understanding of whether or not they can successfully complete a task. Self-efficacy beliefs will determine how much energy learners devote to learning and how long they persist in facing difficulties in learning (Bandura, 1986). Self-efficacy is a powerful force in the process of human behavior. It has immeasurable value in controlling and regulating behavior. The main effects of self-

efficacy on behavior are as follows: 1) affecting individual's choice of tasks; 2) affecting individual's persistence in difficult situations; 3) affecting individual's attitudes and efforts when faced with tasks; 4) affecting individual's acquisition of new behaviors and performance of existing behaviors (Huang Xiting, 1997:102-103).

In recent years, researchers at home and abroad have made useful explorations on the impact of self-efficacy on learning activities and academic performance. The study found that students' self-efficacy differed in grades and major categories, but there were no significant differences in gender, educational level and other factors (Pan Hualing, Chen Zhijie, 2007); self-efficacy was closely related to the use of learning strategies, activity feedback and learning behavior, which could predict academic motivation and academic achievement (Pintrich & DeGroot, 1990; Pintrich & Schrauben, 1992; Zhang Risheng, Yuan Limin, 2004); self-efficacy was affected by background variables such as learning goals (Schunk, 1990). Therefore, setting specific, realistic learning goals can help improve self-efficacy (Wang & Lin, 2007).

Writing is not only a cognitive activity, but also an emotional activity, because the composition of individual emotions always affects all stages of the writing process. Attitudes and concepts play key roles in the individual emotional components of learners (Faigley et al, 1985). Learners who believes in themselves will be more interested in writing and put more sustained efforts and perseverance into writing practice.

With the in-depth study of the impact of self-efficacy on overall academic achievement, scholars began to explore the impact of self-efficacy on foreign language writing. Writing self-efficacy is a perception of the ability to plan writing tasks, implement writing processes, and achieve the desired writing effect. It is also a confidence in the ability to complete specific writing tasks. When a learner is convinced of his or her ability to write, he or she will have a high sense of self-efficacy, and will go all out to complete the writing task. Tang Fang and Xu Jinfen (2011) found that the self-efficacy of non-English majors in China is generally at a moderate level, and the self-efficacy of College English writing is moderately correlated with their writing performance. In order to enhance the self-efficacy of College English writing, it is necessary to train writing strategies, create writing atmosphere and establish multivariate evaluation mechanism.

Although studies have introduced the theory of self-efficacy into English writing teaching, most of the relevant studies are theoretical concepts or teaching suggestions. In the context of China, there are few empirical studies on the impact of peer review on self-efficacy in writing process.

RESEARCH QUESTIONS

This study aims to examine the influence of peer review on self-efficacy in College English writing and attempts to answer the following three questions: 1) what is the impact of peer review on self-efficacy? 2) Is there any difference in the impact of peer review on self-efficacy between male and female students? 3) Is there any difference in the impact of peer review on self-efficacy between high-level and students with low English proficiency level?

PARTICIPANTS

The participants of this study were 175 sophomores of non-English majors in a public university in East China, including 89 in the experimental group (43 boys and 46 girls) and 86 in the control group (38 boys and 48 girls). Before the experiment, in a time-limited writing test entitled "Live alone or Live with Roommates", the average scores of the experimental group and the control group were 7.32 and 7.61 (the full score was 15), respectively. There was no difference in writing level between the

two groups. In the experimental group and the control group, the first 25% of the students were in the high-level group, and the last 25% were in the low-level group.

RESEARCH TOOLS

English Writing Self-efficacy Scale (Tang Fang, Xu Jinfen, 2011) was used in this study. The scale consists of 23 items, which is in the form of Likert 5-point scale. The total score range of 23 items should be between 23 and 115. The higher the score, the higher the sense of self-efficacy. Before the implementation of the questionnaire, the scale was tested, and the retest reliability $\alpha = .746$ at four weeks interval showed that the scale had good retest reliability and met the requirements of statistics. In order to further understand the structural validity of the scale, factor analysis of the test results shows that the cumulative contribution rate of variance of each factor is 58.541%. The data show that the scale has good structural validity.

