### Students' Views on the Usefulness of Peer Review Conducted at Two Grade Levels

Fiona SIU Kwai-peng1

- 1 City University of Hong Kong, Hong Kong SAR
- The paper was presented at The 11<sup>th</sup> European Conference on Arts & Humanities (ECAH2023), Iafor (17 July 2023), University of London, London. Hybrid mode.
- The paper was published in English Language Teaching and Linguistics Studies in October 2023.
- The paper has been peer-reviewed. The policy of implementing peer review is located at the home page of the journal (http://www.scholink.org/ojs/index.php/eltls/index)

#### Citation:

SIU, F. K. P. (2023). Students' Views on the Usefulness of Peer Review Conducted at Two Grade Levels *English Language Teaching and Linguistics Studies* 5(4), 180-205. <u>http://dx.doi.org/10.22158/eltls.v5n4p180</u>

#### Abstract

Peer review is generally regarded as a useful learning tool for students, providing them with opportunities to interact with their peers when engaging in the process of critical reading and critical thinking, thus possibly raising students' motivation to learn. For peer review to be a manageable task for students, appropriate scaffolding is believed to be pivotal. The present study mainly aims to investigate: 1) how students at two levels of English proficiency will perceive the usefulness of the peer review exercise completed; and 2) whether the scaffolding provided to them is viewed as useful and the reasons behind.

The participants involved 76 university students taking two academic writing courses at a university in Hong Kong. Quantitative and qualitative data were analyzed collectively for the responses to an online anonymous questionnaire. Both groups showed favourable responses to the peer review exercise, including the preference for the retention of the peer review exercise. Several findings, however, differentiated the two groups, e.g., significantly a greater number of higher-ability participants than did the lower-ability students agreed to the benefit of peer review with respect to: a) writing a thesis statement; b) using hedges; c) using in-text citation; and d) building friendship.

Key words: Peer review; academic writing; feedback literacy.

#### 1. Introduction

#### 1.1 Background of Peer Review as a Learning and Teaching Activity

*Peer review*, also termed as *peer evaluation*, *peer response*, *formative peer assessment* (Lungstrom & Baker, 2009), refers to the collaborative learning process in which students read their peers' essays and provide comments, aiming to help their peers to improve the quality of their writing as well as improving the commenters' own ability to think critically and to identify the problems of their own writing. In addition to possible improvement in performance scores, Chaktsiris and Southworth (2019) point out that non-cognitive skills, such as overcoming anxiety, improving time management and building a sense of community, may also be developed through reviewing peers' essays. This student-centred-learning approach has been implemented widely in higher education for both traditional writing assignments (e.g., argumentative essays) and innovative writing tasks (e.g., producing articles to be put on Wikipaedia (Thomas, et al., 2021). Peer review is commonly incorporated in a process writing approach, which requires students to produce more than one draft.

The usefulness of peer review in improving writing performance has been demonstrated in many studies (e.g., Cho et al., 2006; Cho and MacArthur, 2011; Nelson & Schunn, 2009; Reddy et al., 2021; Sánchez-Naranjo, 2019; Serrano-Aguilera et al. 2021). For example,-Serrano-Aguilera et al. (2021) found that there was an increase in the participants' course scores compared with those of the control group, which did not go through the process of peer review at all. Serrano-Aguilera et al. (2021) implemented peer review to 409 students taking six STEM courses from different BSc and MSc studies in a university in Spain to promote student learning and such other transversal skills as critical thinking, autonomy and responsibility. Students were required to provide peer feedback on their peers' oral presentations using the rubrics under the guidance of their instructors so that they could have a better understanding of the most important technical aspects of the academic subjects as well as the formal aspects (e.g., index of figures and tables). The peer feedback collected was reviewed by the instructors, who also evaluated the oral presentations. Contrasting the group with peer review with that without peer review, however, constitutes only one of the many aspects of research on peer review. For example, Lundstrom and Baker (2009) investigated the effect of giving feedback and receiving feedback among the 91 learners of English, who were divided into two groups – one group only giving feedback and the other one only receiving feedback. The mean score of the end-ofcourse essays written by the giving-feedback group was significantly higher than that of the essays written by the receiving-feedback group. In addition to the investigation of the usefulness of giving feedback vis-à-vis receiving feedback, some studies examined the numbers of comments provided by trained and untrained students. Sánchez-Naranjo (2019) found that the L2 Spanish learners achieved substantially higher scores in the final drafts of their essays than did the untrained group; it was also found that students having received systematic training for conducting peer review gave significantly more comments to their peers, and students who incorporated comments made by students having undergone systemic peer review training were able to produce revised versions of better quality. A further advantage identified in research focusing on trained peer review is that the participants were able to identify global errors (e.g., organization, coherence) in addition to local errors (e.g., vocabulary, grammar). On the other hand, untrained student commenters focused mainly on local errors; they also included more than twothirds of their peers' comments on formal aspects in their revised writing (Rahimi, 2013). An explanation for these advantages might be related to a pivotal step in students' writing development, which is inherently involved in the process of peer review – that is, the step of reading one's own essay from a reader's perspective rather than from a writer's perspective (Ramage et al., 2006).

For peer review to be a manageable task for students, appropriate scaffolding is believed to be pivotal. What constitutes effective scaffolding for the development of students' feedback literacy has been the focus of research in recent years. Nieminen and Carless (2023) defines *Feedback literacy* as "students' and teachers' capacities to optimize the benefits of feedback opportunities" and "as a way of reframing feedback processes through the idea of individual skill development" (p.1381). The capacity of students to give useful feedback needs cultivating, as indicated by researchers and teaching practitioners who have devised various mechanisms to help students develop individual skills necessary for a peer review exercise to work well, thus benefitting both student writers and peer commenters. Scaffolding may include the use of rubrics to train students step by step to mark a peer's essay (e.g.,

Hafner & Hafner, 2003; Serrano-Aguilera et al.; 2021); alternatively, scaffolding may just focus on general judgement on such areas as task specification, quality and criterion without asking students to use a rubric to grade a piece of writing (Sadler, 2010).

#### 1.2 Rationale for This Study

The course "University English" and the course "English for Academic Purposes 1" offered by City University of Hon Kong both adopt the approach of process writing. Peer review, a learning activity featuring a process writing approach, was assessed in one of the two courses included in the present study, but it is not incorporated in the other course. For the course with the element of peer review ("University English"), class teachers have the flexibility and autonomy in deciding whether to provide training to students, what teaching materials to be used for the training and the logistics of implementing peer review. As such, the present research hopes to investigate the effectiveness of the scaffolding developed for these two courses to guide students through the process of peer review; the present research also hopes to canvass students' views on the usefulness of the peer review exercise they have undergone. For the course that does not incorporate peer review due to the tight course schedule and other considerations ("English for Academic Purposes 1"), the present research hopes to explore the possibility and usefulness of incorporating peer review into this course as a pioneering endeavor.

