

**THE INFLUENCE OF REVIEW STRATEGIES ON STUDENTS' ENGLISH-
LANGUAGE WRITING PERFORMANCE IN A FIRST-YEAR UNIVERSITY
UNDERGRADUATE THAI EFL WRITING CONTEXT**

by

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Abstract

The purposes of this mixed-method study are to (i) investigate whether and to what extent review strategies influence the writing performance of first-year Thai undergraduates; (ii) examine the influence of self- and peer-review strategies based on students' overall English-language proficiency and their varying proficiency groups; and (iii) explore students' perceptions when applying both strategies in relation to writing development. The main findings are: The statistically significant effect of the review strategies were on the students' writing performance; $t(45) = 17.06$; $p = .000$ at the .05 level. The analyses of the students' writing-task score development from 184 self-revised and peer-revised draft scripts showed that they effectively responded to the self-review strategy better than they did to the peer-review strategy; $t(45) = 3.08$; $p = .004$ at the .05 level. In the multi-dimensional comparisons of writing-score development, both self-review and peer-review strategies can be applied to all three proficiency groups of the Science and Education students. From the scripts of the students' responses to three series of questionnaires and a semi-structured interview, the findings revealed some insights into aspects of students' affective-cognitive-social-contextual factors. Implications and recommendation for future studies are also considered.

DEDICATION

This thesis is dedicated to my beloved grandfather

Prayuth Puengpipattrakul

22nd September 1924 – 23rd December 2015

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CHAPTER 1

INTRODUCTION

The inspiration for this thesis lies in the challenges I experienced while teaching English as a Thai lecturer to Thai students, and the Thai students' specific difficulties in general academic English writing at the undergraduate level. These challenges are reflected in the broader national, institutional and pedagogical issues in Thailand surrounding the Teaching of English as a Foreign Language (TEFL). The thesis moves from the macro-level of national education and higher-education institutional agendas in Thailand (which provide the contextual background of the study) to an analysis of micro-level pedagogical issues in writing instruction in a Thai university classroom context. In particular, the intention of this research is to examine writing strategies deployed by both students and teachers in the Thai EFL context in order to evaluate the impact of these on first-year undergraduate students.

This chapter is structured into six sections: contextual background; pedagogical concerns; significance of the research; purposes of the study; research questions; and organisation of the thesis.

1.1 Contextual background of the study

This first section addresses Thailand's national education reform and English-language higher-education policies in Thailand. To better contextualise the Thai education system, Figure 1.1 provides an overview of the main factors affecting Thai EFL learning-teaching

situations including a historic overview of national and institutional education policies and shows the interplay between these and classroom practice at the micro-level (Section 1.2).

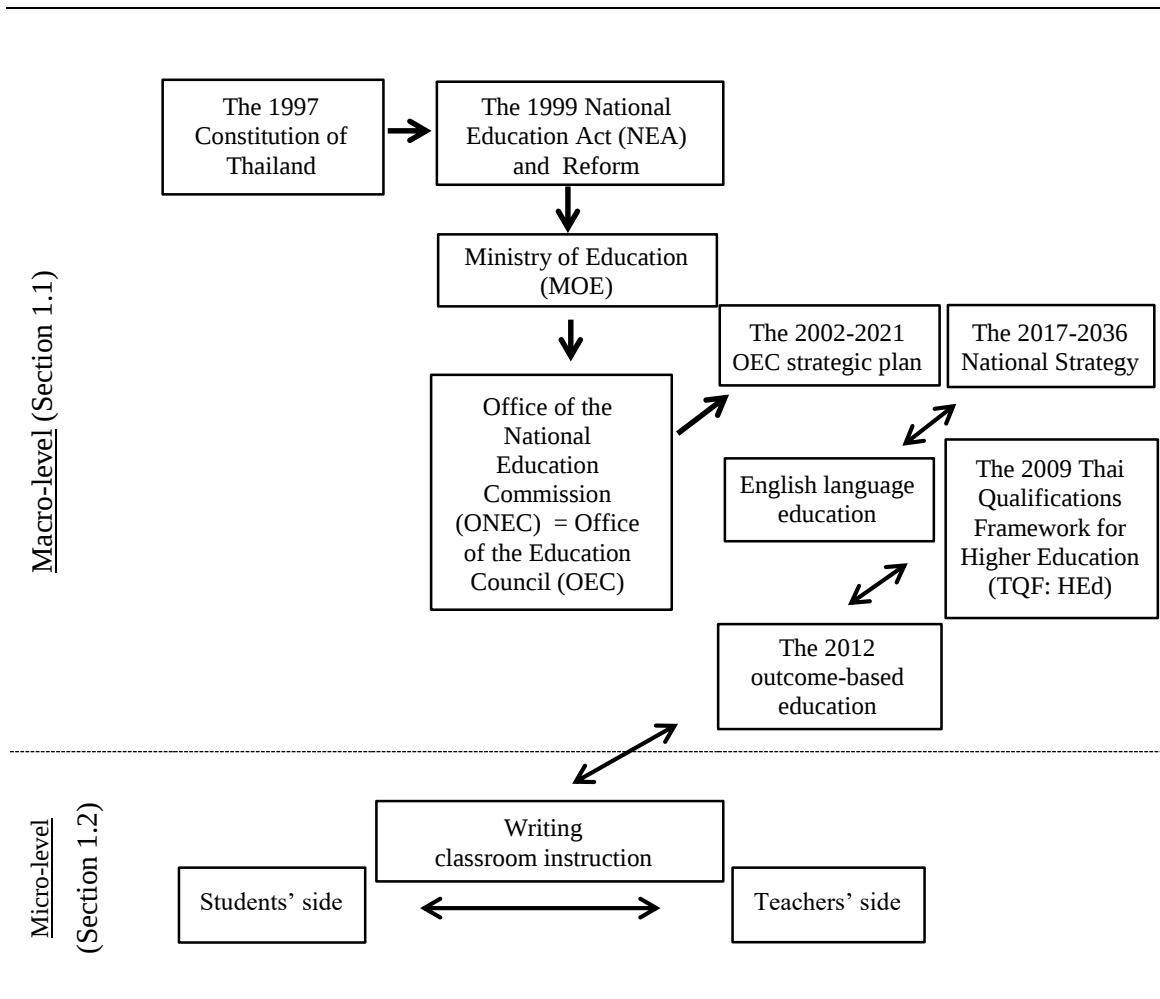


Figure 1.1. Overview of factors affecting Thai EFL learning-teaching situations.

The inter-related factors, which learning and teaching communities in Thailand encounter, indicated by arrows in Figure 1.1, are detailed in Sections 1.1 and 1.2. To understand the Thai education system, it is beneficial to consider the history of educational reforms.

1.1.1 National education reform

The continued importance of educational reform is clear in the 2012-2016 National Research Policy and Strategy Report:

“Social development potential and capability can be enhanced through education reforms, formal and informal learning process, development of self-directed learning systems and support systems for life-long education that compiles with specific local ways of life through development of human resources as well as children and youth”

(National Research Council of Thailand, 2014: 1).

Nationally, one of the Thailand's constitutions was enacted in 1997 for the reason of democratic constitutional reform. As a result from the 1997 Constitution, the country's social, political, cultural, and economic development led to the National Education Act (NEA) in 1999 and subsequently the NEA Amendments in 2002. The 1999 NEA and its 2002 Amendments caused the administrative organisation of the Ministry of Education (MOE) to be restructured in 2003. Under the administration of the MOE, the former Office of the National Education Commission (ONEC) - renamed Office of the Education Council (OEC) in 2003 - implemented its strategic plan of 2002-2021 in order to develop national education and human resources for worldwide competitiveness (Fry, 2002; ONEC, 2003; OEC, 2017). These imply that the implementation of the national education reform is to ensure the improvement of national education quality standards at all levels of basic and higher education.

The implementation of national education reform also gauged the effectiveness and the direction of English language education in Thailand (Wiriyaichitra, 2002). The reform was undertaken to ensure equality of educational and occupational opportunities, thereby promoting English language communicative skills to enable Thailand to reach international standards of well-being and prosperity in the future (OECD/UNESCO, 2016; ONEC, 2016). In Thailand, English is the only obligatory foreign language in the basic 15-year education core (MOE, 2008: 266). In a chapter of the 2002 Educational Reform Act, the significance of proficiency in English is stated: Thai learners should have global literacy, i.e. the ability to both comprehend and produce written English (MOE, 2002; Richards, Platt, & Platt, 1999). In addition, the MOE has conspicuously promulgated the issues of global literacy and proficiency in English in the 2017-2036 National Strategy.

The 20-year National Strategic Plan (2017 to 2036) aims to enable Thailand to achieve developed nation status in terms of stability, prosperity, and sustainability (The Government Public Relations Department, 2017). Out of the six national strategies (i.e. enhancing national stability, improving national competitiveness, broadening opportunities to better equality in society, developing a green economy and society, and reforming and improving public administration), development and empowerment of human capital is considered as the core strategy. Under the core strategy regarding development and empowerment of human capitals, education helps produce quality human resources. The measurement of their quality is performed through tests, examinations, or assessments of learning outcomes or results; for example, literacy skills and English language proficiency of Thai students across OECD (Organisation for Economic Cooperation and Development)

member countries (e.g. Finland, Japan, Singapore, and Vietnam) can be assessed through PISA (Programme for International Student Assessment) scores (OECD/UNESCO, 2016; The Government Public Relations Department, 2017; Vimolsiri, 2017).

With regard to the direction of English language education in response to several national education agendas enacted by national education reform, the role of English in Thailand has become more emphasised, particularly at the higher education level, in the utilisation of communication skills in the international contexts. As Crystal (1997) states, English is used most in non-native English speaking countries in the world. Among the ten ASEAN (Association of Southeast Asian Nations) non-native English speaking community members (i.e. Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, and Vietnam), Thailand, as a region education hub, serves as the centre of the Office of the ASEAN University Network (AUN). Importantly, the AUN has been regarded as the network for ASEAN collaboration in higher education. At the present time, there are 30 member universities across ten ASEAN countries (<http://www.aunsec.org/>).

1.1.2 English-language higher-education policies in Thailand

As stipulated in the National Education Reform Act, the English higher education reforms share the same direction as those at the basic education. The 2002 national education curriculum originated from the 1997 Constitution of Thailand and the 1999 NEA has underlined life-long education to develop affective, social-cultural, cognitive, and moral-ethical skills in curricula (Foley, 2005; Wongsothorn et al., 2002). Apart from the lifelong

learning orientation in the national education curriculum, there have been shifts in pedagogy to be learner-centred and of the development of the learning-teaching process at the levels of basic and higher education (Foley, 2005; ONEC, 2016: 26). Moreover, the MOE has also promoted and rolled out an outcome-driven learning approach to English language syllabi since 2012.

The emphasis of the outcome-based approach has placed, in English language syllabi, more at the higher education level due to the challenges of socio-cultural and economic globalisation (Nitungkorn, 2001; Wiriyachitra, 2002). The growing competition in the worldwide job market after regional and worldwide economic integrations (e.g. AEC—ASEAN Economic Community and EU—European Union) has brought about an open market economy and free flow of labours. Owing to this, proficiency in English is indispensable to Thai citizens and qualifies them for future better careers.

In cooperation with Thailand's MOE, the Ministry of University Affairs (MUA), ONEC, and the Office of Education Reform, the national education reform was implemented with outcome-based education for the sake of the quality of education (MOE, 2008; ONEC, 2009). The MOE established the Thai Qualifications Framework for Higher Education (TQF: HEd) in 2009 in preparation for having Thai higher education institutions produce qualified graduate students. As a result of the Office of the Higher Education Commission's policy in 2012 on TQF, higher educational institutions were then required to develop, revise, and/or alter learning, teaching, and assessment and evaluation in their course syllabi to be learning outcome-based by the year 2012. In other words, since 2012,

an influence of outcome-based education has constituted the national core curriculum of English language education at the higher education level to be learning outcome-oriented.

The term “outcome-based” can be denoted as:

A culminating demonstration of the entire range of learning experiences and capabilities that underlie it. It occurs in a performance context that directly influences what it is and how it is carried out. The word ‘based’ means to direct, define, derive, determine, focus and organize what we do according to the substance and nature of the learning result that we want to have happen at the end.

(Groundwater-Smith et al., 2007: 279)

As pointed out by Spady (1994), an aim of outcome-based education is to ensure that all students are equipped with the knowledge, competence, and qualities needed to be successful after they exit the educational system. He also emphasised that “*the students can learn and succeed, but not on the same day in the same way*” (p. 9).

With the integration of outcome-based education, five fundamental learning-outcome domains which were stipulated in the TQF: HEd for Thai graduates to attain to be “Quality Global Citizens” are knowledge, ethical and moral development, cognitive skills, interpersonal skills and responsibility, and analytical and communication skills (Office of the Higher Education Commission., 2009: 18-25). Out of the five learning-outcome constituents, the required domain of communication skills helps pinpoint the main

direction of how an English language syllabus is to be geared. Communication skills can be defined as the ability to use the mode or the manner in which ideas or information can be exchanged or transmitted between a sender and a receiver of a message via language skills covering listening, reading, speaking, and writing (Richards et al., 1999). Additionally, effective language skills through the promotion of the usage of English in communication have been placed as required higher education standards as well as a tool for communication for jobs and careers (MOE, 2014; Thairath Online, December 9, 2014).

In accordance with one of the national education agendas to adopt the learning outcome-approach in the English language education at the higher education level, learning outcome rubrics, specified in an English language syllabus of the Chulalongkorn University undergraduate level, are illustrated as in Table 1.1.

Table 1.1

Learning-outcome rubrics for university undergraduate English course syllabus (adapted from Richard Kiely's 2012 talk at Chulalongkorn University Language Institute)

	Descriptors	Attributes	Bachelor's Degree
1	Being knowledgeable	Well-roundedness	Knowledgeable in various disciplines and being able to appropriately apply such knowledge in living one's life; keeping abreast of social, economic, and environmental changes
		In-depth knowledge	Having wide and systematic knowledge and understanding of one's discipline, including theories and principles, and having current knowledge of related disciplines
2	Being ethical	Ethics and moral courage	Having faith in virtue; having principles and practices that promote righteousness and human values; having responsibility, morals, and honesty, and being able to live with others in society peacefully
		Professional and social codes of conduct	Having discipline and obeying social rules and regulations; acting in compliance with professional codes of conduct
3	Proficient thinking	Critical thinking	Having critical thinking skills and holistic thinking
		Creative thinking	Having creativity
		Problem-solving skills	Having skills in complex problem-solving
4	Capability	Professional skills	Having skills to work in accordance with professional standards; following up advances in research; knowing how to solve problems; being able to extend the existing body of knowledge
		Communication skills	-Being able to read English at a high level and communicate by speaking, listening, and writing at a fairly high level -Being able to use the Thai language at high level to listen, speak, read, and write to communicate appropriately according to the situation -Possibly being able to use a third language to a certain extent

Table 1.1

Learning-outcome rubrics for university undergraduate English course syllabus (adapted from Richard Kiely's 2012 talk at Chulalongkorn University Language Institute) (continued)

	Descriptors	Attributes	Bachelor's Degree
4	Capability	Skills in information technology	Being able to use information technology to communicate and search for data effectively
		Mathematic and statistical techniques	Having basic mathematic and statistical skills
		Management skills	Being able to devise plans to achieve desired goals; having good interpersonal relations; knowing how to work in teams
		Able to work in society with different cultures	Being broadminded; keeping abreast of changing situations; accepting, respecting, and being able to adjust to cultural and social differences
		Self-development skills	Recognizing the importance of and knowing how to take care of one's physical and mental health; living according to the economic sufficiency philosophy; having a well-developed personality
5	A thirst for knowledge and a capacity to learn	A thirst for knowledge	Searching for knowledge from different sources on a regular basis
		Learning-to-learn skills	Knowing various learning techniques and being able to apply them appropriately
6	Leadership	-	Having vision, bravery, and patience; being consistent and polite; being able to coordinate ideas and benefits based on reasoning and righteousness; being honest, truthful, fair, and loyal to the group; being able to be a group leader at an appropriate level and in an appropriate situation
7	Public mindedness	-	Having concerns for society, the environment, and public property; ready to volunteer to do good for society
8	Retention of Thai identity amidst globalization	-	Recognizing the values in being Thai; preserving and continuing the Thai cultures; living one's life in accordance with the economic sufficiency philosophy while respecting differences and adjusting oneself to live happily in society

As can be seen in Table 1.1, the learning-outcome rubrics (descriptor numbers 3 and 4) for the foundation English course syllabus which was employed in teaching writing in the current study focus more on critical thinking, creative thinking, problem-solving skills and

communication skills. Additionally, the rubrics also serve as a blueprint for other outcome-based English-language curricula in the CU undergraduate English language courses.