EXPERIMENTAL DESIGN

Firstly, the experimental group was divided into several groups with 5-6 people in each group. The grouping followed the principle of intra-group heterogeneity and inter-group homogeneity. Secondly, at the beginning of the experiment, the students were trained in peer evaluation method in two classes (90 minutes). The purposes of training are to:

- 1) make sure peer review is an effective way to improve college English writing.
- 2) clarify the method and standard of peer review.
- 3) emphasize that communication and discussion run through peer review.

The students in the experimental group have peer-to-peer writing assessment every three weeks for a total of five experimental cycles. After completing the same writing tasks in class or after class with the same subjects, genres and requirements, the experimental group adopted the method of peer review in class (30 minutes) and teacher evaluation after class; the content of teacher evaluation was intra-text / selective modification + post-text / selective comment + teacher evaluation.

The control group adopted the traditional method, that is, after-school teacher review + Classroom explanation (30 minutes). The content of teachers' after-class evaluation is the same as that of in-text revision / selective revision + post-text / selective comment + teacher's grading; the content of classroom instruction mainly focuses on: composition comment, example comment, and writing skill instruction, etc. Both the experimental group and the control group were consistent in writing frequency and content. Before and after the experiment, "College English Writing Self-efficacy Scale" was issued to the subjects twice. Based on the data obtained, the comparative analysis was conducted between the experimental group and the control group before and after the experiment by using social science statistical software SPSS12.0.

Peer review adopts "one manuscript one focus" and "multi manuscript evaluation" method, which is implemented in two stages. The first stage focuses on the content and text of the writing, requiring the evaluation of the well written sentences in the peers' composition, as well as pointing out the existing problems and shortcomings, and putting forward suggestions. The reason for doing so is that only after the content of the article is determined, it is necessary to modify and improve the form and in this way, the communicative function of writing can be better reflected (Dheram, 1995). In addition, "from the perspective of communication between readers and authors" (Keh, 1990:301), it will be better to put the focus of the evaluation on the aspects that can be freely discussed and negotiated. According to Xu Xin (Xu Xin, 2003: 48), unlike grammar and technical details which can be only right or wrong, the talking of content and text, which are more flexible and negotiable, are more acceptable psychologically for the students. Quantitative and descriptive peer reviews of content

and textual structure were conducted in groups (15 minutes) using a combination of quantitative and descriptive evaluations.

The second stage focuses on the language and expression of writing, requiring indirect assessment (pointing out but not modifying) of the errors in the expression of words, phrases and sentences in peer composition, pointing out the advantages and disadvantages, and giving suggestions. The peer review of language and expression was also conducted between groups (15 minutes) using a combination of quantitative assessment and descriptive assessment.

FINDINGS AND DISCUSSION

Firstly, the College English Writing Self-efficacy Scale was issued to the subjects before the teaching experiment to investigate whether there were differences between the experimental group and the control group in English writing self-efficacy. The data in Table 1 show that before the experiment, the average self-efficacy of English writing in the experimental group and the control group is 77.98 and 78.46, respectively. There is no significant difference between the two groups ($p > 0.05$). The self-efficacy of the two groups is at the medium level.

To investigate whether peer review has an impact on learners’ self-efficacy in English writing, questionnaires were administered to the subjects again after the experiment. The data in Table 1 show that there is a significant difference in the self-efficacy of English writing between the experimental group and the control group after the experiment ($p < 0.05$).

Table 1: Differences in Self Efficacy Before and After the Experiment

	Group	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Pre-test	Experimental Group	43	77.98	3.77	-.558	.579
	Control Group	38	78.46	4.26		
Post-test	Experimental Group	43	82.21	7.68	2.356	.021
	Control Group	38	78.14	8.26		

In order to explore whether peer review has different effects on College English writing self-efficacy between male and female students, independent sample t-test was used for male and female students in the experimental group and the control group respectively. The data in Table 2 show that there is a significant difference in the self-efficacy of English writing between male and female students in the experimental group ($p < 0.05$), and the self-efficacy of female students ($m=81.91$) is significantly higher than that of male students ($m=77.86$); there was no significant difference in College English writing self-efficacy between the male and female students in the control group ($P > 0.05$).