Although there have been ample studies showing that peer review benefits participants in various aspects, there is little research comparing the views of two levels of students to reveal possible differences across the two groups in terms of difficulties encountered as well as their views on the usefulness of teacher support provided. The present study aims to address the challenges faced by teaching practitioners in the implementation of peer review in the process of producing an academic argumentative essay, in particular, the establishment of tailored scaffolding to develop the feedback literacy of students possessing different levels of English proficiency. Specifically, this study aims to investigate the following research questions:

- 1) How will students of two language proficiency levels view the usefulness of peer review they have completed?
- 2) Will the scaffolding provided in class benefit students from their perspective?
- 3) Will the same scaffolding provided to both EAP1 and GE1401 students be viewed as useful by both groups of students?
- 4) What difficulties will the two groups of students encounter in the process of conducting peer review?
- 5) What suggestions will the two groups of students make concerning the teacher support provided to them?

Hopefully, the findings will shed light on whether it is possible to engage students possessing a comparatively low level of English proficiency in peer review in an academic writing course that involves a tight teaching schedule; and what scaffolding will be seen as appropriate by students possessing different levels of English proficiency.

#### 1.3 Literature Review

#### 1.3.1 Trend of Adopting Peer Review

Peer review has been advocated as a necessary teaching activity for learning to take place by supplementing teacher feedback. A number of researchers have investigated problems students have in interpreting teacher comments (e.g., Carless, 2006; Rae & Cochrane, 2008). Teacher feedback, no matter how detailed and how clear they are from the perspective of teachers, does not seem to achieve the expected explanatory effect that can result in satisfactory error corrections due to students' difficulty in understanding the concepts and terminology used by their teachers (Sadler, 2010). One example of such seemingly unclear comments from students' perspective is that "[one idea] does not follow logically from what goes before" (Sadler, 2010, p. 540). Students who do not understand why later ideas are not connected to previous ones logically are unlikely to make expected correction to the error identified by the teacher. Sadler (2010) differentiated between "disclosure (by the teacher)" and "visibility (to the student)" (p.539). The primary aim should "shift the focus away from telling the students about the quality of their work (disclosure) and towards having them see and understand the reasons for quality (visibility)" (p.546). "Telling" means that teachers just transmit comments to students in a teacher-driven way (Boud and Molloy, 2013, p.69).

To address the discrepancy between the intent of a teachers' comments and the interpretation of the comments by a student, implementing peer review is a highly recommended solution. Sadler (2010) argues that only when students are provided with opportunities to go through the process of giving comments on their peers' essays under the guidance of their teachers will they be more likely to know how to make better use of teacher comments to revise their own drafts. Cartney (2010) holds a similar view that the gap between receiving teacher feedback and utilizing teacher feedback for revising early drafts should be bridged by implementing peer assessment. Kostopoulou and O'Dwyer (2011) also maintains that the focus in providing feedback should change from teacher transmission of knowledge to "student-generated feedback" (p.69). Actually, the shift of research focus from teacher-driven feedback (e.g., investigating the types and the mechanism of delivering teacher feedback) to the studying of how student can possibly make better utilization of teacher feedback by going through the process of giving comments themselves is a manifestation of a growing trend of a student-centred approach in higher education, in which students are encouraged to maximize their learning through participation in class activities that cultivate critical thinking and evaluative ability.

#### 1.3.2 Effective Scaffolding

To make the task of peer review a productive one, effective scaffolding is considered necessary. Guilford (2001) points out that it is a common occurrence that teachers assume that their students can complete the task of peer review without the necessity of providing training whereas students assume that their teachers will provide them with useful guidance if such guidance is deemed as essential by teachers; similarly, Trautmann et al. (2003) questioned the assumption that students can handle the task of peer review when provided with merely a rubric. In many research studies, the scaffolding provided to students are comprised of the exact version of the marking documents used by teachers themselves or the modified version for student use, which include rubrics, correction code, or general guidance about what to comment on (Sadler, 2010). The first type of scaffolding involves the use of rubrics to draw students' attention to various domains (e.g., organization, content, language) specified in the rubrics as well as the particular requirements for assigning a certain mark for a domain. Coupled with exemplars, rubrics are viewed as serving the purpose of providing students with a basic concept about how many marks to be assigned to a peer's essay, which in turn may help the commenter's interpretation of teacher feedback at a later stage of the assessment process. Furthermore, rubrics have also been found to be a reliable and valid tool to be used in peer review (Hafner & Hafner, 2003). The mean of self-assessment scores over the three years in the study was not significantly different from that of the instructor; students' scores were able to predict teachers' ratings with accuracy (a 1:1 relationship being demonstrated) and with a moderate to high correlation coefficient across the three years of the study (p.1520). The second type of scaffolding involves the use of a tailored correction coding system to reduce a teacher's time in composing comments targeted at each student to point out the nature of an error and to provide directions about remedy. By assigning a code number, a teacher can refer a student to: a) the corresponding explanations about the error type; b) sample sentences of incorrect sentences; and c) samples of correct sentences. A correction code would also allow students to see quickly yet systematically what types of errors are committed repeatedly, thus serving as an efficient learning aid when students need to revise for future writing. The third type of scaffolding concerns the use of general concepts as the input on structured peer assessment. Sadler (2010) provides three concepts that could be applied to multiple disciplines - namely, "task compliance", "quality", and "criteria" (p.542). The first concept means whether students have answered specified questions, e.g., by producing the right genre for the assignment. The second concept "quality" involves holistic judgement on the performance level of a task. To develop such judgment, students need to receive systemic exposure to exemplars of different quality and discussion with teachers and students about the rationales how various works could have been done better. The third concept "criteria" subsumes the characteristics or properties that are "useful in the context of quality or quality determination", the examples of which include "cohesion" (an abstract criterion), "word length" (a concrete criterion), "evidence" (for assertions), "originality or rigour" (in an argument) (Sadler, 2010, p. 545).