1.2 Pedagogical concerns

In addition to the political stances and various policy decisions in Section 1.1, English language learning and pedagogical concerns also affect learning and teaching situations. At the 5th UNESCO-ACEID (UNESCO Asia-Pacific Centre of Educational Innovation for Development) International Conference, an education reform in the Thai education system was derived from two main problems: curricula and learning-teaching methods (The Nation, 2009). Over a ten-year career of teaching English in universities since 2009, my teaching methods have been adjusted and geared towards an outcome-based curriculum. Despite education reform through outcome-based education, educational institutions in Thailand face some challenging issues or underlying problems in classroom learning and instruction for both students and instructors. These are outlined in the following sub-sections.

1.2.1 Learning-related

The evidence of Thai learners' under-performance in English language proficiency suggests that the perennial problems of Thai learners' literacy at basic and higher education levels remain unsolved. PISA, conducted by the OECD, has revealed long-term results of low average reading scores of Thai school students. At basic education levels, according to the 2009 PISA results of students from 70 participating countries worldwide, the average score for English reading proficiency of Thai students was lower than other Asian

countries, such as Hong Kong, Korea, Shanghai and Singapore (The Nation, 2012). Moreover, the 2015 PISA outcome of the Thai students' skills and knowledge was unsatisfactory, particularly in their average reading score which was 409 below the average ASEAN reading PISA score of 493 (Rujivanarom, 2016).

In addition to these unfavourable English-language outcomes for Thai school students, the English language proficiency of Thai adult learners at the higher education level has also been revealed as disappointing in both academic and professional aspects. From an academic perspective, Thai learners' average scores of the 2011 IELTS and TOEFL were, to some extent, lower than those of some Asian countries, such as China, Korea and Malaysia (www.ielts.org/researchers.aspx; ETS, 2012). In 2016, Thai learners' TOEFL-iBT average score was 78, while learners from other Asian countries such as China, Korea and Malaysia gained 79, 84 and 92 out of 120 respectively (ETS, 2016: 13-14). Additionally, it was revealed that the average levels of the English proficiency of Thai learners, measured from the EF English proficiency index, were ranked from 2011 to 2017 (<https://www.ef.co.uk/epi/regions/asia/thailand/>). To illustrate, the average level of English proficiency of Thai learners was ranked at 'very low proficiency', in 2013, 55th out of 60 worldwide countries (Kaur, Young, & Kirkpatrick, 2016) and, in 2015, 14th out of 16 countries in Asia and 62nd out of 70 worldwide countries (Thai PBS, 2015). In the latest year (2017), despite little improvement of the English proficiency level band from the very low level, the average level of Thai learners' English proficiency was still at the low level: 15th out of 20 countries in Asia and 53rd out of 80 countries (<https://www.ef.co.uk/epi/regions/asia/thailand/>). From an occupational perspective, it was found that the average

TOEIC of Thai test takers, a score of 524 out of 990, limited career prospects which demanded higher scores for certain job positions (Puengpipattrakul et al., 2007). Furthermore, in 2016, the average TOEIC score of Thai learners fell to 44th position of 49 countries (ETS, 2016: 5).

Writing skills are arguably the most difficult and complex to develop for language learning (Krashen, 1984; Makalela, 2004; Rapacon, 2015). The research findings of the ONEC disclosed that one of the existing problems that needs to be resolved to improve the quality of Thai education is English language writing competence of Thai students at all school levels (Bhangananda, 2007; MOE, 2002; ONEC, 2003). Furthermore, it was also found that most Thai students have perennial problems in the ability to write in English at the higher education level (Asian Scientist Newsroom, 2011; ETS, 2017; EF English proficiency index, 2012). Sripicharn (2002a) also pointed out that in Thailand, most university undergraduate students have struggled with their English language writing (p. 12). With the issue of university Thai learners' English language writing challenges, the necessity for writing competence in English has been more emphasised, particularly for university undergraduate learners who are going to graduate as 'national and global citizens' (Bhangananda, 2007).

1.2.2 Teaching-related

On account of the aforementioned results of these academic surveys of Thai learners, the National Basic Education Curriculum suggests the needs for teachers to provide ample opportunities for the learners to practice using English as a communication tool. In teaching

the four communicative English skills, writing has mostly been considered the most complex skill in both foreign language (Choudhury, 2013) and second language acquisitions (Belzer, 2013; Brown, 2001; Hajiannejad, 2012; Krashen, 1984; Makalela, 2004; Rapacon, 2015; Tillema, 2012). One of the most immediate issues to be resolved, particularly in the EFL context, is the low proficiency writing skills of foreign language or second language learners at basic and higher levels of education (Abdul-Kareem, 2014; Akbari, 2015; Koosha & Yakhabi, 2013; Mohamed & Zouaoui, 2014; Solak & Bayar, 2015).

Teaching writing is one of the most demanding pedagogical tasks. As stated by John (2009: 272), a series of complex negotiations between students, teachers and the academic discourse community occur in writing classrooms. In the traditional writing classroom, students and teachers spend a large amount of time examining writing composition. Both teachers and students may then find writing composition tedious. Teachers may often be unsure whether their time-consuming written feedback is a worthwhile method to teach writing, or whether their students may take teacher feedback for granted. There might be a lack of interaction between teachers and students during the writing process, particularly when the teacher needs to provide written feedback on the work of many students and may not have enough time to discuss that feedback with the students face to face. Less able students may find teacher feedback on their work demotivating and subsequently may lose their self-confidence in writing (Gass & Selinker, 2008). As Jones and Saville (2016: 79) point out, a challenge for Thai teachers of English is to find practical teaching and learning

activities to help students master their skills of English and develop their global literacy and proficiency in English.

Another pedagogical concern has arisen from reflection on my own teaching experience. I am aware that in a Thai EFL class, after students receive their written tasks which are corrected by their instructor, they are not normally required to revise their tasks afterwards. The instructor's time-consuming written feedback, however, does not always guarantee students' writing development. It is likely that there are some students still generating and repeating writing errors which were previously corrected by the instructor. Since students receive feedback from their instructor but hardly had the opportunities to provide feedback and revise the writing tasks by themselves, it would be useful to investigate if students' practices in reviewing writing tasks during the writing process can be used as a means to enhance the learning and writing performance of Thai EFL university undergraduate students.

1.3 Rationale of the study

In response to the aforementioned educational issues (Section 1.1), learning and teaching concerns (Section 1.2), as well as some relevant implications of my previous studies (e.g. Puengpipattrakul, 2013, 2014, 2016), the current study proposes a learning-teaching approach in terms of using review strategies. The study aims to assist Thai EFL university undergraduate students at the first-year level in developing their writing performance. The study was conducted at Chulalongkorn University (CU) where I am employed as a lecturer. Under the CU bachelor's degree curricula, there are two consecutive compulsory English

courses (Foundation English I and Foundation English II), administered by Chulalongkorn University Language Institute (CULI). If students fail (i.e. obtaining an ‘F’ grade or dropping a course) either Foundation English I or II, they need to re-enroll in that course again for the next semester.

The assessment schemes for CU course evaluation of the compulsory English courses, Foundation English I and II, from the academic years 2012 to 2013, are shown in Table 1.2.

Table 1.2

Course evaluation of Foundation English I and II (The 2012 and 2013 academic years)

Assessment tasks	Points	Proportion (%)
Summative assessment	90	60
- Mid-term examination	45	30
- Final examination	45	30
Formative assessment	40	40
- Group project	10	10
- Individual project	10	10
- Classwork/Homework	10	10
- Reflections/Workbook	5	5
- Class attendance	5	5
Total	130	100

From Table 1.2, it can be seen that the highest proportion is assigned to summative assessment (i.e. the mid-term and final examinations) at 60% (90 out of 130 points). To classify the summative assessment of the compulsory English courses, the University

examination specifications from the academic years 2012 to 2013 are presented in Table 1.3.

Table 1.3

Examination specifications of Foundation English I and II courses (The 2012 and 2013 academic years)

Mid-term exam		Final exam	
Components	Scores	Components	Points
1) Vocabulary	10	1) Vocabulary	10
2) - 3) Reading (Unseen passages)	15	2) - 3) Reading (Unseen passages)	15
4) <i>Writing</i>	20	4) <i>Writing</i>	20
- Organisation (4)		- Organisation (4)	
- Content (6)		- Content (6)	
- Grammar (10)		- Grammar (10)	
Total	45	Total	45

As shown in Table 1.3, of the three main skills (vocabulary, reading, and writing) tested in the mid-term and final examinations of compulsory English courses, the highest score was assigned to the writing component (20 out of 45 marks, or 44.4%).

With a significant move towards a more learner-centred approach in the English-language outcome-based curricula at the higher education level (ONEC, 2016: 26), a focus on writing instruction approaches has shifted from product-oriented to process-oriented. In a nutshell, teaching English language writing emphasises more how students write rather than what they write. According to Oshima and Hogue (2007), in the writing process, the

students are expected to be trained how to write through the process-oriented approach from prewriting to polishing steps. The students inevitably interacted with their teacher and classmates when revising and editing during the feedback process of the polishing step (Kurzweil & Scholl, 2007). In the current study, the polishing step includes a reviewing stage which consists of feedback and revision processes to be discussed in Chapter 2. The study by John (2009: 282) suggests that the revision process as part of the writing process can be an educational tool for students to raise awareness of their language use. Sripicharn (2010) also gives precedence over error correction through editing skills and habits in the writing process. That is, the process approach to writing instruction offers students the opportunity to read, write, discuss writing ideas, and finally develop understanding of how to write systematically (Reid, 1993; Seow, 2002). In order to acquire writing skills, students need to have an ability to assess written tasks. In doing so, introducing a process-oriented approach in the writing process is suggested so that students will be able to write drafts, check and spot errors in written tasks (Puengpipattrakul, 2014; Sotoudehnama & Pilehvari, 2016). Furthermore, it is also recommended that the students should be trained in the reviewing process to promote their writing development and learning autonomy (Tigchelaar, 2016; Wakabayashi, 2013). Several scholars have also agreed that students' independent learning under the student-centred approach helps to enable writing competence (e.g. Ferris, 1999, 2003; Mowlaie, 2014; Rollinson, 2005; Truscott, 1999). Another outcome from the use of the student-centred approach can be measured from students' satisfaction with the learning and/or teaching processes (Gurpinar, Kulac, Tetik, Akdogan, & Mamakli, 2013; McKimm, 2009).

However, despite the significance of the feedback and revision processes in the polishing step in the writing process stated earlier, little research focuses attention on the reviewing practices as a whole in the English-language writing process covering both feedback and revision practices in the same study (e.g. Goldstein, 2006; Lee & Schallert, 2008a, 2008b). In other words, most studies examined mainly either feedback (e.g. Brown, 2007; Ellis, Sheen, Murakam, & Takashima, 2008; Ho, 2008) or revision (e.g. Berg, 2000; Tsui & Ng, 2000; Williams, 2004) as separate entities. In addition, there are few studies, for instance Promnath (2000) and Srichanyachon (2011), conducted in the reviewing process in the Thai EFL context. Promnath (2000) examined the effects of self- and peer-editing methods on grammatical correction of essays written by 40 third-year English major students from Huachiew Chalermprakiet University, Thailand. After a 15-week writing class, the peer editing group was found to score higher in a language test than the self-editing group. The study also revealed that the peer-editing group exhibited more grammatical accuracy in their writing. Similarly, the study by Srichanyachon (2011) investigated the effect of revision behavior towards three respective feedback methods (self, peer and teacher) on writing quality of ten Thai students from Bangkok University. Although teacher revision was perceived as more effective than peer revision in improving student language accuracy, the study found peer revision to be more useful in motivating students themselves to improve their writing.

Although the studies by Promnath (2000) and Srichanyachon (2011) supported the effectiveness of editing and revision in the review process in a Thai EFL context, they did not mention the exact criteria for pairing students in either editing or revision practice, nor

whether editing or revision practice was performed by an individual or in pairs. Moreover, with regard to the significance of writing performance in the EFL contexts, several studies of students' attitudes towards writing assessment have disclosed some controversial issue of whether the use of independent or cooperative feedback in the reviewing process is truly effective in eventually developing writing performance (Hyland & Hyland, 2006a, 2006b; Memari Hanjani, 2014; Mowlaie, 2014; Mowlaie & Maftoon, 2015; Siyyari, 2011; Sukumaran & Dass, 2014; Willey & Gardner, 2010; Yoshida, 2008).

If independent or reciprocal writing assessment is effective in boosting student writing performance, this could be regarded as a pedagogical alternative to the time-consuming writing assessment commonly set by teachers of large mixed-proficiency EFL classes. There remain some small research gaps regarding the combined uses of self- and peer-assessment and of feedback and revision processes in review strategies. Although the notion of and research on self- and peer-assessment are not particularly novel, the current study thoroughly investigates the use of combined self- and peer-review in a real pedagogical setting and adopts both quantitative and qualitative methods. Likewise, feedback and revision practices as combined review strategies in the polishing stage of process-based writing are unique focuses in the current study. As far as I am concerned, my research has not uncovered any study in the Thai EFL context which utilised both self-review and peer review in feedback and revision during process writing. The current study, hence, explores these areas by examining the influence and the effectiveness of the review strategies on the writing performance of Thai EFL students as well as how the perceived strategies are in the students' views.

1.4 Purposes of the study

The purposes of the study are:

- 1.4.1 To investigate whether and to what extent review strategies influence the writing performance of first-year Thai undergraduate students;
- 1.4.2 To examine the influence of self and peer-review strategies which are based on:
 - (a) students' overall English-language proficiency;
 - (b) students' varying proficiency groups in relation to their performance in the categories of the university's writing criteria and academic disciplines;
- 1.4.3 To explore students' perceptions when applying self-review and peer-review strategies in relation to writing development.

1.5 Research questions of the study

The study addresses the following questions:

- 1.5.1 What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?
- 1.5.2 Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?
- 1.5.3 What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?

1.6 Organisation of the thesis

This thesis is organised into seven chapters:

Chapter 1: Introduction

The present chapter consists of the contextual background, statement of problems and the significance of the study. The chapter also states the purposes and research questions of the study.

Chapter 2: Review of the literature and related studies

This chapter reviews related literature and studies addressing two main themes: approaches to writing instruction and learner-centred writing assessment. The first theme, approaches to writing instruction covers product- and process-based writing approaches. The second theme focusing on notions of learner-centred writing assessment consists of social cognitive development of learners, feedback and revision mechanisms, and self- and peer-assessment. An applied framework of review strategies is also proposed in the chapter.

Chapter 3: Research methodology

Chapter 3 carries the research methodology. It includes educational research theories, quantitative and qualitative research design, and research procedures. Based upon the validity and reliability of research design, the current study was developed from the pilot study. Under the research ethics, the procedures of data collection and analysis involve the data of the participants and research instruments. A summary of research methodology is also provided at the end of the chapter.

Chapter 4 Analysis of the influence of review strategies on writing performance

This chapter presents the findings of research question 1 and research question 2 from the quantitative and qualitative data analyses from the participants' self-review and peer-review writing test scores and written tasks. The chapter also discusses and relates the findings to related literature and previous studies.

Chapter 5 Perceptions of the use of review strategies in relation to writing development

The results of research question 3 from the quantitative and qualitative analyses were drawn from the data of the participants' perceptions of self-review and peer-review strategies in this chapter. The chapter also includes the discussion of results with related literature and studies.

Chapter 6 Summary of findings and conclusion

This chapter concludes the principal results based on the three research questions of the study, followed by the limitations and the conclusion.

Chapter 7 Reflective stage: Pedagogical implications and recommendations

This chapter provides relevant reflections through the implications of the study, makes recommendations for further studies, and finalises the details with contributions from the thesis to Thailand and the global community.