Table 2: Gender Differences in Self Efficacy Before and After the Experiment

Group	Gender	N	Mean	Std. Deviation	t	Sig. (2-tailed)
Control Group	Male	38	79.30	8.10	-1.398	.184
	Female	48	80.59	7.60		
Experimental Group	Male	43	77.86	8.40	-2.005	.049
	Female	46	81.91	8.37		

In order to explore whether peer review has the same effect on the English writing self-efficacy among students of different English proficiency levels, independent sample t-test was conducted after the experiment between the high-level group and the low-level group. The data in Table 3 show that there is a significant difference in self-efficacy between students with low English proficiency level

($p < 0.05$), while there is a very significant difference between students with medium and high English proficiency level ($p < 0.01$).

Table 3 Self-efficacy of Different English Proficiency Levels Before And After the Experiment

Level	Group	N	Mean	Std. Deviation	t	Sig. (2-tailed)
High	Control Group	21	84.60	3.66	-4.228	.043
	Experimental Group	22	88.45	3.91		
Medium	Control Group	44	79.29	1.36	-12.130	.036
	Experimental Group	45	83.54	.81		
Low	Control Group	21	67.00	5.33	-2.396	.009
	Experimental Group	22	75.83	5.70		

Statistical data in Table 1 show that there is no significant difference in the English writing self-efficacy between the experimental group and the control group before the peer review teaching experiment ($p > 0.05$); after the experiment, there is a significant difference in the English writing self-efficacy between the experimental group and the control group ($p < 0.01$); and there is a significant difference in the English writing self-efficacy between the experimental group and the control group, indicating that peer review can significantly improve learners' English writing self-efficacy.

Atmosphere for writing created

Peer review has created many opportunities for consultation, interaction and cooperation, enabling readers and authors to interact highly and establish a two-way feedback interactive cooperative dialogue (Rollinson, 2005: 27). Through this dialogue, a sense of cordiality and mutual respect will be established among peers, and a harmonious learning atmosphere will be gradually created. When trust and harmony become the mainstream consciousness, learners are more willing to give and accept peer feedback, and even negative comments will be seriously considered. At the same time, due to the mutual evaluation method training, students can understand and master the evaluation criteria and requirements of compositions, eliminating the unknown and worries about how to evaluate compositions (Wu Yuhong, Gu Satellite, 2011:54). Peer review encourages students to concentrate more on how to express themselves, rather than worrying too much about teachers' scores, thus improving students' attitudes towards English writing. Peer review can promote emotional communication among students, enhance mutual understanding and trust among students, and in this way anxiety is reduced and learning becomes a relaxed process (Richards, 1994).

Peer review enhancing writing confidence

Peer review advocates active interaction and cooperation among peers. For this reason, through peer review, students learn from the experience of others, pay full attention to the role models, arouse a strong sense of self-success in their hearts, especially when they see peers with similar capabilities succeed through efforts, their self-esteem could be enhanced, because it is the alternative experience provided by those social "models" (Bandura, 1995) that has an important impact on the formation of self-efficacy. Peer review emphasizes that when evaluating peer composition, we should be good at finding "bright spots" in content, text, language, expression and attitude of the composition, and give full affirmation, and stimulate peers' positive emotion. The praise and encouragement from peers can help students put more effort into the task of English writing and enhance their courage and self-confidence in writing.

Peer review bringing about good revision

The peer review of “one draft, one focus” and “multi-draft evaluation” requires detailed quantitative and qualitative evaluation of peers’ writings in terms of content and text, language and expression. Students who provide detailed evaluation have higher self-efficacy than those who do not and at the same time, receiving detailed evaluation can significantly improve self-efficacy (Wang & Wu, 2008). Face-to-face interactive evaluation is conducive to the smooth transmission of evaluation information and avoids the shortcomings of traditional evaluation in which the feedback of evaluation information is not adequate and timely. In view of the similarity of cognitive ability, peer revisions in terms of vocabulary, article organization and content are more easily accepted, which can stimulate self-revision more effectively (Caulk, 1994; Paulus, 1999; Matsuno, 2009) and improve the quality of text output. Students who have participated in the peer feedback teaching experiment in English writing process, whether as feedback givers or receivers, have significantly improved their writing performance. Female students’ English writing self-efficacy significantly improved. Statistical data in Table 2 show that there a significant differences in English writing self-efficacy between male and female students, in the experimental group. This shows that peer review plays a significant role in improving English writing self-efficacy of female students than that of male students.