Peer review can take multiple forms of manifestations as far as class activities are concerned. The class activities could be done in the form of small-class discussion or whole-class discussion (Sánchez-Naranjo, 2019). Discussion could centre around such topics as the primary purposes of engaging in peer review; judging on the quality of text using rubrics; reading and evaluating comments made by teachers or students in sample essays (e.g., the types of comments and the use of them in revisions), discussing undesirable behaviors that might inhibit the productiveness of peer review; having students practice giving comments and using them in actual drafts; showing teacher corrections based on written comments or correction code numbers. Kostopoulou and O'Dwyer's (2021) study illustrate the implementation of some of the aforementioned class activities in real classes. One of the classes in Kostopoulou and O'Dwyer's (2021) study involved a Pre-Master EAP course at University College Dublin. The

study used the last assessment – the end-of-course Reflective Essay -- to canvass students' opinions about the peer review practice. It was found that students had very positive opinions about the peer review tasks in terms of benefiting the student writers as well as the commenters. The peer review tasks involved students forming groups of 3 to 4 to engage in iterative peer reviews over the semester. Both the assignment of mid-term bibliography and the final research project required three drafts – the first draft to be commented on by peers and the second drafts to be commented on by class teachers before the submission of the final draft. Teacher feedback was returned to both student writers and their peer reviewers to facilitate their comparison of the comments made by students with those made by teachers. Three exemplars of high, mid and low quality were provided to students during training for them to comment on. Assessment terminology was encouraged to be used when explaining their judgment to their partners, and the group judgements were submitted to teachers. Subsequently, the teacher explained to students his/her judgement, unpacking the rubric for the purpose of clarity for students' sakes. Students were then instructed to improve the exemplars based on teacher feedback. Finally, the teacher version with corrections was provided to students to keep for their future reference.

#### 2. Methodology

#### 2.1 Research Tools

An anonymous questionnaire was developed using Google Form. The questionnaire contained 21 questions, which included 17 MC questions and 4 open-ended questions. The questions were classified into five groups: 1) Writing skills (essay structure, paragraphs structure, academic tone, grammar, self-editing ability, research skills); 2) Emotional support (reducing anxiety and building social network); 3) Teacher support, and 4) Preference for the nature of comments, and 5) Overall opinions (retaining the exercise of peer review or not; and the most useful class activity in the training process. See Appendix A for the specific questions of the questionnaire.

The online questionnaire was administered in the second session of the training, which was conducted in two consecutive lessons for desirable training effect. In the first session of the training, one hour was used to explain the 20 types of errors covered in the student handout "Correction Code" (Appendix B) and to demonstrate how to use the correction code to provide feedback on peers' essays using a sample student essay (Appendix C for the clean copy and Appendix D for the version with errors identified with correction code numbers). Subsequent to the first-hour training, students were assigned to read their partners' essays outside of class and provide comments using the correction code introduced or using any methods of their preference. In the second session, which took place in the following lesson, the corrections to the errors in the sample essay were provided to students (Appendix E) prior to the voluntary completion of the questionnaire, which took about ten minutes.

#### 2.2 Participants

The participants of this study included students of two language levels learning academic writing at the City University of Hong Kong in the first semester of 2022-23. A total of four classes taught by the present researcher were involved: two classes of students took the course "English for Academic Purposes 1" (hereafter "EAP 1 students"); two classes took the course "University English" (hereafter "GE students"). The general course requirements stipulate that students scoring Level 3 out of five levels in the Hong Kong Diploma of Secondary Education (HKDSE) should take the course "English for Academic Purposes 1" whereas students scoring Level 4 or above in the HKDSE can directly take the course "University English". Both courses span one semester, totalling thirteen 3-hour lessons.

As can be seen from Table 1 below, the questionnaire return rate of the EAP 1 students was 71%, and that of the GE students was 66%.

#### Table 1. Return Rate of the Questionnaire

	EAP 1 (Class size: 30)	GE1401 (Class size: 25)
Number of classes	2	2
Copies of questionnaires	43	33
collected	Return rate=71% (43/60)	Return rate=66% (33/50)

#### 2.3 The Provided Scaffolding

A correction code, which contained 20 types of errors covering both global and local errors, was used as the basis of the teacher support provided to the students in this study. As can be seen in Appendix B, each of the error types was provided with a code number, followed by a succinct explanation of the error type. Examples illustrating the error type and possible correction(s) to the error were also provided. The use of code numbers to indicate the nature of an error was regarded as necessary by the present researcher to reduce the marking time for both teachers and student commenters; it was also intended to enhance the clarity and depth of explanations, which would otherwise turn into cursory comments because of the possibly large numbers of errors to be commented on from a whole class. Furthermore, the process of having students use the same correction code as the one used by the class teacher was aimed to familiarize students with the targeted types of error, which the class teacher would focus on when deciding what errors to identify when reviewing students' second drafts. Yet, the use of the code numbers was not compulsory; students were told that they had the flexibility of writing comments in words.

To reinforce the in-class explanations of the correction coding system – that is, code numbers and the corresponding errors, a student sample was used for demonstration. In the sample, errors identified by the class teacher were highlighted with code numbers and explained to students as a concluding activity after students were given time to identify the strengths and weaknesses of the sample essay, especially the 20 types of errors included in the correction code. Before being shown the teacher's pre-made version containing code numbers for targeted errors, a student first role-played in pairs as the student writer of that sample essay and then as the commenter. The above steps constituted the first one-hour training session. It is worth noting that at this stage of training, the suggested corrections to the identified errors were not yet revealed to students. It was only in the second training session, which took place in the following lesson, that suggested answers were provided to students, coupled with detailed explanations.

#### 2.4 Logistics of Incorporating Peer Review for Both Groups

After the first training session, both groups of participants were instructed to email their partners the first drafts of their essays before midnight of the day of the first training session. Their partners, in turn, should return their comments before the Sunday midnight of the same week. Simultaneously, the commenters should also upload their comments, which were written on the scrips of their partners' first drafts, to Canvas – a Learning Management System – for the class teacher's monitoring. Based on the peer feedback as well as the training they received in the second session of the training, students submitted the second drafts for assessment in one week's time (Table 2).

(EAP 1 Students)			
• Training for	or peer review in Lesson 6	1.	Email your partner your Draft 1 on the day of Lesson 6;
		2.	Email your partner your comments written on his/her essay BEFORE the end of Week 6 (Sunday).
		3.	Upload your comments written on your partner's essay to Canvas BEFORE end of Week 6 (Sunday).
• Revise you feedback	ar Draft 1 based on peer		Week 7
Submit Dr	aft 2		Week 8
(GE Students)			
. ,	or peer review in Lesson 7	1.	Email your partner your Draft 1 on the day of Lesson 7;
		2.	Email your partner your comments written on his/her essay BEFORE end of Week 7 (Sunday).
		3.	Upload your comments on your partner's essay to Canvas BEFORE end of Week 7 (Sunday).
• Revise you feedback	ur Draft 1 based on peer		Week 8
Submit Dr	aft 2		Week 9

#### Table 2. Instructions to Students About the Timeline of Peer Review

The content and the format of the training provided to prepare students for the peer review activity for both EAP 1 and GE1401 students was the same. In Session 1 of the training, the training for peer review started in the last hour of Lesson 6 (for EAP 1 students) and Lesson 7 (for GE students). The following steps were involved:

Step 1: Teacher explanation of the correction code.