CHAPTER 2

REVIEW OF THE LITERATURE AND RELATED STUDIES

2.1 Introduction

The purpose of this chapter is to review the theoretical background related to what is researched in the present study. In order to frame the purposes of this study, a general overview of the approaches to the teaching of writing is provided in Section 2.2. In this section, product-based and process-based writing approaches and sequences of process-based writing are discussed. Section 2.3 addresses the notions of writing assessment in the learner-centred approach which include those of social cognitive development, feedback and revision mechanisms, as well as self- and peer-assessment in classroom writing instruction. Following a major review of the relevant literature and studies as a comprehensive guide towards the final section of the chapter, a proposed framework of review strategies to be utilised in the present study is suggested.

2.2 Approaches to teaching of writing

“Learning comes through writing” (Murray, 2017: 17).

The term ‘writing’ is defined as “a process through which meaning is created” (Zamel, 1982: 195). In writing instruction, the social context refers to the environment in which meanings are exchanged (Vygotsky, 1978). For example, during this study’s timeframe, although English has been more promoted as an international language, the major role of

English in Thailand is primarily as a foreign language during the time when this study had been conducted. In the EFL setting, English needs to be formally taught since a language learner does not completely use English in his or her daily communication nor outside the classroom (Ellis, 2002). As stipulated in the 2009 TQF: HEd, writing is one of the required communication skills for qualified global citizens. Being compatible with outcome-based education, learning outcomes in any course can reflect how effective student learning, course instruction and course evaluation are. In the Thai EFL setting, a university lecturer of English is normally assigned to teach an English language course in a large class of mixed-ability. The lecturer is expected to help and facilitate students to improve their English language skills, particularly in writing, and achieve learning course objectives under the learning outcome-based syllabus (Table 1.1, pp. 9-10).

Teaching EFL learners to achieve competence in English language writing requires a variety of approaches to writing instruction. These approaches should be appropriately designed to inform the instructor of the learner's ability to write competently while simultaneously helping them to acquire proficiency in English. Thus, mastering writing skills can be better achieved through learning and practicing in formal instructional settings rather than through natural acquisition (Leech, Deuchar, & Hoogenraad, 2006; Myles, 2002).

In general, the accepted criteria for measuring competence in second language (L2) writing are fluency and accuracy (Skehan, 1998). Writing quality can be assessed through the accuracy of the use of language in writing. The term 'accuracy' refers to the ability to produce grammatically correct sentences (Richards et al., 1999: 142), while 'fluency'

represents the number of words produced in a specified time frame, together with lexical frequency, irrespective of spelling and content, provided that the writer's meaning is readily understandable (Fellner & Apple, 2006: 19). Skehan (1998) briefly describes fluency as meaning-focused and accuracy as linguistic or form-focused. He also states that both fluency and accuracy may not be accompanied at the same time when L2 learners perform a task. It is believed that writing fluency is supposed to be established by the learners prior to the optimal amount of monitoring (i.e. revising and editing) for language accuracy (Fati, 2013; Marefat, 2002; Oshima & Hogue, 2007; Pritchard & Honeycutt, 2007). Sripicharn (2002b: 104) points out that in practice, it is frequently hard to balance the processing of language meaning and form. When students focus on a meaning-oriented approach and subsequently gain fluency in English language communication (written and oral), they commonly do not further concentrate on language form or grammar.

The importance of the concept of how learners develop writing competence in fluency and accuracy underlines the need for quality English-language writing instruction. Fluency and accuracy in written communication can be achieved through two main instructional approaches: product-based and process-based writing approaches (Rusinovci, 2015) as discussed in the next sub-section.

2.2.1 Product- and process-based writing approaches

The focus on writing instruction has shifted from product-oriented to more process-oriented since the 1960s, owing to the shift to more communicative language teaching and learner-centredness in the outcome-based English language curricula at higher education.

In other words, the teaching of English language writing these days emphasises *how* learners write rather than *what* they write. Nevertheless, the product-oriented approach is traditionally and predominantly used in EFL writing instruction and assessment in the English curricula of most EFL countries (Rusinovci, 2015).

The product writing approach emphasises form or language accuracy in writing (Bourke, 2008; Ferris, 1999; Rusinovci, 2015; Schlig, 2006; Vickers & Ene, 2006). Grammatical or language knowledge has since become an indispensable part of EFL writing instruction. In a formal classroom setting, grammar instruction is provided within the framework of L2 writing instruction to promote the correct and appropriate use of forms. However, the product-oriented and more teacher-centred writing instruction does not seem to provide much opportunity for EFL learners to practise and evaluate their own and/or classmates' writing tasks systematically and critically. This is because pieces of writing are mainly evaluated by their own instructors. Moreover, the product-based writing approach over-emphasises fixed linguistic patterns and language accuracy (Robertson, 2008).

On the other hand, the process-based writing approach allows learners to think and discover their writing and learning processes (Bourke, 2008; Hedge, 2000; Rusinovci, 2015). The approach also leads learners to discover their own voice (Silva & Matsuda, 2001). According to John (2005), the concepts of process writing, self-discovery and voice are derived from the Expressivist tradition. In her study, it is believed that from this tradition that process writing can help a writer to possess his or her own ideas or have a voice or authority in writing. The writing process is also denoted as "an important process for the

development of the voice or identity of the writer” (John, 2005: 4). On account of these attributes, process-oriented writing can also develop writers intellectually and emotionally. The use of the process approach appears more effective than other approaches in terms of improving writing products and attitudes (Pritchard & Honeycutt, 2007). An example of the study by Schlig (2006) of the foreign language writing competence of 35 native English-speaking students in the United States indicates that students are more aware of their language accuracy in writing after they have undertaken process writing in a composition class. Further studies have shown that practicing writing through process-based writing can help develop Thai EFL undergraduate students’ writing fluency and accuracy as well as their cognitive and social skills (Puengpipattrakul, 2013, 2014). Consequently, it can be reaffirmed that process writing appears useful and meaningful and may therefore be helpful in the teaching of English language writing (Rusinovci, 2015).

The next section will discuss the process-based approach to writing in greater detail.

2.3 Process-based writing: Steps and sequences

The writing process has several process-oriented writing stages: prewriting (including composing and drafting), writing, and rewriting (Myles, 2002; Oshima & Hogue, 2007; Polio, 2012; Richards & Lockhart, 1995; Rusinovci, 2015). For the present study, several scholars’ notions of the writing process have been taken into account, but a synthesis of two key scholars’ approaches are summarised below (Richards and Lockhart (1995: 119-120) and Oshima and Hogue (2014: 21-26)) alongside an overview of how these have been interpreted in the current study.

Table 2.1

Process-based steps and sequences in the current study

(Richards & Lockhart, 1995: 119-120)		(Oshima & Hogue, 2014: 21-26)		(The present study)
Writing process	Activity	Writing process	Activity	Writing process
1. Pre-writing	Activities designed to generate ideas for writing or focus the writers' attention on a particular topic	1. Prewriting (Creating)	Choosing a topic and collecting ideas to explain the topic: 1.1 Choosing and narrowing a topic 1.2 Generating ideas	1. Prewriting: Creating and composing
2. Drafting	Activities in which students produce a draft of their composition, considering audience and purpose	2. Organising (Planning and drafting)	Organising the ideas into a simple outline: 2.1 Making sublists 2.2 Writing the topic sentence 2.3 Outlining	2. Drafting: Outlining
3. Revising	Activities in which students focus on rereading, analyzing, editing, and revising their own writing	3. Writing	Writing a rough draft and using the outline as a guide	3. Composing: Beginning and ending the first rough draft
		4. Polishing (Revising and editing)	4.1 Revising: Attacking the big issues of content and organisation 4.2 Editing: Working on the smaller issues of grammar, punctuation and mechanics	4. Polishing: Reviewing
		5. Writing a final copy		

In the table, according to Richards and Lockhart (1995), the writing process is divided into three main stages: pre-writing, drafting and revising, while Oshima and Hogue's (2014) writing process consists of five chronological steps from prewriting to writing the final copy. After a synthesis of both scholars' writing processes, the process-based writing in the writing process utilised in the current study lies in four main stages: prewriting, drafting, composing and polishing. Unlike Richards and Lockhart, this study proposes that the drafting stage is better conceived as having the two steps of drafting and composing as separate processes where drafting might include outlining. The current study understands the final stage of polishing as including the writing of the final product, thus collapsing Oshima and Hogue's final stage into Stage 4.

Lecturers in writing classes quite often explicitly instruct students to adopt the process-writing approach (Myles, 2002; Polio, 2012; Richards & Lockhart, 1995). Linked closely to adopting a process-writing approach is the need for learners to assess their writing and make changes to their writing in the process of writing. It is therefore useful to discuss writing assessment using a learner-centred approach as this would be an important issue in a writing process classroom.

2.4 Writing assessment in a learner-centred approach

Learner-centred assessment is defined as a technique encouraging students' self-reflection of their own learning (Wood, Waugh, & Lancaster, 2008). It also includes a focus on how classroom cooperation and collaboration is important for the learning process (Huba &

Freed, 2011). This learner-centred approach has its roots in the field of social cognition (Bandura, 1989; Vygotsky, 1978).

2.4.1 Social cognitive development of learners

Fundamentally, learning and acquisition of a target language occur through social interaction and cooperation (Bandura, 1989; Gibbons, 2002; Vygotsky, 1978). In writing instruction, writing is regarded as “a language practice where writers need to be aware of how their writing is both shaped by and shapes the social world around them” (John, 2005: 15). Moreover, it is posited that “writing systems must be learned through socially mediated processes” (Ferris & Hedgcock, 2014: 16). In other words, social interaction promotes learning process and subsequently cognitive development (Vygotsky, 1978). Students make use of cognitive processes in language learning such as inferencing, generalisation, deductive learning, monitoring, and memorizing (Richards et al., 1999). To illustrate, in the prewriting stage of the writing process (Table 2.1, p. 29), the students use their cognitive process to express their ideas or compose their writing content (Brown, 2001; Memari Hanjani, 2016). Since writing is a cognitive task, the process-oriented teaching approach has been utilised to evaluate the writing skills of students (e.g. sentence construction, organisation, or ideas and content). In addition to students’ intellectual development, the process-oriented writing approach also helps build their confidence and motivation (Memari Hanjani, 2016; Pritchard & Honeycutt, 2007).

In the context of writing composition classes, teacher-student interaction is essential to students’ learning process (Gibbons, 2002) and their second language development

(Brown, 2001; van Lier 1996). In classroom interaction, it is believed that verbal scaffolding in the form of conversation between teacher and students and among students themselves can enhance their Zone of Proximal Development (ZPD) and their critical thinking (Vygotsky, 1978). ZPD represents:

- (1) “the distance between what students can do on their own and what they require assistance with (Gass et al., 2013: 532).
- (2) “the potential distance the student could reach with the help of a more capable peer” (Wass, Harland, & Mercer, 2011: 319).
- (3) “the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978; Lightbown & Spada, 2013; Saville-Troike, 2012).

In order to develop students’ writing process, it is believed that the provision of writing assessment through feedback is an essential part of English language writing instruction and language acquisition in classroom learning situations (Brown, 2007; Larsen-Freeman, 2008; Norton, 2009; Willey & Gardner, 2010; Williams, 2003). Then, revision following feedback helps sharpen the quality of a written task (Elgadal, 2017; Hyland & Hyland, 2006a; Murray, 2017; Tsui & Ng, 2000). In the current study, learner-centred writing assessment is viewed as comprising two mechanisms: writing feedback and writing revision. Each mechanism is explained as follows.

2.4.2 Feedback mechanism: Self-feedback and peer-feedback

In the current study, the participants were trained to provide corrective feedback through comments or responses which address specific writing errors (as identified in the writing feedback sheet – Appendix 7, p. 302). The corrective feedback is categorised as direct and indirect feedback. ‘*Direct*’ feedback (i.e. the identification of an error and the subsequent provision of the correct form) and ‘*indirect*’ or ‘*metalinguistic*’ feedback (i.e. the provision of a written correction code or symbol at an error without giving the correct form). Metalinguistic feedback employs many strategies to indicate errors, encouraging an explicit knowledge or understanding of errors (Sheen, 2007) and to stimulate autonomous self-correction of their errors (Brown, 2007; Ellis et al., 2008; Ferris & Hedgcock, 2005; Larsen-Freeman, 2008). A sample of corrective feedback is also provided in Chapter 3.

Several studies undertaken on corrective feedback for more than three decades have revealed several issues regarding the provision of corrective feedback. Examples of the corrective feedback studies are selected and shown in Table 2.2.

Table 2.2

Issues of 1982-2014 corrective feedback studies

Issue of corrective feedback	Example of ESL and EFL studies
Assist learners to comprehend the misuse of language rules	Brown (2007); Ho (2008)
Improve learner writing accuracy and fluency	Lalande (1982); Robb et al. (1986); Ferris (1999); Ferris and Roberts (2001); Bitchener et al. (2005); Ellis et al. (2008); Larsen-Freeman (2008); Loewen, (2012); Ferris and Hedgcock (2014)
Encourage learners to self-correct and discover their own linguistic rules	Lalande (1982); Doughty and Williams (1998); Ferris and Roberts (2001); Brown (2007); Ellis et al. (2008); Larsen-Freeman (2008); Rusinovci (2015)
- Stimulate learners' explicit knowledge to understand the nature of the errors - Increase the use of memorisation strategies (e.g. identifying, remembering, storing, and retrieving words, or other aspects of the L2, in grammatical acquisition)	Oxford (1996); Duong and Nguyen (2006)
Help learners realise their writing progress and weaknesses	Tran (2007)
Create trust as the 'catalyst' to build the teacher-student relationship	Lee and Schallert (2008b)
Soften the issue of learners' individual variations (e.g. anxiety, face-saving conditions)	Van Lier (1988); Mahmoud (2006)

In L2 written communication, the provision of writing assessment through corrective feedback is a useful means of assisting learners to comprehend the misuse of language (Brown, 2007) and developing their writing accuracy and fluency (Bitchener, Young, & Cameron, 2005; Ellis et al., 2008; Ferris, 1999; Ferris & Hedgcock, 2014; Larsen-Freeman,

2008; Loewen, 2012). The corrective feedback also helps create positive effects in the L2 learning process in the way that it stimulates learners to discover their own relevant linguistic concepts and rules (Bitchener et al., 2005; Brown, 2007; Ferris & Hedgcock, 2014). An example of the study by Lee and Schallert (2008b), from Table 2.2, demonstrates a direct relationship between the written feedback quality of the non-native teacher of English and 14 Korean students' level of trust in the teacher's written feedback, and the subsequent bettering of their writing accuracy in their revised tasks.

However, corrective feedback, particularly metalinguistic correction, is sometimes impractical when it impedes or even fossilises the learning progress of L2 learners (Gass & Selinker, 2008; Mahmoud, 2006; Selinker, 1992) and their cognitive processes (Han, 2004, 2012; Larsen-Freeman, 2003). In a debate over corrective feedback on students' written tasks, Truscott (1996) claims that grammar correction is ineffective in developing writing accuracy, particularly in the long term (Schlig, 2006). Truscott (1996) also adds that correction may hinder language learning processes. He points out that the improvement in writing accuracy has nothing to do with grammatical correction, but rather the timing of the natural order of L2 grammar acquisition. This probably results in corrective feedback which can sometimes lead to stress and anxiety (Larsen-Freeman, 2003) and cause students to lack motivation to learn (Mahmoud, 2006).

2.4.3 Revision mechanism: Self-revision and peer-revision

The process approach involves the decisions students make about the audience and topic during the steps of prewriting (e.g. setting writing goals, selecting writing topics and

generating ideas), organising, composing rough drafts, revising, editing and writing the final copy (Hedge, 2000; Goldstein & Carr, 1996; cited in Pritchard & Honeycutt, 2007). In order to improve the writing skills of L2 learners, the intervention of peers or a teacher in the form of feedback during writing revision is encouraged at any time during the writing process (Rusinovci, 2015; Memari Hanjani, 2016).

For decades, many studies have been conducted to examine the different aspects of writing revision. Examples of the revision studies are demonstrated in Table 2.3.