Male and female students have different learning styles:

Gender differences in brain biological structure lead to male students being field-independent, analytical and controlling linear thinking rather than interpersonal interaction, while female students are field-dependent, holistic and intuitive thinking, with emotional orientation, social interaction, high empathy and preference for cooperative learning (Oxford, 1995). In peer review, girls have higher participation motivation than boys.

Male and female students having different learning strategies: Compared with male students, female students use more emotional strategies and social strategies (Lai Peng, Xia Jimei, 2009) in learning style, and female students are more abundant and sensitive in emotion. Peer review provides a platform for girls to fully show themselves, and meets their emotional needs of being recognized and expressing themselves in front of their classmates. Boys, on the other hand, have more “face consideration” and are afraid of making mistakes. Therefore, in face-to-face peer reviews, they are more willing to listen rather than actively offer opinions and opinions.

Male and female students having different attitudes towards learning: Compared with boys, girls have a more positive attitude towards English writing. In daily life, male students, especially those in teacher universities and colleges, enjoy certain employment advantages over female students. As a result, female students are more willing than male students to make efforts on their academic achievements in choosing jobs and realizing their personal values. They take college English writing more seriously and participate in peer-to-peer evaluation teaching experiments more actively.

The English writing self-efficacy of students with low English proficiency level significantly improved by peer review. Table 3 shows that peer review has a very significant difference in the English writing self-efficacy among students of low English proficiency level ($p < 0.01$), and a significant difference in the self-efficacy level of College English writing among students with medium and high English proficiency level ($p < 0.05$). This shows that peer review has a more positive effect on English writing self-efficacy of students with low English proficiency level.

Students with low English proficiency level got more positive emotional experience:

Compared with students with high English proficiency level, students with low English proficiency level have low self-efficacy and low expectation of self-success due to their low writing ability and self-confidence. Students are encouraged to discover the bright side in peers' compositions. In this way, students, especially those with low English proficiency level, acquire a sense of achievement that they have never achieved before. The peers' earnest and meticulous evaluation makes the students with low English proficiency level feel valued and respected, which in turn strengthens their motivation and confidence of English writing. The praise and encouragement from peers enable students with low English proficiency level willing to devote more efforts to English writing, gain more positive emotional experience, enhance the emotional synergy between peers, and produce positive emotional and learning effects (Wang Chuming, 2010: 298).

Students with low English proficiency level getting more quality feedback

As far as language competence is concerned, students with high English proficiency level are relatively proficient language users and unequal peers of students with low English proficiency level. Early studies (Long, 1983) found that second language learners, who interact with people above their foreign language proficiency, are able to improve their foreign language proficiency rapidly and based on this, the hypothesis of interaction was put forward. In the heterogeneous peer review within the group, students with high English proficiency level can provide more comprehensive and substantive comments on content, structure and language expression, and bring more successful revisions and writing experience to students with low English proficiency level. At the same time, as feedback givers, through reading and appreciating high-level peers' writings, students with low English proficiency level have gained more macro-writing skills and micro-language expression ability. On the contrary, due to the limitation of English writing level, it is difficult for students with low English proficiency level to give the same feedback on high-level peers' writings, no matter in quantity or quality. Students with high English proficiency level bring relatively few successful revisions through peer feedback. Therefore, students with low English level proficiency become the beneficiaries of the levelling effect of language learning.

CONCLUSION

Peer review, like English writing, is not only a complex process of psychological cognition, the construction and internalization of writing knowledge and skills, but also a complex process of social interaction. This study tries to make a preliminary empirical study on the influence of peer review on English writing self-efficacy among college students. In view of the positive role of peer review in improving writing self-efficacy, peer review should be introduced into English writing classes in colleges and universities so as to create a positive and good writing atmosphere, enhance students' writing confidence and improve the teaching effect of English writing. Meanwhile, ways to optimize peer review should be actively explored so as to highlight the role of peer review in improving English writing self-efficacy and English writing ability.

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