Step 2: Student practice: Students read a sample essay and commented on the essay using the correction code, followed by role-play, in which one student acted as the commenter and one acted as the writer of the sample essay.

Step 3: Teacher analysis: Teacher pointed out the errors identified in the sample essay using the correction code.

In the 2-hour training of Session 2, Teacher explained possible corrections to the errors identified in the sample essay in great detail. In the process of explanation, students were asked to try to justify the suggested corrections using the prompts provided in the Correction Code before the class teacher told them the reasons directly.

#### 2.5 Data Analysis

Both quantitative and qualitative analyses were adopted. For quantitative analysis, the auto-generated frequency counts available in Google Form was used. For Proportional t-tests, IBM SPSS Statistics 28.0 were used. For qualitative analysis, questionnaire responses to open-ended questions were grouped together manually based on themes.

#### 3. Results

#### 3.1 Likert-Scale Findings

Table 3 summarizes the statistical outcomes generated by Google Form as well as by IBM SPSS Statistics 28.0 (Proportional t-tests). The percentages for each of the questions in Table 3 represent the sums of the percentages of students choosing "4" and "5" for the statements in the questionnaire using a 5-point Likert Scale. "1" meaning "totally disagree" or ""not useful at all"; "5" meaning "totally agree" or "very useful".

As can be seen from Table 3, through engaging in peer review, approximately two-thirds of EAP 1 students and the majority of GE students indicated that they had improved in both the writing and social skills listed in the questionnaire. There were no significant differences between the two groups except for four skills (indicated by an asterisk):

Question number	GE Students (Sum of percentages of Rating 4 and Rating 5) n=33	EAP 1 Students (Sum of percentages of Rating 4 and Rating 5) n=43	Significance of Proportional t-test (Z-value)
Q.1 Thesis statement	84.9	74.4	1.11
Q2 Topic sentences/mini topic sentences	87.8	65.1	2.26*
Q.3 Hedging	93.9	72.1	2.43*
Q.4 To identify informal expressions	84.9	67.4	1.93
Q.5 Linking words	84.9	65.2	1.03
Q.6 identify problems of my own	87.9	72.1	1.68
Q7 To use in-text citation	87.9	65.2	2.27*
Q8 To communicate politely/tactfully when pointing out the problems of my partner's essay	84.8	65.1	1.93
Q9 Reducing my anxiety	77.7	69.2	0.83
Q10 Building social network	84.9	60.4	2.33 *
Q. 11 Usefulness of the correction code	81.8	79.1	0.29
Q.12 Usefulness of the lesson* in which you were trained to do peer review	90.9	83.8	0.91

#### Table 3: Likert-Scale Findings for Both Groups of Students

The details of the findings concerning the questionnaire respondents' perception of their improvements in writing and social skills (Table 3) are further summarized below:

- Thesis statement (GE students: 84.9%; EAP 1 Students: 74.4%)
- Topic sentences/mini topic sentences (GE students: 87.8%; EAP 1 Students: 65.1%) (Z-value: 2.26\*)
- Hedging (GE students: 93.9%; EAP 1 Students: 72.1%) (Z-value: 2.43\*)
- Identifying informal expressions (GE students: 84.9%; EAP 1 Students: 67.4%)
- Linking words (GE students: 84.9%; EAP 1 Students: 65.2%)
- Identifying problems of my own (GE students: 87.9%; EAP 1 Students: 72.1%)
- Using in-text citation (GE students: 87.9%; EAP 1 Students: 65.2%) (Z-value: 2.27\*)
- Communicating politely/tactfully when pointing out the problems of my partner's essay (GE students: 84.8%; EAP 1 Students: 65.1%)
- Reducing my anxiety (GE students: 77.7%; EAP 1 Students: 60.4%)
- Building social network (GE students: 84.9%; EAP 1 Students: 60.4%) (Z-value: 2.33\*)

The findings concerning the questionnaire respondents' perception of usefulness of the correction code and the training overall are summarized below:

- The correction code introduced in class was useful (GE students: 81.8%; EAP 1 students: 79.1%);
- The training provided for conducting peer review was useful (GE students: 90.9%; EAP 1 students: 83.8%);

The findings derived from short-answer questions are summarized as follows.

As can be seen in Table 4, the majority of both groups of students indicated that:

- Negative comments were preferred (GE students: 87.9%; EAP 1 students: 90.7%);
- The exercise of peer review should be retained (GE students: 93.9%; EAP 1 students: 95.3%)

However, the two groups of students differed in the following aspects:

- Significantly more EAP 1 students (18.6%) regarded the use of the correction code to indicate the nature of an error (i.e., Option b) as the most useful training step than did GE students (1%).
- Significantly fewer EAP 1 students (30.2%) chose "all of above" (i.e., Option e) when asked to indicate which of the training steps was the most useful than did GE students (60.6%).

Q.14 Do you fear	87.9 ("no")	90.7 ("no")	0.39	
receiving negative				
comments from your peer?)				
Q16 Do you prefer your peer	93.9	95.3	0.27	
to point out the strengths or the weaknesses of your essay?	point out the strengths or			
Q.18 Overall, do you think	93.9 (to be retained)	95.3	0.27	
that peer review should				
be retained or removed?				
Q.20. Which of the following training steps is the <i>most useful</i> in helping you review your peer's essay?	Option a# (18.2%)	Option a (18.6%)	0.04	
	Option b (1%)	<b>Option b (18.6%)</b>	2.43*	
	Option c (role play) 0%	Option c (role play) 0%		
	Option d (18.2%)	Option d (27.9%) 0.92		
	<b>Option e (60.6%)</b>	<b>Option e (30.2%)</b>	2.65* (99%	
			confidence)	

#### Table 4. Short-Answer Questions

(\*Significant at 95% confidence level)

#### 3.2 Open-Ended Questions (Questions 13, 15, 17 and 21)

#### 3.2.1 Reasons for the Usefulness/Uselessness of the Training Session

The provision of clear explanations of the correction code and examples of the error types constitutes the major reasons for the usefulness of the training session. Another reason mentioned by the two groups of students was that knowing various types of errors helps improve their English proficiency.

#### For example:

Student A from the GE group wrote: "Clear teacher instructions about the error types to focus on using the marking code, giving a lot of examples".