Table 2.3

Issues of 1994-2016 writing revision studies (adapted from John, 2005: 25-27)

Issue of writing revision	Example of ESL and EFL Studies
▪ The effects of written between-draft responses on students' writing and reasoning about literature	Newell (1994)
▪ The role of classroom context in the revision strategies of student writers	Yagelski (1995)
▪ A systematic-functional model of textual revisions in scientific research articles	Gosden (1995)
▪ The effects of trained peer response on the type of revisions and writing quality	Berg (2000)
▪ The effect of differential feedback (corrections and commentaries) on journal writing accuracy	Fazio (2001)
▪ The roles of teachers' response to student writing in a multiple draft composition classroom	Tsui and Ng (2000)
▪ Teachers' response to sentence-level errors in writing. A study on comments and corrections and how teachers might misinterpret a learner's text	Yates and Kenkel (2002)
▪ Writing centre sessions and how they affect writers' revisions on subsequent drafts of their writing	Williams (2004)
▪ Effects of the teacher-student relationship on revision process of EFL college students taking a composition course	Lee and Schallert (2008a)
▪ Constructing trust between teacher and students through feedback and revision cycles in an EFL writing classroom	Lee and Schallert (2008b)
▪ Collaborative revision in L2 writing: learners' reflections	Memari Hanjani (2016)

In a recursive writing process, revision is indispensable in assisting students to improve their writing performance (Silva, 1993). The study by Memari Hanjani (2016), from Table 2.3, explored EFL students' perceptions of engaging in a paired revision activity through

interview. Apart from the students' positive views of the revision process enhancing their self-awareness and self-monitoring skills, the collaborative revision could help to increase their self-confidence in writing and assessment. Furthermore, the study by Tsui and Ng (2000), from the same Table, examined whether writing revision can improve the quality of writing based on two components: the learner's writing performance and a reader's quality of feedback. The reader's feedback or correction techniques can be provided by classmates, teachers or the students themselves. This brings about different types of writing assessment: self-, peer- and teacher-assessment. However, since the present study aims to investigate a pedagogically-effective means for teachers, particularly in the EFL context, to mitigate time-consuming writing assessments that teachers must provide for students in a large class, the strategies reviewed below focus on self- and peer-writing assessment rather than teacher assessment.

2.4.4 Self-assessment and peer assessment

When considering revision in the process writing, some studies in both ESL and EFL settings have revealed that self-assessment or self-review helped develop the grammatical accuracy of students in writing and autonomous learning (e.g. Chandrasegaran, 1986; Elgadal, 2017; Ferris, 1999; Honsa & Ratanapinyowong, 2005; Lee & Schallert, 2008a; Oshima & Hogue, 2007; Quirke, 2001; Rollinson, 2005; Schlig, 2006; Silva, 1993; Vickers & Ene, 2006; Wakabayashi, 2013). Such findings can be exemplified in the study by Wakabayashi (2013). In her comparative study, it was found that the group of students who were trained to do self-review gained higher scores in ESL writing composition than the other group who were trained to review their classmates' written tasks. However,

despite such results, her study did not make it clear that the proficiency levels of the student groups had been analysed before they received training. This may affect the interpretation of the main results because it is not clear whether the higher writing scores are from the self-review practice or the students' proficiency levels.

Simultaneously, other studies have shown peer assessment or peer-review promotes learners' writing development (Bitchener & Ferris, 2012; Busse, 2013; Manchón, 2012) and learning autonomy (Benson, 2011; Tigchelaar, 2016). In Vygotsky's theory, it is suggested that peer interaction can help enhance writing development. This results from the assumption that in classroom interaction, a more capable learner tends to aid a less capable one in becoming a part of the learning process and then achieve a higher level of development (Storch, 2001).

An illustration of peer review promoting students' writing development includes the study by Srichanyachon (2011). The study found peer assessment or peer review contributes to Thai EFL students' writing development. The students were more aware of their weaknesses and, in turn, were encouraged to develop their writing performance. Additionally, the teachers in the study viewed peer assessment as a means of facilitating students' revision practices. Peer review is also deemed useful as a way to raise students' awareness of writing components (i.e. content, organisation and grammar), develop their mental rapport, and provide them with the required social interaction skills to be able to achieve activity or task objectives (e.g. Diab, 2010; Ferguson-Patrick, 2007; Hyland & Hyland, 2006b; Larsen-Freeman, 2008; Memari Hanjani, 2014; Mowlaie, 2014; Mowlaie

& Maftoon, 2015; Sotoudehnama & Pilehvari, 2016; Sukumaran & Dass, 2014; Tsui & Ng, 2000; Wang, 2015; Wakabayashi, 2013; Willey & Gardner, 2010; Yoshida, 2008). Such findings are exemplified in the study by Sotoudehnama and Pilehvari (2016). Their comparative study was conducted to examine the effect of being feedback givers and feedback receivers on writing proficiency. The results reveal that out of 122 Persian EFL students divided into two proficiency groups of high and low feedback givers and feedback receivers, the group of both high and low feedback givers obtained higher post-test score than that of the feedback receivers. It is noticeable that in their study, the students' age range is quite wide (i.e. between 18 and 30). Individual differences in the wide age range groups of students may affect, to some extent, the results of the study, compared with those in the homogeneous age group such as the first-year university undergraduate students whose age range is approximately from 18 to 19. There may possibly be other issues such as the students' prior knowledge of the reading text in the test (Ferris & Hedgcock, 2014; Grabe & Stoller, 2011) which may affect the results of the study.

Furthermore, a number of studies have also investigated the effects of, and students' attitudes or perceptions towards, the provision of writing assessment through writing feedback and revision (e.g. Elgadal, 2017; Memari Hanjani, 2014; Mowlaie, 2014; Mowlaie & Maftoon, 2015; Siyyari, 2011; Sukumaran & Dass, 2014; Tsui & Ng, 2000; Wakabayashi, 2013; Willey & Gardner, 2010; Williams, 2003; Yoshida, 2008). It should be noted that overviews of findings from the scholars' studies examining the use of self-assessment and peer-assessment as well as learners' attitudes towards the provision of writing assessment cited earlier will be discussed in greater detail in Chapters 4 to 5.

In the current study, peer assessment is carried out through pair work. The features of pair work have been investigated more widely in some studies (Diab, 2010; Roskams, 1999; Villamil and de Guerrero, 1998; Watanabe & Swain, 2007; Yoshida, 2008). The use of pair work in the classroom is frequently emphasised in cooperative learning, collaborative learning and Communicative Language Teaching (Richards & Lockhart, 1995). According to Curtain and Pesola (1988: 172):

“Pair work can be the most natural and effective means of helping students to communicate in a target language.”

Nerenz and Knop (1982; cited in Curtain & Pesola, 1988) ascertain that in foreign language classrooms, pair work offers the best balance of on-task behaviour in terms of time spent addressing the communicative use of the target language, and in terms of the proportion of teacher versus student talk. In the foreign-language communicative classroom, pair work can provide a meaningful interaction during which learners can use their language skills. A study by Storch (2003) found that students undergoing pair-work peer revision were more likely to learn than those without such writing collaboration.

Cooperative learning is an approach to teaching and learning in which classrooms are organised so that students work together in small cooperative teams (Richards et al., 1999: 87). In a study by Hatch (1978; cited in Richards & Lockhart, 1995), it was found that pair-work interaction could develop linguistic and communicative competence of learners. However, a study by Yoshida (2008) discovered that learners sometimes did not understand

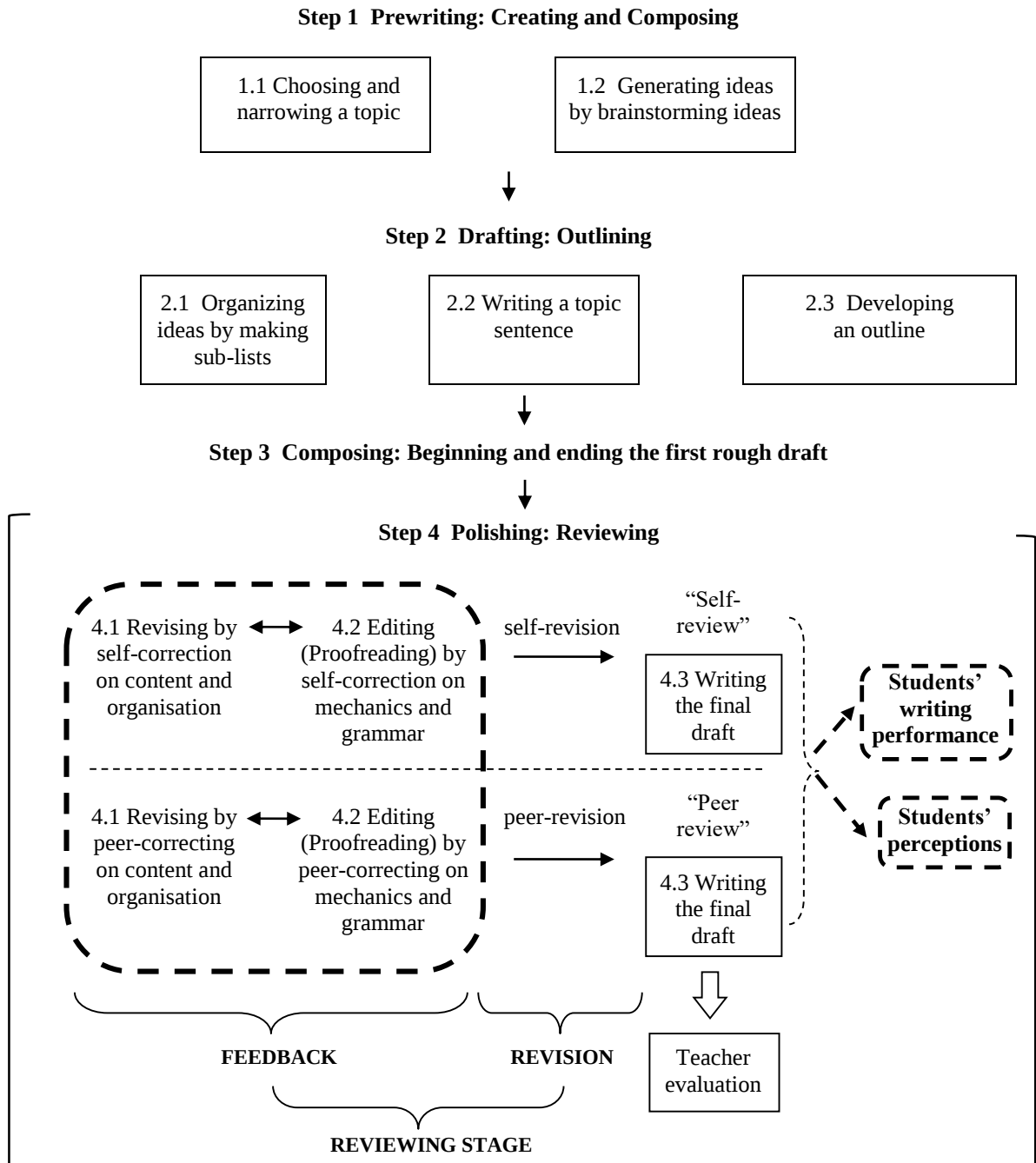
their partner's writing assessment and this caused them to be dissatisfied with the pair-work interaction.

Peer assessment is a very complex process, particularly in the EFL context, because it deals with the reading and revising processes of non-native English learners in L2 and their use of L1 to bridge their understanding of their classmates' L2 writing (Villamil & de Guerrero, 1998; Memari Hanjani, 2016). In order to facilitate the writer-audience relationship, it should be noted that in the process approach to pair work peer assessment, the roles of the language teacher change to those of facilitation and monitoring the learners' engagement with the editing process. The degree of learner engagement in a writing assessment is likely to be dependent upon their ZPD. These concepts are supported by a study by Bourke (2008). It was found in his study that in the writing classroom, supportive factors like students' positive views about classroom interaction and use of their mother tongue (L1) with classmates and their instructor help lessen their anxiety and encourage their awareness of L2 and social skills.

Consequently, the learner-centred approach to writing assessment deals with self-assessment (Wood et al., 2008) and peer assessment (Huba & Freed, 2011) as discussed earlier. Both self-assessment (i.e. self-feedback and self-revision) and peer-assessment (i.e. peer-feedback and peer-revision) will be featured in the review strategies of the current study and it is hoped that this will be an effective means to support students to improve their English writing skills.

2.5 Proposed framework of review strategies in process-based writing in the current study

This section demonstrates and elaborates upon the writing process of the present study which is derived from the synthesis of the writing process of two scholars' notions (see Table 2.1, p. 29). In process-based writing, the polishing steps contain cyclical processes of writing feedback, revising and editing. In the present study, review strategies are related to a designed plan of action consisting of feedback and revision mechanisms. The review strategies include self-review and peer-review strategies. The following conceptual framework is used in the reviewing stage as shown in Figure 2.1.



Notes. Self-review strategy: Correcting, editing, revising and rewriting own work.
Peer-review strategy: Correcting and editing a classmate’s work as well as revising and rewriting own work which was previously corrected and edited by the classmate.

Figure 2.1. Proposed framework for reviewing stage in process-based writing in the current study.

In process-based writing, learners are encouraged to choose a topic, brainstorm relevant ideas, organise the ideas into a writing outline, develop the outline into an essay draft, and polish up the draft before finally submitting to their instructor. As shown in Figure 2.1, the main focus is on the sequences of the polishing stage. In this stage, feedback is provided through written comments during the revising and editing steps of the writing process. Self-feedback, produced by the student writer himself/herself, consists of self-revising (on content and organisation) and self-editing (on mechanics and grammar), while peer feedback, provided by the student's paired classmate, includes peer-revising (on content and organisation) and peer-editing (on mechanics and grammar) of the student's first draft of an argumentative essay. Revision covers self-revision and peer-revision.

In process-based writing (Figure 2.1), it should be noted that editing or proofreading is usually implemented at the outset of the revision steps in the process writing (Oshima & Hogue, 2007). As can be seen from the figure, the two types of review strategies are: firstly, self-revision after self-feedback (i.e. students revised and edited their own written tasks), and secondly peer-revision after peer-feedback (i.e. students revised and edited their classmate's tasks). Noticeably, in the feedback process, revising refers to making changes to clarify wording and organisation while editing covers mechanics (e.g. spelling, punctuation, and capitalisation) and grammar (Wingersky, Boerner, & Holguin-Balogh, 2006: 3-17). Wingersky et al., (2006) also describe that when students are learning the writing process, content comes before mechanics and grammar, but correct mechanics and grammar will be expected as they master the writing process. Additionally, in Figure 2.1, learners are encouraged to choose a topic, to brainstorm ideas relevant to the topic, organise

the ideas into a writing outline, develop the outline into an essay draft, share drafts, each of which is used as an onset for the next, to classmates and their teacher, and polish up the draft before submitting to their instructor.

The following procedures were followed in the study (more detail will be provided in Chapter 3). Each participant produced two drafts per writing title – first and final drafts using the following procedure as in Table 2.4.

Table 2.4

Writing review procedure in the present study

Instruments	Argumentative Writing Title	Writing review process
• Pre-test & Post-test	Work & Travel-Malida	
• Writing task 1	Censorship - Debbie	Pre-task questionnaire ► 1 st draft ► Self-feedback ► Self-revision ► final draft ► Teacher evaluation
• Writing task 2	Live concerts - SeoulMan	1 st draft ► peer-feedback ► In-process questionnaire ► Peer revision ► final draft ► Post-task questionnaire ► Teacher evaluation

Note. The degree of difficulty of writing tasks 1 and 2 is at the relatively same level approved by the Academic Affairs, Chulalongkorn University Language Institute.

Second, review strategies are implemented through student's two-in-one roles: an author and a reviewer. Before a student author could provide feedback on his or her classmate's task, s/he initially experienced reading and editing his or her own written task as a reviewer. This meant that the student needed to read, analyse and comment on content, organisation,

mechanics and grammar in his or her own written task (i.e. writing task 1). After the feedback process, those edited tasks were returned to student authors. Then, the authors had to read and understand their edited tasks before revising their writing. Similarly, these steps cyclically repeat when a student started to provide written feedback on his or her classmate's written tasks (i.e. writing task 2). After the feedback process, those edited tasks were returned to student authors. Then, the authors needed to read and understand the feedback provided by their paired classmates. The students also had to be able to critically think and rewrite with new and/or different sentence construction, organisation, or ideas/content in their revised tasks. It is noted that in order to prevent students' memory effect of their written tasks (i.e. writing task 1 and writing task 2), the provision of a time interval between the first-draft writing, the draft feedback provision and the draft revision was made (see Section 3.6.1 Active stage: Data collection at Steps 5 and 6 and Table 3.6).

To be a successful academic writer, a learner needs to practise process writing which consists of writing a draft, revising it, and writing the final draft (Oshima & Hogue, 2014). Process-oriented writing guides learners from the first step of generating ideas to the final step of refining the entire written discourse (Zamel, 1982; Li Wai Shing, 1992). Schlig (2006) and Sokolik (2003) name these steps as part of the cyclical approach to process writing as they contain the chronological processes of writing, feedback, revising and editing.