Student B from the GE group wrote: "improving my English writing, useful to me".

Student C from the EAP 1 group wrote: "Teacher showed her analysis of the essay using the mark code and provided suggested corrections".

#### 3.2.2 Fear for Receiving Negative/Positive Comments

The majority of the students from both groups expressed their wishes to learn from mistakes, and they see negative comments provided by their peers can achieve this purpose.

#### For example:

Student E from the GE group wrote: "Negative comments help me to do better".

Student F from the GE Group wrote: "It's a process to get better".

Student G from EAP 1 wrote: "It's important to learn from failure."

3.2.3 The training element students most/least liked

The correction code was chosen as the most useful element by some students for the reason of providing guidance to help students identify the major types errors. Examples of comments include: "make us easier to know the common mistakes while writing an essay"; "this can let us review some point through find the numbers in correction codes"; "the marking code list really helped students to identify the mistake, mine and my classmate's".

The comments made by students who chose "All of the above" for the questions about which elements being the useful include: "It is useful and not hurt me"; "The training was good"; "already good/useful/gained a lot"; "all of the materials are easy to understand and the explanation are very clear. I learnt a lot after the training"; "It has many interactions in the training"; "I love interacting with other and understand myself more".

#### 3.2.4 Other Suggestions

Suggestions made by some GE students for the peer review exercise involve: providing more sample essays demonstrating the identification of errors using the correction code; pairing up students based on their writing topics; and expanding the list of types of errors in the correction code. Suggestions made by some EAP 1 students involve: establishing a mechanism to ensure that students will do the peer review seriously; and more teacher guidance on use of definite and non-definite articles.

#### 4. Discussion

#### 4.1 Summary of Findings

#### 4.1.1 Similar Findings for Both Groups

Both EAP 1 and GE1401 students viewed the exercise of peer review useful in helping them improve such writing skills as essay structure; paragraph structure; academic tone (use of hedges and avoidance of informal expressions); use of linking words; communication skills; in-text citation skills; and ability to identify one's own essay problems.

Overall, it was also found that: the training provided was viewed by both groups of students as useful; the activity of peer review should be retained; and peer review was useful in reducing anxiety and building social network.

The positive opinions of the two groups of students about the usefulness of peer review in helping them improve their writing skills align with affirmative conclusions made in some previous studies comparing the actual improvements between drafts that students benefit from giving feedback on their peers' writing (e.g., Lundstrom & Baker, 2009; Sánchez-Naranjo, 2019; Serrano-Aguilera et al., 2021; Rahimi, 2013). The finding that peer review was useful in reducing anxiety and building social network coincides with the survey findings of Chaktsiris and Southworth's (2019) study that peer review helped the participants, who were 30 university third-year history students writing research papers, build resilience in overcoming anxiety, which in turn helped them integrate into a social network.

#### 4.1.2 Different Findings Across Groups

Significantly more EAP 1 student participants than did GE1401 student participants chose the option "the students were encouraged to indicate the nature of an error using a code number (e.g., "1", "8") rather than having to explain the errors in words" as the most useful training step (18.6% vs. 1%). This might be due to EAP 1 students' weaker language ability to explain errors in words; thus, the use of a code number to represent an error seems much easier for them.

In addition, significantly more GE1401 student participants than did EAP 1 student participants agreed to the following statements at the 95% confidence level:

- The process of peer review helped me improve my ability to write an effective thesis statement;
- The process of peer review helped me improve my ability to use hedges (e.g., might, would);
- The process of peer review helped me improve the in-text citations in my essay;
- The process of peer review helped me build friendship with my classmate(s).

#### 4.2 Possible Explanations

GE student participants might be more highly motivated in engaging in peer review because they would be penalized if not completing the peer review activity; furthermore, the quality of the revised essays, which was based on peer feedback, constituted part of the assessment of the second draft. As such, GE student participants might attach more importance to receiving as well as making comments on the aforementioned writing skills – namely, writing an effective thesis statement, using hedges, and using in-text citations. Receiving useful peer comments might have generated a strong motivation for the GE students to build friendship.

Lastly, significantly more GE1401 student participants than did EAP 1 student participants chose the option "All of the above" in the question about which training step(s) is the most useful in helping them review their peer's essays. It seems that each of the training steps adopted in the present study posed little difficulty to the higher ability group. The lower ability group (i.e., the EAP 1 students) might have had a certain degree of difficulty with some of the training steps; for example, in-text citation skills were indicated by an EAP 1 student in the questionnaire to be skills needing more practice.

#### 4.3 Limitations of the Present Study

There exist several limitations of the present study. First, the small sample size of 76 participants in total has limited the generalizability of the findings derived from the data collected. Second, the actual peer comments written on the first drafts were not examined due to the time constraints of the present researcher. Third, possible improvements made by the participants in their second drafts as a result of going through the process of peer review were not examined for the same reason of time constraints.

The following recommendations might be useful for future researchers and teaching practitioners. Apart from enlarging sample sizes, future researchers are strongly suggested to examine the written peer comments as well as the possible improvements made between the first and second drafts. It would be interesting to investigate whether students' perception of the usefulness of the peer review training, as indicated in their questionnaire responses, align with the actual improvements they possibly make in the second drafts. With respective to pedagogical recommendations, peer review is highly recommended for the completion of an essay that involves more than one draft for both groups of students scoring Levels 3 and 4 in the Hong Kong Diploma of Secondary Education. In

addition, a marking code such as the one used in this study might be introduced to students as scaffolding to guide them to identify the types of errors on which class teachers focus. It would be helpful if the explanations and examples in the marking code are compatible with the English proficiency level of the students. Lastly, students possessing a higher level of English proficiency could be encouraged to write their comments as an alternative to the use of code numbers. On the other hand, students possessing a lower level of English proficiency seem to need more explanations and practice for the error types indicated in a marking code to help them revise some basic grammatical concepts. Other pedagogical recommendations include the use of two sample essays for peer review training. One could be used in class while the other one could be for self-study. The two samples are recommended to include suggested answers in addition to the use of code numbers for highlighted errors.

#### 4.4 Conclusion

This study aimed to investigate the usefulness of peer review as perceived by two groups of students, one scoring Level 4 and the other one scoring Level 3 in the HKDSE. Additionally, this study aimed to determine whether the scaffolding provided to the participants were sufficiently helpful from the participants' perspective, as indicated in the questionnaire. Overall, the provided training was viewed by both groups of students as useful in improving their writing skills and providing emotional support; the activity of peer review was considered necessary for future classes of the same two courses. Despite the similarity of findings between the two group, a significantly higher number of students from the lower-ability group found error indications by using code numbers to replace words useful than did the higher-ability group. Conversely, the higher-ability group regarded all training steps as useful in a significantly greater number compared to the lower-ability group. This discrepancy may be due to the need of the lower-ability group for more teacher explanation and practice for the grammatical errors covered in the correction code used in this study. It is worth noting that the present study utilized the same teaching materials and allocated the same amount of time for both training sessions. Based on the findings, it is recommended that the activity of peer review be incorporated into a writing course adopting an approach of process writing for both students at Levels 3 and 4 in the HKDSE. Furthermore, it is advised that a marking code as scaffolding to guide students on which aspects of the writing to comment on be provided. Lastly, the time allocated to train students in using the marking code may need adjustment according to the English proficiency level of the learners.

#### References

- Boud, D. & Molloy, E. (2013). Rethinking models of feedback for learning: The challenge of design. *Assessment and Evaluation in Higher Education*, 38(6), 698–712.
- Carless, D. 2006. Differing perceptions in the feedback process. *Studies in Higher Education* 31, 219–33.
- Cartney, P. (2010). Exploring the use of peer assessment as a vehicle for closing the gap between feedback given and feedback used. *Assessment & Evaluation in Higher Education*, 35(5), 551– 556.
- Chaktsiris, M. G., & Southworth, J. (2019). Thinking beyond writing development in peer review. *The Canadian Journal for the Scholarship of Teaching and Learning*, 10(1). https://doi.org/10.5206/cjsotl-rcacea.2019.1.8005
- Cho, K., Schunn, C. D., & Charney, D. (2006). Commenting on writing: Typology and perceived helpfulness of comments from novice peer reviewers and subject matter experts. *Written Communication*, 23(3), 260-29.
- Cho, K., & Macarthur, C. (2011). Learning by reviewing. *Journal of Educational Psychology*, 103(1), 73-84. <u>https://doi.org/10.1037/a0021950</u>
- Guilford, W. H. (2001). Teaching peer review and the process of scientific writing. *Advances in Physiology Education*, 25(3), 167-175. https://doi.org/10.1152/advances.2001.25.3.167
- Hafner, J.; & Hafner, P. (2003). Quantitative analysis of the rubric as an assessment tool: An empirical study of student peer-group rating. *International Journal of Science Education*, 25, 1509–1528.

Kostopoulou, S. & O'Dwyer, F. (2021). We learn from each other: peer review writing practices in English for Academic Purposes. *Journal of the European Confederation of Language Centres in Higher Education (CercleS) (CERCLES), 11*(1), 67–91. https://doi.org/10.1515/cercles-2021-2006

- Lundstrom, K., & Baker, W. (2009). To give is better than to receive: The benefits of peer review to the reviewer's own writing. *Journal of Second Language Writing*, *18*, 30-43. <u>https://doi.org/10.1016/j.jslw.2008.06.002</u>
- Nelson, M. M., & Schunn, C. D. (2009). The nature of feedback: How different types of peer feedback affect writing performance. *Instructional Science*, *37*(4), 375-401.
- Nieminen, J.H., Carless, D. (2023). Feedback literacy: a critical review of an emerging concept. *High Education*, 85, 1381–1400. <u>https://doi.org/10.1007/s10734-022-00895-9</u>
- Rae, A.M., & Cochrane, D.K. (2008). Listening to students: How to make written assessment feedback useful. *Active Learning in Higher Education*, 9, 217–30.
- Rahimi, M. (2013). Is training student reviewers worth its while? A study of how training influences the quality of students' feedback and writing. *Language Teaching Research*, *17*, 67–89.
- Ramage, J. D., Bean, J. C., & Johnson, J. (2006). *The Allyn & Bacon guide to writing* (4th ed.). Pearson.
- Reddy, K., Harland, T., Wass, R., & Walk, N. (2021). Student peer review as a process of knowledge creation through dialogue, *Higher Education Research & Development*, 40(4), 825-837. <u>https://doi.org/10.1080/07294360.2020.1781797</u>
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. Assessment & Evaluation in Higher Education, 35, 535-550. http://doi.org/10.1080/02602930903541015
- Sánchez-Naranjo, J. (2019). Peer review and training: Pathways to quality and value in second language writing. *Foreign Language Annals*, 52, 612–643. http://doi.org/10.1111/flan.12414
- Serrano-Aguilera, J.J.; Tocino, A.; Fortes, S.; Martín, C.; Mercadé-Melé, P.; Moreno-Sáez, R.; Muñoz, A.; Palomo-Hierro, S.; Torres, A. (2021). Using peer review for student performance enhancement: Experiences in a multidisciplinary higher education setting. *Education Sciences*, 11, 71. https://doi.org/ doi:10.3390/educsci11020071
- Thomas, P., Jones, M., & Mattingly, S. (2021). Using Wikipedia to teach scholarly peer review: A creative approach to open pedagogy. *Journal of Information Literacy*, 15(2), 178.
- Trautmann, N., Carlsen, W., Eick, C., Gardner, F., Kenyon, L., Moscovici, H., Moore, John, Thompson, M., & West, S. (2003). Online peer review. Journal of College Science Teaching, 32(7), 443-447.

#### Appendix A Questionnaire

Dear Students,

You are cordially invited to participate in a research study investigating your views on the support you hope to receive from your class teacher for the peer review exercise. Hopefully, the findings can benefit students in terms of providing them with useful guidance that is compatible with the level of their English proficiency. Students' responses elicited in this questionnaire will be analyzed collectively and anonymously. No individuals will be identified in the report of findings. I would, however, be happy to share the findings with you upon your request once when they are ready.

Submitting the completed questionnaire means that you have agreed to my use of the group responses in research relating to the peer feedback exercise aiming to improve students' academic English.

#### THANK YOU!

Please indicate your choice on a scale of 5 for each of the following questions. "1" means "totally disagree"; "3" means "neutral"; "5" means "totally agree".