Since Murray (2017: 17) suggests, "Quality comes through revision," it could be said that in the writing process (Figure 2.1), overall quality of a written task can obviously be checked through revision in the reviewing stage. Reid (1993: 31) agrees that writing is a

“discovery procedure which relies heavily on the power of revision to clarify and refine that discovery.” In other words, revision can assist a writer in developing his or her own voice or ideas (John, 2005). At some levels, language accuracy can, in fact, impact on the overall quality of writing (Puengpipattrakul, 2016; Roehanpton, 2008). Theoretically, the accuracy of language in L2 learners’ written communication can be improved via language correction (Ferris, 1999; Polio, 2012). Rusinovci (2015) further elaborates that the aspects of process writing support students’ writing development through revision which involves peer cooperation and collaboration. That is, in the writing process, writing assessment practices (i.e. feedback, revising, and editing) can help students to develop their writing performance.

2.6 Chapter summary

Why individual language learners exhibit different levels of writing progress and performance bringing about varied qualities in writing pieces was explained by relevant theoretical concepts in this chapter. In order to answer the three research questions of the study, this chapter reviewed the underlying principles regarding approaches to writing instruction and learner-centred writing assessment. The theoretical applications of teaching writing through process writing make the classroom writing process practical and render writing by L2 learners as meaningful. Among different aspects of the process-oriented writing process, learner reviewing practices through writing feedback and revision are likely to be the key to developing their language learning and writing performance.

Relevant studies suggest that teacher feedback sometimes demotivates students' learning to write while self-assessment does not assure better writing performance. However, it is still worth investigating whether students' self-assessment in the reviewing process is effective in developing writing performance, and this could facilitate and lighten the feedback workload of teachers, particularly in large EFL classes. Additionally, in the current study, peer assessment in the writing process was designed and implemented in the form of pair-work during the reviewing process. Since the suitable criterion in pairing learners and the effectiveness of paired peer assessment in the Thai EFL context are inconclusive and still questionable, three research questions are addressed concerning the research procedures on how to collect and analyse data. The research design and procedures adopted in the methodology of the study into the influence of review strategies on EFL student writing performance will be elaborated on Chapter 3.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology of the current study. The chapter is divided into three main sections: theoretical underpinnings, research design and research procedures. The first section presents relevant theoretical underpinnings which inform the research design and procedures. Next, the section on research design will explain the design used in the pilot study and explain how it was developed in the main study. The last section on research procedures will include a discussion on the methods of data collection and of data analysis.

3.2 Theoretical underpinnings for research design

Many scholars have suggested different models of how to conduct educational research (Burns, 1999; Ferrance, 2000; Freeman, 1998; Tripp, 2005). In this thesis, two scholars' educational research models (Freeman's (1998) teacher-researcher cycle and Burns' (1999) action research process) are introduced, since their models are systematic and useful when applied in the EFL context. Freeman (1998) proposes the teacher-researcher cycle which consists of inquiry, data collection, and data analysis. Similarly, Burns (1999) also proposes an action research process which includes plan, act, observe, and reflect. Both scholars' educational research stages are shown in Table 3.1.

Table 3.1

Synthesis of educational research stages

Freeman's (1998) Teacher-Researcher Cycle	Burns' (1999) Action Research Process	
1. Inquiry: Question/Puzzle	1. Plan	Exploring/Identifying Planning
2. Data collection	2. Act 3. Observe	Collecting data Observing/Intervening
4. Data analysis	4. Reflect	Analysing/Reflecting

Freeman's teacher-researcher cycle and Burns' action research process from Table 3.1 can be blended into five research stages as detailed in Figure 3.1.

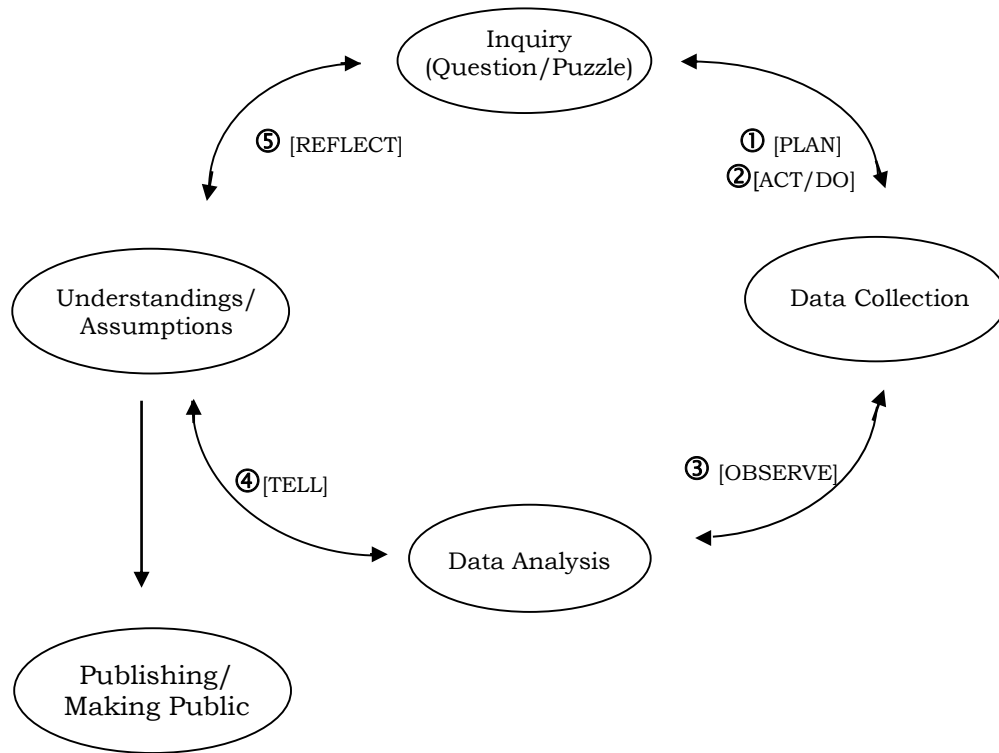


Figure 3.1. Educational research stages (adapted from Burns, 1999; Freeman, 1998).

As can be seen in Figure 3.1, the five research sequences contain initial reflections, planning stage, active stage, observational stage, and reflective stage. Burns (1999) identifies these research stages as a continual cycle. Freeman (1998) also adds that the teacher-researcher cycle shares scientific research approaches. To illustrate, the first stage of the cycle called “inquiry” or “initial reflections” possesses a scientific entity since it deals with an identification and elaboration of research questions which needs to be operationalised and measurable.

I have adapted this model to the present study, adopting the following stages. These are: Initial reflections—The pilot study (Section 3.4), Planning stage—The current study (Section 3.5), active stage—data collection (3.6.1), and observational stage—data analysis (3.6.2). The last stage (i.e. reflective stage) is evident after the research findings have been interpreted and discussed in Chapters 4 to 5. The reflective stage is reported in the summary of findings and implications of the study in Chapters 6 and 7, respectively.

Further to the research design adapted in this study, it is important to recognise the two main schools of thought on approaches to research: quantitative and qualitative approaches (Burns, 1999; Check & Schutt, 2012; Dörnyei, 2007; Nunan, 1992; Pickard, 2008). Quantitative research approaches aim to formulate, test, and confirm or disconfirm hypotheses, whereas qualitative research approaches aim to describe, interpret, and clarify naturalistic contexts (Burns, 1999; Dörnyei, 2007). Based on these different orientations of the approaches, quantitative approaches deal with numerical data interpretation, while

qualitative approaches do more in social context interpretation. With these features of the research approaches, quantitative approaches are frequently used in science disciplines but qualitative approaches are more in social sciences disciplines (Burns, 1999). Moreover, the research methods of quantitative approaches can normally be employed through surveys and experiments but those of qualitative approaches are utilised through observation, interview, and focus groups (Check & Schutt, 2012). However, a new method which was employed to provide depth and breadth to the research and its findings in the current study is regarded as the mixed methods of these two schools of quantitative and qualitative approaches (Cameron, 2011; Check & Schutt, 2012; Creswell, 2007; Dörnyei, 2007; Edmonds & Kennedy, 2013; Pickard, 2008).

The approaches to research methodology undertaken in both my pilot and current studies were regarded as *mixed methods*. Mixed methods triangulate quantitative and qualitative research approaches (Check & Schutt, 2012; Edmonds & Kennedy, 2013). In other words, through the triangulation design of the studies, two or more different measures of the same variable are used (Check & Schutt, 2012: 77) or multiple methods are used to study one research question (Check & Schutt, 2012: 11). The term ‘triangulation’ is basically derived from using either multiple data collection techniques or multiple sources of evidence, or both, depending upon the overall research approach (Pickard, 2008: 86). Brown (2016) categorised such triangulation as “method triangulation”. Moreover, triangulation is considered an aspect of validity in educational research since the use of multiple data sources is basically required (Brown, 2001, 2016; Check & Schutt, 2012; Creswell & Miller, 2010; Pickard, 2008). That is, the concept of triangulation as well as its types (e.g.

data triangulation, methodological triangulation, interdisciplinary triangulation, and location triangulation) was initiated in order to help validate mainly qualitative data analysis (Brown, 2001: 227-229). Based on Brown's (2016) experience, he categorised types of triangulation into nine alternatives, which were stakeholder, method, location, time, perspective, investigator, theory, interdisciplinary, and participant-role triangulations (pp. 141-142). In the current study, triangulation was employed in order to answer research question 3 (i.e. *What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?*) since the results were analysed from both quantitative (i.e. the participants' responses to the open-ended questionnaire series) and qualitative data (i.e. the participants' responses to an interview). In addition to method triangulation, the current study also employed the following types of triangulation which were time triangulation (i.e. collecting data from different points of time through the writing pre- and post-test and questionnaire series), interdisciplinary triangulation (i.e. exploring the' opinions of the students from the faculties of Science and Education), and participant-role triangulation (i.e. analysing written tasks by students themselves and students' classmates).

Based upon the analysis of quantitative data in the current study (i.e. scores of writing tests, and tasks and responses from a close-ended questionnaire series), statistical techniques, such as descriptive statistics (e.g. a frequency as a percentage, arithmetic means, and standard deviations) and inferential statistics (e.g. correlation coefficients, *t*-tests, and Analysis of Variance-ANOVA) were employed using Statistical Package for Social Sciences (SPSS) software. According to Pickard (2008: 278), the statistical analysis of

numerical datasets in social sciences and humanities is frequently tested using the statistical programmed SPSS for Windows. In SPSS, the datasets are normally calculated for a frequency distribution in terms of percentage, for a correlation, and for a significant test for SPSS helps provide thoroughly statistical analysis and lessen time in analyzing data as well as errors in coding data. The representation of the quantitative results of this current study is arisen from the interpretation of patterns of the closed-response data which were numerically coded and statistically analysed.

As for the analysis of qualitative data (i.e. writing review on scripts and interview response scripts), this study employed content analyses. Krippendorff (2013) states that the content analysis is widest used in the social sciences and humanities. Content analysis is regarded as “an unobtrusive technique that allows researchers to analyze relatively unstructured data in view of the meanings, symbolic qualities, and expressive contents they have and of the communicative roles they play in the lives of the data’s courses” (p. 49) or “a research technique for making replicable and valid inferences from texts (or other meaningful matter) to the contexts of their use” (p. 24). As stated in Check & Schutt (2012), the inductive approach is implemented for the use of actual data to lead to a framework of analysis. Content analysis of the participants’ writing review scripts was employed through Faigley & Witte’s (1981) taxonomy of review changes. In addition, content analysis of the participants’ semi-structured interview responses (which were recorded and transcribed) was employed by finding themes or patterns in the displayed responses based on research question 3 of the study (Brown, 2001: 11; Cohen, Manion, & Morrison, 2018: 680-684; Pickard, 2008: 176-178).

In this current study, a triangulation study was employed to validate how accurate the qualitative data of the participants' review scripts and interview responses could represent their review responses (i.e. research question 2: *Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?*) and opinions towards the benefits and drawbacks of self-review and peer-review in relation to writing development (i.e. research question 3: *What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?*), respectively (Creswell & Miller, 2010). The representation of the qualitative results of the study is derived from the interpretation of patterns of the opened-response data which were coded, transcribed, and grouped.

Since the pilot study and the current study investigate the first-year university participants' writing review strategies throughout one semester, it appeared appropriate to select the participants from my own classes. In my context, teaching timetables were issued to lecturers of English in each term by the Academic Affairs Department of CULI. Since the foundation English I course accommodated more than approximately five thousand students from 18 disciplines in each term (see the next Table 3.3, p. 63), two Foundation English I classes which contained Science and Education students were randomly assigned in my 2013 academic-year teaching timetable through the University's registration system. In the current study, the participants from my two classes could be considered a subset of first-year university Thai students. The selection of the participants of the studies was through "convenience sampling" (Krippendorff, 2013). as it was impossible to investigate

the writing review strategies of all first-year University participants within limited time of one semester, sampling methods are necessary to be used.

3.3 Research design

This study was conducted in accordance with established practices on research ethics. In the pilot study and the current study, after the participants were informed that their participation was voluntary, anonymous, and confidential (Brown, 2001; Pickard, 2008), I gained the participants' written consent in the copies of the consent forms. The participants were asked to provide their personal details in questionnaires and allow their writing tasks and writing test scores as well as their interview responses to be used in the pilot study and the current study.

The current study had three purposes: (i) to investigate whether and to what extent review strategies influence the writing performance of first-year Thai undergraduate students; (ii) to examine the influence of self- and peer-review strategies based on students' overall English language proficiency and their varying proficiency groups; and (iii) to explore students' perceptions when applying both strategies in relation to writing development. These research purposes are used to explain how the following research questions are answered: (i) What is the influence of review strategies on the writing performance of first-year Thai undergraduate students? (ii) Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance? (iii) What

are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?

The research designs of the pilot study (Section 3.4) and the current study (Section 3.5) deal with the context, participants of the study, and research instruments in sub-sections 3.5.1, 3.5.2, and 3.5.3, respectively. They are described as follows.

3.4 Initial reflections: The pilot study

The persistent issues with Thai students' English-language writing performance in the Thai context of writing instruction and the results of the pilot study regarding pair-work peer-editing inspired me to reflect on how and to what extent review strategies affect students' writing performance. The results of the pilot study showed that pair-work peer editing could enhance the average scores of post-test writing of 28 first-year undergraduate students. Moreover, since editing is one of the revising activities in the process writing at the feedback stage (see Table 2.1, p. 29) (Richards & Lockhart, 1995), what I found worth further examination were the students' strategies of review (i.e. students' feedback and revision), not only the peer review strategy but also the self-review strategy, and their effects on the students' writing performance.

The main purpose of the pilot study was to establish research methodology and test research instruments prior to implementing them in the current study. The pilot study was carried out in the first semester of the 2012 academic year which lasted for four months from June to September, 2012. Based upon the data collection and analysis, the results of

the pilot study were utilised to develop the research methodology and the instruments of the current study. The implications of the pilot study are presented in Section 3.5.

3.5 Planning stage: The current study

This study, undertaken in the first semester of the 2013 academic year (i.e. June to September, 2013), was designed and planned as follows.

3.5.1 Context

The importance of English and communication has been promoted for decades at all levels of the basic and higher education in both ESL (English as a Second Language) and EFL (English as a Foreign Language) contexts. Although English in Thailand is still a foreign language, the English language writing itself taught in the setting of higher education appears for general and academic purposes as in ESL countries. Following the Higher Education English language syllabi, foundation English courses (which are general English courses), are required at the first year of undergraduate studies, while English for Academic Purposes (EAP) courses cater to the second year of undergraduate studies onwards in a Thai university context like Chulalongkorn University (CU) where I have been working.

To take the Experiential English I (foundation) course syllabus of the first year study into account, Thai students are required to take this three-credit compulsory course for 15 weeks, with a three-hour class period each week, in the first semester. The students are able to pass the course with A, B+, B, C+, C, D+, and D grades and allowed to register the Foundation English II course in the following semester, whereas those who obtain an

F grade are required to re-take the Foundation English I course in the first semester of the following year. Alternatively, the failing students are also allowed to re-take the 45-hour course in the summer of the same year. In order to complete all 45 hours within a short duration in summer, the summer course is provided for only three weeks, each of which includes 5 three-hour consecutive days. The classroom learning and instruction are implemented at Chulalongkorn University in Bangkok, Thailand.

According to the course syllabus, the course book required in the Experiential English I course was “English Unlimited” (Upper-Intermediate) (Tilbury, Hendra, Rea, & Clementson, 2011). In the syllabus, four skills of English (i.e. listening, speaking, reading and writing) are integrated and required in learning and instruction. However, in the course evaluation, listening and speaking skills are mainly evaluated in formative assessment (e.g. a group project presentation and self-directed learning activities), while reading and writing skills are mainly evaluated in summative assessment (e.g. mid-term and final examinations). Within the course, summative assessment (i.e. mid-term and final examinations) is a major proportion of 60% compared to formative assessment. In the summative assessment, the only productive skill measured was writing. As regards the writing skills, argumentative writing is required to be mastered by the end of the course according to the course learning contents.

3.5.2 Participants in the pilot and current studies

In the pilot study and the current study, all student participants were first-year undergraduate Thai students from Chulalongkorn University. Prior to the participants’

university study, they had been educated in Thai educational programmes at schools for approximately 12 years (i.e. six-year primary, three-year secondary, and three-year high schools). Throughout the school years, participants had not been exposed to the English language writing at primary and secondary schools, while they had slightly experienced about the writing skills, to some extent from a paragraph to an essay levels, at their high schools. Before starting the first-year study in the University, they were required to take Chulalongkorn University Test of English Proficiency (CU-TEP).

(i) *The Pilot study*

In the first semester of the 2012 academic year, the participants who returned their completed consent forms in the pilot study were 28 (16 females and 12 males) first-year Thai undergraduate students from the Faculty of Economics at Chulalongkorn University. All participants were students from my Foundation English I class. In this semester, I was assigned to teach three class sections (i.e. one section of first-year students in the Foundation English I course and the other two sections of second-year students in the English for Economics course and the Basic Business English Writing course). During the study, the number of participants reduced from 30 to 28 after the midterm examination.

In order to implement the editing activity, the participants were further divided into groups based on their English-language proficiency measured by Chulalongkorn University Test of English Proficiency (CU-TEP) scores (Chulalongkorn University Language Institute, 2011). Furthermore, CU-TEP scores are required as one of the standards for admission to CU for first-year undergraduate students. Referring to the CU-TEP score data from

Chulalongkorn University Academic Testing Centre, the scale of CU-TEP (TOEFL Equated) scores can be interpreted in Table 3.2.

Table 3.2

CU-TEP (TOEFL paper-based equated) score interpretation

CU-TEP		Interpretation
(TOEFL equated) score range	Score range	
640-677	107-120	Upper advanced/Expert user
590-637	92-106	Advanced/Very good user
550-587	80-91	Middle advanced/Good user
513-547	69-79	Low advanced/Very competent user
477-510	57-68	Intermediate/Competent user
437-473	45-56	Middle intermediate/Moderate user
397-433	33-44	Low intermediate
347-393	18-32	Upper beginner/Marginal user
310-343	8-17	Middle beginner
0-310	1-7	Beginner/Very limited user

Based on their CU-TEP scores, the test of which was taken on June 17, 2012, all 28 participants were divided into two groups: high proficiency students and low proficiency students. High proficiency students (H) were the participants whose CU-TEP scores were equal to or greater than 477 (TOEFL paper-based equated). Low proficiency students (L) were those whose CU-TEP scores were less than 477 (TOEFL paper-based equated). Within these two groups, 10 participants (i.e. five in the high-proficiency group and five for the low-proficiency group) were randomly selected for qualitative analyses in the interview. It is noted that these 28 participants who showed their informed consent in the pilot study were not part of the current study.

(ii) The current study

The current study was conducted in the first semester of the 2013 academic year (June to September, 2013) when the population of first-year Thai undergraduate students who enrolled in Foundation English I as shown in Table 3.3.

Table 3.3

Total number of the first-year undergraduates enrolled in Foundation English I by faculty (semester 1/2013)

No.	Faculty	No. of Students
1.	Science	845
2.	Engineering	796
3.	Commerce and Accountancy	605
4.	Education	416
5.	Medicine	299
6.	Fine and Applied Arts	292
7.	Political Science	259
8.	Architecture	230
9.	Law	211
10.	Allied Health Science	203
11.	Pharmaceutical Science	182
12.	Economics	181
13.	Communication Arts	157
14.	Dentistry	138
15.	Sports Science	128
16.	Veterinary Science	121
17.	Psychology	113
18.	OCARE	51
Total		5,227

Note. Faculties are arranged in order based on the number of students.

Table 3.3 shows the information gathered from the Office of the Registrar at CU. The population of first-year undergraduate students were from all eighteen faculties (i.e. Allied Health Science, Architecture, Commerce and Accountancy, Communication Arts, Dentistry, Economics, Education, Engineering, Fine and Applied Arts, Law, Medicine, OCARE, Pharmaceutical Science, Political Science, Psychology, Science, Sports Science, and Veterinary Science) enrolling in the first semester of the 2013 academic year at Chulalongkorn University. Out of 1,261 (i.e. 845 Science and 416 Education students), 52 first-year undergraduate Science and Education students who enrolled in Foundation English I were in my two classes. That is, class 1 contained 24 Science students and class 2 consisted of 28 Education students. However, out of 52 participants, six participants were excluded from the study due to the fact that they did not fully participate in the training workshop and they dropped out of the course after the midterm examination. Therefore, the actual number of the participants in the data collection of the current study was 46 first-year students who were from both of my class sections (i.e. 20 students from the Faculty of Science in class section 1 and the other 26 students from the Faculty of Education in class section 2).

The results of the pilot study raised the following implications for the current study. Firstly, based on the interview results of the pilot study, five students or 100% of the students whose English language proficiency fell into the low level revealed that they were sensitive to being grouped in a so-called “low” proficiency group. Accordingly, the low level group

of English language proficiency was called “limited” proficiency students in the current study.

Secondly, a high proficiency student and a low proficiency student revealed in the pilot interview, that if possible, they would prefer to select their partner to work with. Being specifically paired with those whom they had different learning styles from sometimes made them feel uncomfortable to work with. Based on both proficiency students’ interview responses previously mentioned, I decided to alter the pairing criterion from proficiency pairing to students’ pairing preference. Those students who could choose to work with their partners by their own would likely be more willing to mutually communicate when doing pair work than those who were specifically paired. In other words, I gave the students freedom to choose their own partner in the current study.

Since Thailand is an EFL country where a classroom contains multiple levels of English proficiency, it would be logical and meaningful to concern the students’ different levels of English proficiency as a criterion to pair students for the peer assessment. A number of Storch’s studies (2001-2003, 2005, 2007, 2009) on pair work writing activities have been conducted in ESL contexts. Two studies have been done in EFL contexts (Storch, 2008; Storch & Aldosari, 2013). However, it seems that only the study by Storch and Aldosari (2013) points out the implementation of the students’ level of English proficiency as a criterion to pair EFL students. In their study, the data were gathered from 36 college males from Saudi Arabia. The students were grouped into 18 pairs based on three criteria: high school English scores, the scores of two grammar quizzes, and teacher’s general

observation over a semester. The results of the study indicated that in heterogeneous classes, how to pair students best depends on the objective of the task and the pair-work relationship other than L2 proficiency pairing.

Lastly, based on the results from the writing test and the questionnaire in the pilot study, two out of five students (40%) in the low proficiency group whose levels of English proficiency fell into the score range of 437-473 (TOEFL Paper-Based Equated) obtained higher writing post-test scores than those whose levels of English proficiency were lower than the range of 437-473 (TOEFL Paper-Based Equated) (see Table 3.2, p. 62). Moreover, the responses of open-ended items in the in-process questionnaire (Appendix 9, p. 306) of those two students (40%) in the same group of the students whose levels of English proficiency were at the score range of 437-473 (TOEFL Paper-Based Equated) showed some different aspects of their opinions during the editing activity from those whose levels of English proficiency were lower than the range of 437-473 (TOEFL Paper-Based Equated). That is, both of them felt more confident of writing paragraphs in English in terms of language or grammar than those whose levels of English proficiency were lower than the range of 437-473 (TOEFL Paper-Based Equated). These results from the pilot study made me realise that the group of middle proficiency students should have been recognised and separated from the group of the low proficiency students (see Table 3.4 on the next page).

In order to answer all research questions of the current study, the participants were divided into three groups based on the interpretation of the CU-TEP (Chulalongkorn University Language Institute, 2013) as shown in Table 3.4.

Table 3.4

Grouped participants based on English proficiency score interpretation

CU-TEP		Interpretation	Grouped participants	No. of grouped participants	
(TOEFL equated) score range	Score range			Science (n = 20)	Education (n = 26)
640-677	107-120	Upper advanced/Expert user	High proficiency (n = 14)	3ScF	6EdM, 5EdF
590-637	92-106	Advanced/Very good user			
550-587	80-91	Middle advanced/Good user			
513-547	69-79	Low advanced/Very competent user			
477-510	57-68	Intermediate/Competent user	Middle proficiency (n = 17)	3ScM, 5ScF	3EdM, 6EdF
437-473	45-56	Middle intermediate/ Moderate proficiency user			
397-433	33-44	Low intermediate			
347-393	18-32	Upper beginner/Marginal user	Limited proficiency (n = 15)	3ScM, 6ScF	1EdM, 5EdF
310-343	8-17	Middle beginner			
0-310	1-7	Beginner/Very limited user			

Notes. Sc: Science; Ed: Education; F: Female; and M: Male.

Based on the implications of the pilot study and the students' CU-TEP scores, the test of which was taken in June, 2013, all the 46 participants were divided into three groups: high, middle and limited proficiency for quantitative data collection and analysis. Moreover, for qualitative data collection and analysis, twelve participants from my two class sections were randomly selected as informants. As can be seen from Table 3.4, three groups of the participants were:

- a) Fourteen high proficiency students (H) were the participants who obtained CU-TEP scores of equal to or greater than 477 (TOEFL Equated) or 57. This group of 14 contained six Education males, five Education females, and three Science females. In addition, four informants were randomly selected from my two classes (i.e. two participants per class) for qualitative analysis in an in-depth interview.
- b) Seventeen middle proficiency students (M) were the participants who gained CU-TEP scores of between 437 and 473 (TOEFL Equated) or between 45 and 56. This group of 17 contained three Education males, six Education females, three Science males, and five Science females. Additionally, four informants were randomly selected from my two classes (i.e. two participants per class) for qualitative analysis in an in-depth interview.
- c) Fifteen limited proficiency students (L) were the participants who gained CU-TEP scores of equal to or less than 433 (TOEFL Equated) or 44. Within this group of 15, there were one Education males, five Education females, three Science males, and six Science females. Moreover, four informants were randomly selected from my two classes (i.e. two participants per class) for qualitative analysis in an in-depth interview.

3.5.3 Research instruments

The details of the research instruments were developed from the pilot study. The research instruments of the current study were a test of English proficiency, writing pre- and post-tests, writing tasks, a writing task checklist, questionnaire series, and a semi-structured

interview. These instruments were used to collect the quantitative and qualitative data (Cameron, 2011; Creswell, 2007) to answer three research questions of the study.

1. What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?
2. Does English language proficiency influence the writing performance of students when they use either self or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?
3. What are students' perceptions of the use of both self and peer-review strategies in relation to writing development?

The research instruments are described as follows.

(i) Test of English proficiency

The standardized test of English language proficiency employed in the study was the Chulalongkorn University Test of English Proficiency or CU-TEP. The test is designed and administered by the Chulalongkorn University Language Institute or CULI. The CU-TEP scores are systematically scaled in ten range levels (see Table 3.4, p. 67). A CU-TEP score with its TOEFL-equated score is normally reported on a computerised test result slip. The criteria of the CU-TEP score ranges were utilised in the current study to answer research questions 1 to 3.

The pilot study and the current study employed the CU-TEP score range as in Table 3.2 (p. 62) and Table 3.4 (p. 67), respectively. A relevant merit of using the fixed scale of the CU-TEP score range to divide the participants into high, middle, and limited proficiency

groups, from Table 3.4, is that all groups of the participants can take part. In contrast, other criteria for group division like selecting 27% of the students at the top and the 27% at the bottom allows only some of the participants to take part.

(ii) Writing tests

The participants' writing achievement was measured from their writing performance to achieve a writing task and a writing test which were designed, by CU academic affairs committee, in accordance with the Foundation English I course syllabus. In other words, the participants were assigned to write and were tested in what they were taught in writing.

An argumentative writing test which was selected from a mock writing exam handout was allowed to be used in this present study by the Deputy Director for Academic Affairs from Chulalongkorn University Language Institute (CULI). Since the test in this study was designed, developed, and assessed by the CULI academic committee to measure the argumentative writing achievement of the first-year university undergraduate students who were from a total of 18 University disciplines, the usability and validity of the tests were constructed, measured, and approved (Pickard, 2008).

Before being utilised in the current study, the writing test, entitled 'Work & Travel', was tested for its reliability in the pilot study. In the current study, the test was utilised as the pre-test and the post-test, both of which were identical. The utilisation of the identical writing test, in both pilot and current studies, before and after the participants had acquired the writing skills were to avoid questions of the equivalent levels of test difficulties which

might affect the outcome of the tests. According to Mackey and Gass (2005: 129), a test-retest method can determine the reliability of a test. It is also suggested that a two-month time interval between the test and the re-test is likely to be an appropriate duration since such a duration could at least avoid a bias of the test results influenced by effects of the participants' learning process and practice and their test memory. Due to these reasons, the pre-test and the post-test administrations of the pilot study and the current study were planned and designed to be undertaken at the eight-week time interval. What is more, it is known that a writing test can be considered reliable from its scoring consistency by scorers or raters (Weigle, 2002: 128-129). The reliability of the writing tests was thus assessed through the inter-reliability index which was from the average writing scores rated by two external raters. The average index of test reliability was approximately .90 for the argumentative writing test ($p < .01$).

(iii) Writing tasks

The main purpose of argumentative essay writing is to express a convincing opinion in response to given sources. In other words, the students should be able to express their own opinions against a person's idea in a given web posting. The writing organisational components consist of an introductory sentence, a topic sentence, supporting details, and a concluding sentence.

In the pilot study, argumentative writing tasks were assigned to class after a three-hour course lesson. Within the ten-week duration in the pilot study, 28 participants who did not have prior experience of argumentative essay writing had written at least four writing

pieces (i.e. 2 writing tasks x (1 writing piece + its revision per piece)) in the total 6-week writing practice. The participants also had opportunities to assess their classmates' written tasks by using the designed writing-task criteria, checklist, and correction symbol worksheet (Appendix 2, p. 289 and Appendix 7, p. 302, respectively) during six weeks or 18 hours (i.e. three class hours per week). The results gathered from the participants' written argumentative tasks in the pilot study helped me to adjust the chronological order of the provision of teacher feedback to be at the final step after the participants' review processes (i.e. the first self-review strategy and the subsequent peer-review strategy practices) and their post-tests in the current study instead of being involved after individual self-review and peer-review strategy practices (see the next Section 3.6.1 Active stage: Data collection at Step 9, p. 100).

Regarding the validity of the writing task criteria, it is noted that the criteria of the writing test and of the writing tasks (Appendix 2, p. 289) are the same. Thus, the validity of the writing task criteria was approved as those of the writing test were. Moreover, in terms of the validity of the designed writing task checklist and writing correction symbol worksheet, three experts verified the checklist and the worksheet which were designed by me and adapted from the writing-task scoring measure from Experiential English I and the correction symbols from Hogue (1996). Then, I revised the writing task checklist and the correction symbol worksheet based on the experts' suggestions through the completed Index of Item-Objective Congruence (IOC) checklists (Rovinelli & Hambleton, 1977). The revised versions of the designed writing-task checklist and correction symbol worksheet of argumentative writing (Appendix 7, p. 302) were used in the current study. As for the

reliability of the writing tasks, the inter-reliability was calculated through the correlation between external rater 1 and external rater 2. The computed Pearson correlation coefficient r demonstrated a high correlation between the mean scores given by rater 1 and those by rater 2 at .88 ($p < .01$) in the writing task 1 (entitled ‘Censorship’), and at .89 ($p < .01$) in the writing task 2 (entitled ‘Live Concerts’). In other words, the average inter-reliability index of these two writing tasks was .89 ($p < .01$).