- ESSAY STRUCTURE: The process of peer review helped me improve my ability to write an effective thesis statement.
   1 2 3 4 5
- PARAGRAPH STRUCTURE: The process of peer review helped me improve my ability to write effective topic sentences/mini topic sentences.
   1 2 3 4 5
- ACADEMIC TONE: The process of peer review helped me improve my ability to use hedges (e.g., might, would).
   1 2 3 4 5
- ACADEMIC TONE: The process of peer review helped me improve my ability to identify informal expressions.
   1 2 3 4 5
- 5. GRAMMAR: The process of peer review helped me improve my ability to use linking words to show the relationship between two sentences (e.g., "in addition", "as a result").
  1 2 3 4 5
- 6. SELF-EDITING ABILITY: The process of peer review helped me improve my ability to **identify the problems of my own essay.**

- RESEARCH SKILLS: The process of peer review helped me improve the in-text citations in my essay (e.g., Were academic sources used? Could the citations effectively support my arguments?).
   1 2 3 4 5
- COMMUNICATION SKILLS: The process of peer review helped me improve my ability to communicate politely/tactfully when pointing out the problems of my partner's essay.
   1 2 3 4 5

<sup>1 2 3 4 5</sup> 

- EMOTIONAL SUPPORT: The process of peer review helped me reduce my anxiety about handling the essay assignment. (Skip this question if you do not have such anxiety.)
   1 2 3 4 5
- 10. BUILDING SOCIAL NETWORK: The process of peer review helped me build friendship with my classmate(s).
  1 2 3 4 5
- 11. TEACHER SUPPORT: Do you find the correction code useful or not useful for providing feedback to your partner(s)?
  1 2 3 4 5
- 12. TEACHER SUPPORT: Do you find the two lessons\* in which you were trained to do peer review useful or not useful in helping you review your partner's essay *afterwards*?
  1 2 3 4 5
- 13. Please provide reason(s) for WHY you have chosen  $\frac{1}{2}{3}/{4}/{5}$  in Question 12.
- 14. NATURE OF COMMENTS: Do you fear receiving **negative comments** from your peer? Yes\_\_\_\_ No\_\_\_ Other\_\_\_\_
- 15. Please provide reason(s) for WHY you have chosen "Yes/No/Other" in Question 14.
- 16. NATURE OF COMMENTS: Do you prefer your peer to point out the **strengths or the weaknesses** of your essay?

Stronger area \_\_\_\_\_ Weak area \_\_\_\_\_ Other\_\_\_\_\_

- 17. Please provide reason(s) WHY you have chosen "Strong areas/Weak areas/Other" in Question 16.
- 18. OVERALL USEFULNESS OF THE PEER REVIEW EXERCISE: Overall, do you think that peer review should be retained or removed?
   To be removed \_\_\_\_\_ To be retained \_\_\_\_\_ Other \_\_\_\_\_
- 19. Provide the reason(s) WHY you have chosen "Retained/Removed/Other" in Q.18.
- 20. Which of the following training steps is the most useful in helping you review your peer's essay?

a) Students listened to the explanations about the types of errors in the marking code;

b) Students were encouraged to indicate the nature of an error using a number (e.g., "1", "8") rather than having to explain the errors in words (i.e., the marking code);

c) Students were instructed to role-play as the commenter and as the writer;

d) Students were provided with the teacher's analysis (including the errors identified and corrections) at the end of the training.

Option a\_\_\_\_ Option b\_\_\_\_\_ Option c\_\_\_\_\_ Option d\_\_\_\_\_ All of the above\_\_\_\_\_

21. Please give your overall comments on the training you have received, e.g., the thing you like the most/the least. You are also welcome to suggest any more teacher support you hope to receive.

#### Appendix B Correction Code

Explanatory notes for error correction

1. The thesis statement is ineffective.

## A thesis statement should be written in <u>one single sentence</u>, stating your position and the scope of **the essay succinctly.** For example:

This essay argues that ...should/is.... because A, B, and C.

#### 2. The topic sentence/a mini topic sentence is too long.

- Use only <u>simple</u> sentences (i.e., containing NO conjunction).
- Less important ideas packed into a topic sentence should be put in the next sentence (i.e., the *elaboration part*).
- **3.** The topic sentence/mini topic sentence is too specific. A topic sentence/mini topic sentence should be comprehensive yet precise enough to cover all the sub-points in that paragraph.
- 4. The Conclusion does not include basic required information, which includes:
  - Restatement of your stance; restatement of the main reasons put forward in the body.
  - General statements to round off the essay naturally, e.g. by expressing a hope/ a recommendation or stating a condition.

E.g., It is hoped that ....

#### 5. The relationship between paragraphs/sub-sections was not indicated clearly.

Correction: Add a linking word/a transition expression between the two paragraphs/sub-sections.

#### 6. This sentence does not cohere\* with previous sentences.

\*cohere – meaning "connected with other ideas in a clear and reasonable way.

7. The tone is not academic. Hedges (e.g., *probably*) should be used to weaken the tone. Refer to the handout on hedges for more examples.

#### 8. Informal expressions should be avoided.

Please refer to the handout on informal and formal expressions.

9. The basic sentence structure of the sentence is poor, e.g. having two verbs, two subjects.

#### 10. Avoid the use of AND because it is a weak conjunction.

Use other linking words or sentence structures.

E.g.,

• House prices are too high <u>and</u> many citizens cannot afford to buy a flat.

#### $\mathbf{\Psi}$

• House prices are too high; as a consequence, many citizens cannot afford to buy a flat.

- House prices are <u>so high that</u> many citizens cannot afford to buy a flat.
- <u>Because/since/as</u> house prices are so high, many citizens cannot afford to buy a flat.
- <u>As a result of high housing prices</u>, many citizens cannot afford to buy a flat.
- <u>Because of high housing prices</u>, many citizens cannot afford to buy a flat.

#### 11. The two clauses are not linked up correctly because of the wrong use of the comma.

#### Try to use a conjunction, connective or preposition to link up the two clauses.

## Alternatively, you could use <u>a full stop</u> when there is no close relationship between the two sentences.

Wrong: The project lacks funding, it will be scrapped. Correct: The project lacks funding, so it will be scrapped. Correct: Recycled materials could be used. This concept has been advocated for years.

#### 12. No main verb or subject in the sentence can be identified.

Wrong: There are many temples in Hong Kong. <u>For example, Wong Tai Sin Temple.</u> Correct: There are many temples in <u>Hong Kong, for</u> example, Wong Tai Sin Temple.

#### 13. No main clause can be identified.

Wrong: I have decided to withdraw from the course. <u>So that I can look after my mother, who is ill.</u> Correct: <u>I have decided to withdraw from the course</u>, so that <u>I can look after my mother</u>, who is ill.

#### 14. Wrong word choice . Check the meaning of the word AND the example sentences in a dictionary.

# 15. A *defining relative clause* is used instead of a *non-defining relative clause*. A *non-defining clause* (i.e., ", which") should be used when the writer wants to use "which" to refer to the previous entire clause rather than to the word adjacent to it.

Wrong: He has failed in the driving test<u>which</u> makes him upset. Correct: He has <u>failed</u> in the driving test<u>, which</u> makes him upset.

**16.** "Therefore" is used inappropriately. "Therefore" is a logical connective, which shows a very logical result of the previous idea.

Wrong: The students are starving; therefore, they will go to a fast food shop after class. Correct: All insects have six legs. A spider has eight legs; therefore, a spider is not an insect.

A concluding sentence might be introduced by the following expressions rather than "therefore" -- "for these reasons", "as such", "It would be reasonable to believe that..."

- **17.** A verb is wrongly used after a preposition. Instead, a noun should be used after a preposition. Or use a conjunction to replace the preposition.
  - Wrong: <u>Because of</u> the workers <u>have raised</u> their objection to the new company policy, the management has decided to abandon the proposed policy.
  - Correct: Because of the <u>objection raised by the workers</u> concerning the new company policy, the management has decided to abandon the proposed policy.
  - Correct: <u>Because the workers have raised their objection to the new company policy</u>, the management has decided to abandon the proposed policy.

**18.** The two clauses do not share the same sentence subject. Change the sentence subject of the second clause, so that it can match the omitted sentence subject of the first clause.

Wrong: Walking in the forest, a snake was seen. Correct: Walking in the forest, <u>a group of hikers</u> saw a snake.

- **19.** The two tenses do not agree. Change one of the tenses so that it can match the other tense.
- 20. The subject and the verb do not agree. Use a singular verb is if the subject is an uncountable noun.

Wrong: The land that were reclaimed should be better utilized. Correct: <u>The land that was</u> reclaimed should be better utilized.

#### Appendix C Peer review practice - clean copy

#### **Class Demonstration of Peer Review Exercise**

#### Step1

First, use the correction code just taught in class to indicate the types of errors. Apart from using the correction code, you might also wish to write your appreciative remarks and suggestions in point form/paragraph form.

#### Step 2

After Step 1, you should talk/write to your classmate(s) about your judgments. When talking or writing to your partner(s), you should be courteous when explaining an error you think you have detected. You could improve your tone by using hedges and pointing out something positive first. E.g.,

- "It seems/appears that the thesis statement does not show your stance."
- "You could/might add a second sub-section to enrich the content. What do you think?
- "I feel/think that the citation source is not academic".
- "The paragraph is interesting to read, but I would suggest the organization to be improved. How about adding a mini topic sentence for the second part?"

#### 

#### Is Lantau Tomorrow Vision is an effective way to solve the housing problem?

The housing problem has become the most critical and emergent public issue in Hong Kong, the government has tackled with the problem over a decade, but it still tormenting the both government and citizens nowadays. The major factor that the housing problem is such severe is mainly because of limited supply of housings (Daniel, Meghani & Jeffery, 2013). As a result, the chief executive, Mrs Carrie Lam, has launched a project - Lantau Tomorrow Vision. However, there are some experts and citizens considered that this project is not an efficient method to tackle with the housing problem in Hong Kong. And the reasons are as follow.

First of all, the costs of the whole project are too high. From the latest announcement by the government, the estimated costs of the complete project is around 624 billion, which may further increase in the future. For the Hong Kong citizens, this is a numerous amount to them. The Hong Kong Research Association had done a survey about the project in 2018, and there were 46% out of 1130 interviewees who did not support the project, and 53% of opponents said it was because of the expensive costs of building. Moreover, some Legislative councillors worried that the project is actually wasting the government funds because according to the 2019-2020 Budget, the government estimated expenditure is only around 608 billion, which are less than the costs of the project. Furthermore, some interviewees also worry that the costs will eventually shift back to themselves, since the costs are expensive, then the costs of housings there may also be high as well, that reflect the project is not work that great.

Second, the project will affect the ecosystem there. The estimated area of the artificial island is 1700 ha, according to the Assistant Director of Oceans Conservation of World Wide Fund of Nature (WWF), Samantha Lee, claimed that the project will bring out a negative impact to marine ecology and the livelihoods of Hong Kong fisherman, due to the huge damage of habitat and change of hydrology. These damages are permanent and cannot be recovered in the future, which imply that the future generations cannot see these beautiful marine ecology anymore and it is definitely an unfortunate issue. These assets are extremely valuable as some of them are unique in the world, for example, Dibamus Dogadeki only exist in Hong Kong, but because of the artificial island, it may affect the nearby

living environment of these species as the reclamation will build up the contaminant, and eventually these precious species may even face the problem of extinction.

On the other hand, some supporters of the project claimed that the artificial island is the most direct method to increase the supply of the public housings, so that it can shorten the waiting query for the citizens and reduce the purchasing costs as well. From the government estimation, after the completion of the project, it can provide 250,000 to 400,000 units of housings in total and benefit around 700,000 to 1 million people, and 70% of them will be public rental housings, and the rest will be private housings. When the supply of housings increases, it can assist the citizens to catch up the property ladders, which is moving forward from public housings to private housings as the ultimate goal. For the long term, it can not only provide a new downtown for the citizens, but also increase their living standard, and solve the most thorny problem in Hong Kong.

Nevertheless, there are some scholars claimed that instead of the artificial island, utilising the brownfield is a much better way to increase the supply of housings. Brownfield is the land which were previously developed but not used currently. These lands can be developed to build more housing units as well, and it is much environmental-friendly and efficient method than the reclamation. According to the GreenPeace, the estimated developing costs of using brownfield is only nearly 33.3 billion, which is much cheaper than the Lantau Tomorrow Vision, and it does not affect the ecosystem and able to maintain the environment for the future generations. The GreenPeace has done a research and from the report, we can see that there are around 408 hectares that can be developed and can provide almost 140,000 housings units. Since the brownfield is useless currently. The government should fully utilise the existent land before developing new one.

In conclusion, based on the above arguments, the Lantau Tomorrow Vision may not be the most efficient and best way to solve the housing problem because of the expensive costs, bring huge negative impacts to the environment and availability of better substitutes plan. However, the government has already launched the project and there are further actions in the future. It would be grateful if the government can consider the impacts of the project and able to solve them. Or it is only solving a problem by creating another problem.

#### References

1. Lee, H. M. (2018, October 18). Controversy issues concerning Lantau Tomorrow Vision. BBC News.

Retrieved from https://www.bbc.com/zhongwen/trad/chinese-news-45886706

2. D. D., S. M., & W. J. (2013). Subdivided Housing Issues of Hong Kong: Causes and

Solutions. Subdivided Housing Issues of Hong Kong: Causes and Solutions. Retrieved

from

https://web.wpi.edu/Pubs/E-project/Available/E-project-022713-213142/unrestricted/Subdivided\_Housing\_Issues\_of\_Hong\_Kong\_Causes\_and\_Solutions.pdf