In the current study, based on the course lessons, two argumentative writing tasks with a maximum word length of 200 were assigned (Appendices 5 and 6, pp. 298-301). Within eight out of 11 weeks of the study, individual 46 participants from two classes who did not previously have experience on argumentative essay writing had written four writing pieces (i.e. 2 writing tasks x (1 writing piece + its revision per piece)). They also had opportunities to assess their own and classmates’ written tasks by using the designed writing-task criteria, checklist, and correction symbol worksheet (Appendix 7, p. 302) during eight weeks or 24 hours (i.e. three class hours per week) (see the next Table 3.6, p. 87). Based on the writing criteria and checklist, the participants’ written tasks were assessed in relation to content, organisation and grammar. With the research procedures of the study, the participants were assigned to write and subsequently self-revise the argumentative writing task 1 entitled ‘Censorship’ (Appendix 5, p. 298). Later, they were assigned to write the argumentative writing task 2 entitled ‘Live Concerts’ (Appendix 6, p. 300) and to have their partners revise. The research procedures are presented in Section 3.6.

(iv) Questionnaire series

A series of questionnaires were constructed to elicit student participants' information and answer all the research questions. Since the current study examined the impact of the participants' review activities, the questionnaires were revised and developed to be used in three phases: before, during, and after writing and review strategy practice. The questionnaire used before writing and review strategy practices is named the pre-task questionnaire (Appendix 3, p. 291), and those used during and after review strategy practices are named the in-process questionnaire (Appendix 9, p. 306) and the post-task questionnaire (Appendix 10, p. 308), respectively.

Before the actual use, the questionnaire series was piloted to test its validity and reliability. After completing the construction of the questionnaires, I designed and developed an item-scoring checklist based on the IOC. The questionnaires with the item-scoring checklist were distributed to three experts for validity assessment. After the experts verified the questionnaires and marked the prepared checklist, I calculated the average scores to analyse the questionnaire validity. Furthermore, the questionnaire series was also piloted to test its reliability. The reliability of the 10 five-point Likert scale items in Part 2 of the pre-task questionnaire and of the 10 five-point Likert scale post-task questionnaire was statistically analysed using the formula for the Cronbach alpha coefficient (α -coefficient). It is noted that in order to examine whether there is any change of the participants' opinions towards review activities, the content of the pre-task and the post-task Likert scale questionnaires was the same. The reliability index of the questionnaires was approximately .88.

After the pilot study, the questionnaire series was revised and developed in terms of the format, the content, and the number of the items, and then used in the current study to collect data. With the validity measurement through the IOC checklist and the reliability measurement of the questionnaires through the Cronbach alpha coefficient in the pilot study, the design of the questionnaires was revised, particularly in parts of the numerical rating scales or Likert scales (Dörnyei & Taguchi, 2010) and developed as a series for the current study (Appendix 3, p. 291 and Appendix 10, p. 308). The participants' opinions towards their English language skills and review activities were assessed based on five-rating-scale checklists. The average rating scores from the scale checklist (i.e. 1 meaning "Very weak", 2 meaning "Weak", 3 meaning "Average", 4 meaning "Good", and 5 meaning "Very good") in Part 1 of the pre-task questionnaire represent the participants' opinions towards their English language skills. In addition, the average rating scores from another scale checklist (i.e. 1 meaning "Very weak/Strongly disagree", 2 meaning "Weak/Disagree", 3 meaning "Average/Neutral", 4 meaning "Good/Agree", and 5 meaning "Very good/Strongly agree") in Part 2 of the pre-task questionnaire and in post-task questionnaire represent the participants' opinions towards their review activities.

The specifications of the revised questionnaire series are as follows. The 20-item pre-task questionnaire consisted of two parts. The nine-item first part of the pre-task questionnaire, containing five close-ended items, three open-ended items, and one Likert-scale item, is concerned with the bio-data, English language learning background, and perception of the English language skills of the students. The 11-item second part of the questionnaire contains ten-item perceptions of review strategies and one open-ended item of other

comment(s) or suggestion(s) about any relevant issue of English language learning and/or class (Appendix 3, p. 291).

Referring to the in-process questionnaire, it was framed with five semi-open-ended items. It was designed to elicit the participants' perceptions of challenges and their own writing confidence when they undertook review strategies. Regarding the self-review strategy, the students had to provide their responses to the challenges and the writing confidence they had when doing the strategy practice (items 1 and 4 of the questionnaire). The other three items of the questionnaire were designed to elicit the students' perception of the challenges and the writing confidence they had when doing peer-review strategy practice. Since the peer-review strategy provided the students with two roles in practice (i.e. a feedback provider to a classmate's written task and a feedback receiver to make revision for the final draft), the questionnaire was designed to elicit their views on the challenges of their first role (item number 2) and those of the second role (item number 3), followed by their writing confidence after the peer-review strategy practice (item number 5) (Appendix 9, p. 306).

As regards the 12-item post-task questionnaire, 11 five-point Likert scale items and one open-ended item were also adjusted to elicit the participants' perceptions after writing and all review strategy practices (Appendix 10, p. 308). All the post-task questionnaire items were the same as those in Part 2 of the pre-task questionnaire in order to be able to compare their perceptions of the pre-use and the post-use of the review strategies.

Referring to the common features of questionnaires, Mackey and Gass (2005: 93) point out that questionnaires are often used in survey research. The design of questionnaires can be divided into two types: closed and open-ended. The former is developed with the uniformity of measurement including the provision of a set of possible answers. The responses of closed-item questionnaires are easily quantified and analysed, thereby producing high reliability. Pickard (2008: 187) elaborates three further categories of the closed-item questionnaires: the dichotomous (a set of two fixed choices), the multiple dichotomous (a list of possible choices), and the rank order (scale) questions. Among the three categories of the closed questionnaires, the scale questions, known as ‘an attitudinal scale’ or ‘a Likert scale’ questions, are frequently used in questionnaires. In a Likert-scale questionnaire, respondents are asked to rate their level of agreement with given statements. However, it is accepted that designing Likert scale questions is time-consuming. The second type of questionnaires—the open-ended questionnaires, in contrast, do not provide possible answers for respondents but allows their own opinions or unique ideas. Thus, the benefits of the open-ended questionnaire responses may encourage additional data in a study.

In the data collection, it should be remarked that the title of each part of the questionnaire series (i.e. bio-data and English language learning background and opinions towards review activities) was not shown in the copies of the questionnaires used to collect the participants’ responses in order to prevent Halo effects causing response bias (Cohen et al., 2018; Dörnyei & Taguchi, 2010; Mackey & Gass, 2005).

(v) Semi-structured interview

Generally speaking, one of the most frequently-used research instruments for qualitative data collection is ‘interview’. An interview seems to be more appropriate than a questionnaire whenever questions, particularly in an open-ended questionnaire, are designed to elicit the respondents’ implicit and sensitive data (e.g. attitudes) in a written form. The respondents may not feel free to write all what they are asked in the open-ended questionnaire items (Pickard, 2008). As described in Pickard (2008: 175), there are generally two types of interview: structured and unstructured. However, Mackey and Gass (2005: 173-174) added another type—the semi-structured interview. These three interview types are described as the following paragraph.

Firstly, structured or standardised interviews are framed by a fixed list of questions. An interviewer cannot ask any new question beyond the provided list. However, this type of interview allows the researcher to easily compare responses under the same standardised set of questions. On the other hand, the semi-structured interview allows the interviewer to extend his or her own questions as appropriate from the guided list of questions. Lastly, in unstructured interviews, there is no list of questions provided to the interviewer. Therefore, these are similar to natural conversations since the interviewer must develop his or her own questions to elicit interviewees’ responses.

Regarding the individual types of interview, structured or standardised interviews are framed by a fixed list of questions. An interviewer cannot ask any new question beyond the provided list. However, this type of interview allows the researcher to easily compare

responses under the same standardised set of questions. On the other hand, the semi-structured interview allows the interviewer to extend his or her own questions as appropriate from the guided list of questions. In unstructured interviews, there is no list of questions provided to the interviewer. This last type of the interview is similar to natural conversations since the interviewer must develop his or her own questions to elicit interviewees' responses.

An interview provides the benefits of being both interactive and flexible about the use of the interviewee's L1. The interviewee's responses are more likely to complete initially unclear responses from other research instruments. Additionally, the interview can be another option for the interviewee who may not feel comfortable with giving responses to other research instruments for data collection. Nevertheless, the possibilities of an interviewee's selective recall, perceptual distortions or memory loss and of an interviewer's subjectivity in data interpretations are drawbacks of the interview (Hall & Rist, 1999; cited in Mackey & Gass, 2005: 174). Concerning an interviewer's data interpretation, it is suggested that the interviewer should be cautious and well-trained to conduct an interview, particularly unstructured ones; otherwise, the halo effect can distort the instrument validity and reliability (Krippendorff & Bock, 2009). The term 'halo effect' refers to "the distorting influence of early impressions on subsequent judgements of a subject's attributes or performance, or the tendency of a rater to let an overall judgement of the person influence judgements on more specific attributes. This is a common source of response bias..." (Davies et al., 1999: 72).

The semi-structured interview in the current study was conducted for insightful qualitative data (e.g. participants' self-reported perceptions) but was another useful source to ensure more accurate results in quantitative analysis. The interview aimed to solicit more about the participants' perceptions of the use of review strategies (i.e. self-review and peer-review strategies) in relation to their writing development. The interview questions were also to solicit the participants' impression of and suggestions about review strategies and/or any writing activity that could help develop writing skills (Appendix 11, p. 308).

In the current study, the interviewee group was composed of 12 first-year undergraduate Thai participants from my two class sections. All twelve participants signed the consent form before participating in the interview process. They were from three proficiency groups, four of which were randomly selected from my two classes in an equal proportion (i.e. two participants per class). That is, four high-proficiency, four middle-proficiency, and four limited-proficiency participants were regarded as interview representatives. With the participants' permission, the interviews were recorded and subsequently transcribed to support the analysis of quantitative data.

3.5.4 A summary of development in research design

After the implementation of the pilot study, the research design was adjusted and developed for the current study. The details of research design development are summarized in Table 3.5.

Table 3.5

Development in research design

Research design	The pilot study	The current study
Data collection time	The first semester of the 2012 academic year	The first semester of the 2013 academic year
Participants	- Participants: 28 first-year Economics Thai undergraduate students (12 males and 16 females) - Two proficiency groups: high and low levels of the English proficiency (<u>Note</u>: The number of first-year students from 18 disciplines and their Foundation English classes were randomly assigned to the course instructors through the University's registration system.)	- Participants: 46 first-year Thai undergraduate students consisting of 20 Science students (6 males and 14 females) and 26 Education students (10 males and 16 females) - Three proficiency groups: high, middle and limited levels of the English proficiency
	A teacher (or the researcher)	A teacher (or the researcher)
	Two raters: The researcher and an external rater	Three raters: The researcher and two external raters
Research instruments	- A writing test: Pre-test and post-test - Two 200-word writing tasks - A questionnaire (<u>Note</u>: The content of the questionnaire in the pilot study was added and separated into a series in the current study.) - A structured interview	- A writing test: Pre-test and post-test - Two 200-word writing tasks - A questionnaire series: pre-task, in-process, and post-task questionnaires - A semi-structured interview
Pairing Criterion	The participants were paired based on their pairs' proficiency levels which were pre-designed on purpose such as high with high proficiency participants and high with low proficiency ones.	The participants selected their working pairs by their own based on their preference. Alternatively, they were randomly paired in case of their non-pairing preference.

Table 3.5

Development in research design (continued)

Research design	The pilot study	The current study
Writing Process: Polishing or Rewriting step	• Pair work peer editing process: Participants' final-draft tasks 1 and 2 were from their peer-edited tasks 1 and 2. • Teacher feedback was provided after the participants' peer-editing and before their final drafts of each task.	• Reviewing process: Participants' final-draft task 1 was from their self-reviewed task 1. Then, their final-draft task 2 was from their peer-reviewed task 2. • Teacher feedback was provided after the final drafts of each self-revised and peer-revised task. (see Figure 2.1)

After having been developed from the pilot study to the current study through initial reflections and planning stage, the following research procedures were implemented.

3.6 Research procedures

Based on the proposed research model (Figure 3.1, p. 51), the last section of this chapter discusses the research procedures adopted in the study. These are two stages to consider – the active stage and the observational stage. These stages are described as follows.

3.6.1 Active stage: Data collection

Prior to the data collection procedures, I informed the participants that their participation was on the voluntary basis and that their information and responses would remain anonymous and confidential. Relating to the anonymity of the study, the participants were identified by the assigned codes. For instance, Participant HEd5 stands for the high-proficiency Education participant number 5 which was ranked by the respective 5th high level of the English language proficiency. With regard to the confidentiality, the records of

the study are stored securely and only the researcher, namely myself, is able to access the records. In conformity with ethical considerations, all original recordings of interviews were deleted following completion of transcriptions and their transference to a data file. In addition, all efforts were taken to treat students equally throughout the data collection procedures from the pilot study to the current study. Furthermore, all students completed consent forms to confirm their willingness to participate the studies.

The data in this current study were collected from the participants in two classes, one group of Science students and another group of Education students. Owing to this, the following preliminary conditions in the similarities of the background knowledge of English and/or ways of learning English in the Thai EFL context of the participants from both classes are pointed out to ensure the validity and reliability of the subsequent findings of research questions 1 to 3 of the study.

With regard to the preliminary conditions, prior to the implementation of review strategies, any variables which were not intentionally examined were to some extent controlled in this study in order to obtain valid and reliable findings. Although all participants who enrolled in these two class sections were randomly placed through the University's registration system, they were arguably engaged under the following homogeneous conditions. All 46 participants were in the same first year of study in the first semester of the 2013 academic year. They had neither prior experience in argumentative writing nor review strategy practice. Additionally, they spoke the native Thai language and had the same age range as well as similar English language learning backgrounds based on the Thai educational

system. Within the same Thai EFL educational context, the participants also had similar learning environments including classroom settings and the surrounding climate of Thailand. Hence, when the participants took an examination or a test, the issues of classroom setting and climate may, to some extent, hardly affect findings of the current study. This also includes the participants' gender. It is suggested that as long as language learners are willing to participate in a learning activity, their gender is not an issue (Morgan, Gelbgiser, & Weeden, 2013). In addition, the issue of the effect of different lecturers on students' learning performance from different classes would not be the case because I was the only lecturer for the two classes of the study. To conclude, these conditions ensured a degree of homogeneity for the research.

The current study was undertaken during regular class time. The data were collected in the first term of the 2013 academic year. The procedures were designed as illustrated as the flowchart in Figure 3.2.

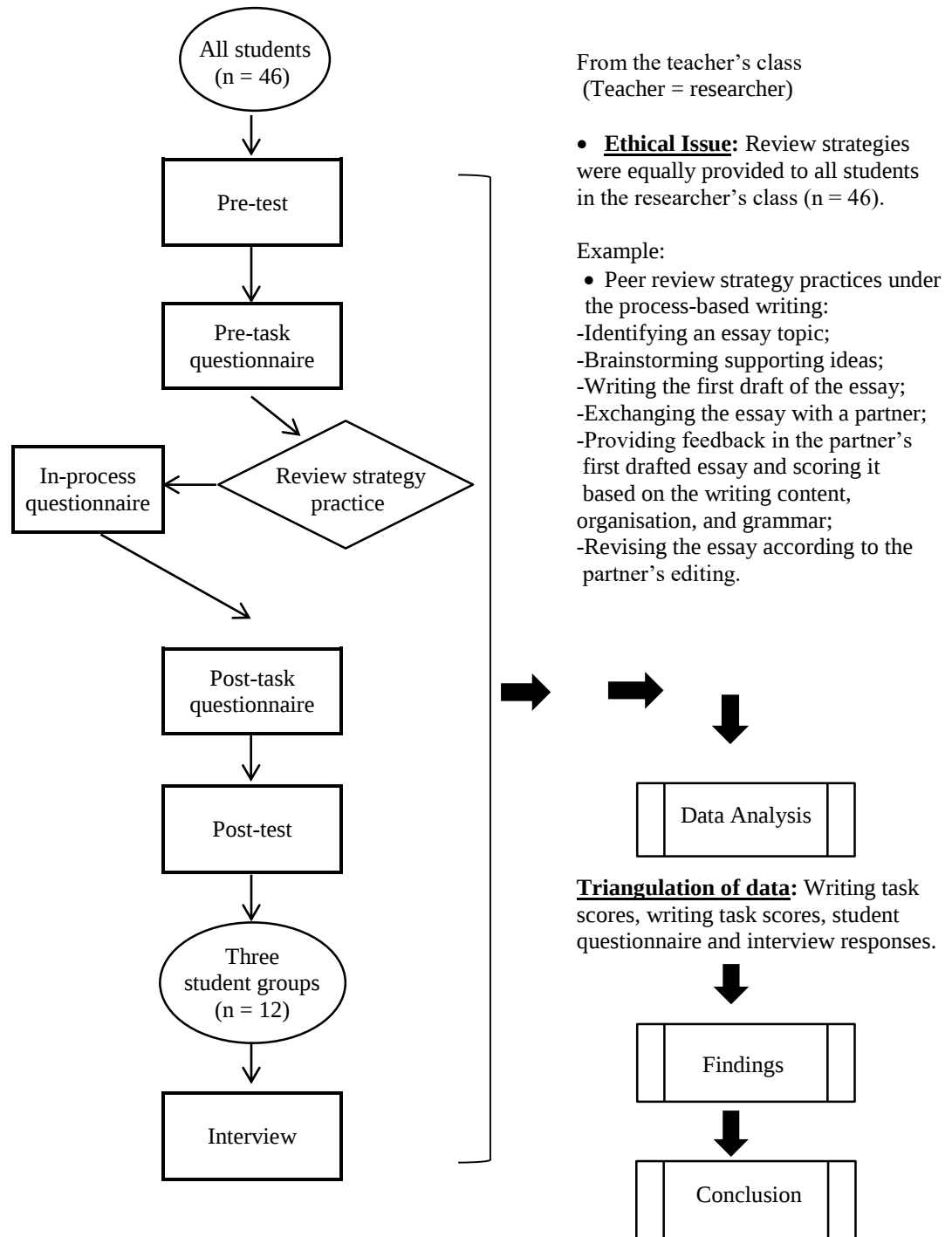


Figure 3.2. Research design.

As can be seen from Figure 3.2, I had the simultaneous roles of teacher and researcher. As the teacher of two classes, I provided both review-strategy training and writing instruction, as well as gathering data. There was no policy to have a co-teacher or a teaching assistant in each class, and all full-time and part-time Foundation English lecturers were occupied. Therefore, it was necessary, in the 2013 academic year, for me to teach classes and conduct this study. Because of the potential conflict of interest in undertaking these two roles, particular consideration was taken to design the study so as to ensure validity and reliability. Therefore, in the writing assessment, two external raters assisted me in triple-marking the students' written task and test scripts. In addition, students were aware that I was not the one who marked their exam papers as well as they were informed that this study did not affect their course grades but for writing research and development. This likely protects the collected data from the halo effect (Cohen et al., 2018; Krippendorff, 2013; Mackey & Gass, 2005) and encourages the participants' bias-free responses to the questionnaires and the interview.

In the Experiential English I class, I was assigned to provide a 3-hour course lesson to my two classes each week for 13 weeks from June to September, 2013. During the 78-hour first semester (i.e. 39 hours per class), the data were collected in ten steps over eleven weeks or 66 hours (i.e. 33 hours per class). All the steps of data collection were carried out based on the following procedures in Table 3.6.

Table 3.6

Data collection procedures

Processing plan	2012 academic year				2013 academic year									
	Term 1/ 2012	Summer	Term 2/ 2012	Summer	Term 1/2013								Summer	Term 2/ 2013
	Jun-Sep 2012	Oct 2012	Nov 2012- Feb 2013	Mar-May 2013	Jun 2013		Jul 2013		Aug 2013		Sep 2013		Oct 2013	Nov 2013- Feb 2014
					Wk 1-2	Wk 3-4	Wk 5-6	Wk 7-8	Wk 9-10	Wk 11-12	Wk 13-14	Wk 15-16		
▪ The pilot study: - Consent form and a questionnaire - Writing test - Writing tasks - Student interview	----->													
▪ The current study: - Step 1: Consent form - Step 2: Test of English proficiency - Step 3: Writing pre-test - Step 4: Pre-task questionnaire - Step 5: Writing task 1 - Step 6: Writing task 2 - Step 7: In-process questionnaire - Step 8: Post-task questionnaire - Step 9: Writing post-test - Step 10: Student interview					Course Orientation and Introduction									
▪ Data Analysis: Analysing the results														----->

The ten steps in the procedures, based upon the University's academic calendar, from Table 3.6, can be elaborated on as follows.

- **Step 1: Consent Form**

In the first week of June, the Experiential English I course orientation was introduced to the students of my two classes. My class 1 of Science students was on Tuesdays and class 2 of Education students was on Thursdays. In a three-hour class, I distributed copies of the course syllabus and the supplementary handouts (i.e. 'Strategies for Reading Comprehension' and 'Basic English Writing Skills') to the students. I then explained the course syllabus and reviewed the supplementary handouts, focusing on reading skills and grammatical sentence structures, to the students. At the second week, I assigned the students to complete all supplementary handout exercises, followed by giving them all correct answers. In the remaining one and a half hours of the class, lessons of vocabulary, tenses, active-passive voice, and reading review were overviewed and assigned as the participants' self-study before starting the first course lesson.

At Week 3 when the course registration was due and the number of the students per class was more stable, I introduced and explained this study to the students in the two classes. In relation to ethical issues, I distributed the copies of the consent form to those students: all of the students were willing to participate in the study (Appendix 2, p. 289). It had been noted that in order to facilitate all Thai participants' understanding of this study, the Thai-version of the consent form was also needed. This was provided on the back of the English-version.

- **Step 2: Test of English Proficiency**

After I had collected the copies of the signed consent form, I informed the participants that they would need to provide their scores from Chulalongkorn University Test of English Proficiency (CU-TEP) in order to fill in a pre-task questionnaire (Appendix 3, p. 291) which would be distributed next week. As all first-year undergraduate Thai students were required to take the test before starting their first-year courses, their test scores had been announced and available since the beginning of Experiential English I, their foundation English course.

The purpose of collecting the participants' CU-TEP scores was to examine the level of English language proficiency of the participants from the two classes (i.e. Science students enrolling in section 1 while Education students in section 2) at the starting point before implementing review strategies. Accordingly, an investigation was conducted to determine whether there was any difference in the initial English language proficiency between the groups of the Education participants and the Science participants. It should be noted that the results of the participants' initial level of English language proficiency were used to determine subsequent analyses of data (see the next Section 3.6.2) to answer the respective research questions of the current study.

The data on the participants' English language proficiency were their CU-TEP scores which were gathered for the analysis from 46 participants' entry records after the admission and registration for first-year university studies and before starting their first-year studies

in the first semester of the 2013 academic year. The scores were analysed to compare whether there was any significant difference in the 46 participants' English language proficiency between two classes using an independent-samples *t*-test through the SPSS programme (Appendix 8, p. 304). The results of the average levels of the English language proficiency of the participants from two classes are shown in Table 3.7.

Table 3.7

Descriptive statistics of two classes of participants' English language proficiency

Group Statistics					
	Sec	N	Mean	Std. Deviation	Std. Error Mean
EP	1.00	20	44.8500	9.56020	2.13773
	2.00	26	55.1923	11.94326	2.34227

Notes. EP: Initial English proficiency scores (i.e. CU-TEP scores)

SEC: Section

SEC1 included first-year Science participants

SEC2 included first-year Education participants

Table 3.7

Descriptive statistics of two classes of participants' English language proficiency (continued)

		Independent Samples Test								
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
EP	Equal variances assumed	1.612	.211	-3.168	44	.003	-10.3423	3.26509	-16.92266	-3.76196
	Equal variances not assumed			-3.261	43.908	.002	-10.3423	3.17113	-16.73368	-3.95093

The findings from the data analysis presented in Table 3.7 showed that there was no statistically significant difference in English language proficiency between the two classes. The average scores of the participants' English language proficiency (CU-TEP) were ranged, from 45 to 56, in the same group of middle or intermediate proficiency students (see Table 3.4, p. 67). That is, in the class section 1, Science participants had the average score of CU-TEP at 44.85 or approximately 45 ($M = 44.85$, $SD = 9.56$) and Education participants in the class section 2 gained the average score of 55.19 or approximately 55 ($M = 55.19$, $SD = 11.94$).

Noticeably, the average scores of both Science and Education participants fell into the same middle intermediate proficiency group, the CU-TEP score range of which was between 45 and 56, as shown in Table 3.4. Similarly, the English language proficiency of 46 participants from two classes was found to be at a similar or equivalent level. In other words, all participants of the current study had relatively equivalent levels of English language proficiency at the beginning prior to implementing review strategies. The homogeneity of the first entry levels of English language proficiency of the participants from the two classes in this current study could be justifiably attributed to their similar Thai educational context. As stated in some scholars' studies, the nature of knowledge, ways of thinking, belief about learning, and socio-cultural characteristics of academic contexts of a student could be influenced by an educational context (Berthiaume, 2009; Hughes & Overton, 2009; McAllister & Alexander, 2009). Hence, as a result of the same level banding of the initial English language proficiency of the two classes between 20 Science participants and 26 Education students, these two groups of the participants will be

perceived as one group in subsequent data analysis (see the next Figure 3.5 in Section 3.6.2, pp. 102-103).

- **Step 3: Writing Pre-Test**

In the following week, the copies of the writing pre-test of argumentative writing were distributed to the participants before they had an argumentative writing lesson (Appendix 1, p. 287). In the pre-test, the participants did not know beforehand that they were assigned to do a pre-test. They did not have any review of argumentative writing before taking a pre-test. They were not allowed to consult any dictionary or English language writing handout while taking the 40-minute pre-test. The participants finished and submitted their written test scripts together with the test copies.

- **Step 4: Pre-Task Questionnaire**

After the writing pre-test, I further distributed the copies of the pre-task questionnaire to the participants of two classes (Appendix 3, p. 291). Similarly, in order to facilitate all Thai participants' understanding of this study, the copies of the Thai-versioned questionnaire were utilised.

- **Step 5: Writing Task 1**

The writing-training workshop had been provided to the participants for eight weeks from week 4 to week 12. On the syllabus of the Foundation English I course, the introduction of the argumentative writing lesson was scheduled after the midterm examination and the students' argumentative writing performance would be tested in the final examination.

However, in the current study, such lessons started at week 4, before the midterm examination, parallel to those descriptive-narrative writing lessons being scheduled in accordance with the syllabus. This would be helpful to introduce argumentative writing earlier together with the descriptive-narrative email writing lesson. The participants accepted and willingly participated in such hard work (i.e. practicing lesson exercises and descriptive-narrative writing at the first 1.5 hours and joining the argumentative writing workshop at the later 1.5 hours) from weeks 4 to 7 (Table 3.6, p. 87) because they wanted to pass the course with good grades. Moreover, with the background knowledge of descriptive-narrative email writing format, they would be able to understand the argumentative writing in a web posting format more easily. That is, both descriptive-narrative writing and argumentative writing were of integrated writing formats which provided textual input or sources of information for writers to use to generate written responses (Brown, Iwashita, & McNamara, 2005).

In the training sessions, the participants were required to write two argumentative writing tasks. Starting at week 4, an argumentative writing lesson was introduced in the third hour after finishing a two-hour descriptive-narrative writing lesson (Appendix 4, p. 293). It is noted that prior to the implementation of the argumentative writing lesson, the process-based writing (see Table 2.1, p. 29 and Figure 2.1, p. 44) was introduced in the descriptive-narrative writing lesson to the participants.

At the beginning of Week 5, regardless of the normal lessons based on the course syllabus, in the weekly 1.5-hour writing workshop, I needed to ensure that the participants

understood how to write the argumentative writing through a writing lesson handout distributed at week 4. Then, I described the writing process and how it was important to the participants' writing skills (also see Table 2.1, p. 29). In the writing process, the participants needed to plan and organise their written scripts through re-reading, revising, editing, and rewriting steps by means of 'process writing'. Later, I distributed the copies of a 200-word writing exercise handout which was adapted from an argumentative writing sample entitled 'File Sharing' (Appendix 4, p. 293). The exercise in this handout was redesigned by adding two given sources. The participants were required to finish their 40-minute essays in class. With the remaining time out of 90 minutes, I distributed the handouts of writing task criteria, checklist, and writing correction symbols (Appendix 2, p. 280 and Appendix 7, p. 302) and informed the participants to self-revise their own work on the basis of these handouts. Before ending the class, I collected all the participants' self-revised writing task scripts.

In the workshop at Week 6, I firstly distributed the copies of a 'File Sharing' writing-sample script with some major and minor writing errors added. It is noted that major writing errors, including the misuse of tenses, active-passive voice, subject-verb agreement and pronoun reference, affect the meaning of a sentence in the same context while minor errors, including misuse of capitalisation, spelling and punctuation, do not. Then, I posed a question on whether there were any writing errors in the script, to the participants to have them engage in the following training of how to use review strategies after they experienced process-based writing from last week. I had spent the first 30 minutes of training on how to provide direct and indirect feedback in a written form together with

utilising the supporting handouts of writing task criteria, checklist, and writing correction symbols (Appendix 2, p. 289 and Appendix 7, p. 302). In the training session, the participants understood and experienced how to provide direct feedback and indirect feedback in the sample script. It is suggested, in the study by Puengpipattrakul (2013), direct feedback is provided on minor errors by directly correcting the errors and giving correct answers while indirect feedback is provided in the form of symbols without providing correct answers. An illustration of the provision of feedback (Puengpipattrakul, 2013: 12) is shown in Figure 3.3 below.

A student's written version	Since he won a scholarship. He then look forward to visit usa.
Feedback mechanism	The diagram illustrates the feedback mechanism for the sentence "Since he won a scholarship. He then look forward to visit usa." The student's text is written in a cursive-like font. Above the text, "direct feedback" is indicated by dashed arrows pointing to specific errors: "(sp) scholarship" (spelling), "(punc)," (punctuation), "the (Cap.)USA" (capitalization), and "usa" (capitalization). Below the text, "indirect feedback" is indicated by dashed arrows pointing to symbols: "FRAG" (fragment) under the first sentence, "T." (tense) under "look", "SV" (subject-verb) under "forward", and "wf" (word form) under "visit".
Answer key	Since he won a <u>scholarship</u> , he then <u>looked</u> forward to <u>visiting</u> the <u>USA</u> .

Figure 3.3. Sample of corrective feedback.

Later, the participants had an opportunity to revise the script by using the correction symbol worksheet (Appendix 7, p. 302) and on the basis of writing criteria and checklist (Appendix 2, p. 289 and Appendix 7, p. 302) for a maximum of 30 minutes. Then, I demonstrated to them how to revise the sample script using the given handouts of writing

task criteria, checklist, and writing correction symbols and subsequently showed the suggested answer key.

When the participants understood how to revise, I distributed their self-revised “File Sharing” tasks with my written feedback. Next, I assigned them to write and submit the 200-word argumentative writing task entitled ‘Censorship’ within 40 minutes in class (Appendix 5, p. 298). It is noted that when I received all the participants’ written ‘Censorship’ tasks, I had the tasks photocopied in order to provide my written feedback. Their original first-draft tasks would be distributed to them for their self-review practice and final drafts in the next class.

In Week 7, I returned the participants’ first-draft ‘Censorship’ tasks and assigned them to self-revise their own tasks by using the previously distributed handouts of writing task criteria, checklist, and correction symbols for approximately 30 minutes (Appendix 2, p. 289 and Appendix 7, p. 302). When they finished revising their tasks, they were allowed to take a break for 10 minutes. Being back to the class, the participants were then assigned to write and submit the final drafts of their self-revised tasks within 30 minutes. Next, the suggested answer-key copies were distributed to the participants for their writing comprehension and revision clarity. It is noted that the photocopied versions of their self-revised ‘Censorship’ first- and final-drafted tasks with my written feedback were returned to the participants after they finished their post-test in week 13.

- **Step 6: Writing Task 2**

At the beginning of Week 9 after the eighth-week midterm examination (see Table 3.6, p. 87), I reviewed the lesson of argumentative writing (Appendix 4) to the participants in the writing workshop. This reminded the participants of how to do argumentative writing and writing review before starting the next argumentative writing task. I also gave the participants approximately 15-30 minutes to learn, be aware of, and question (if any) about their assessed tasks. Additionally, as I would have liked to ensure that the participants were exposed to how to write and assess argumentative writing, I reviewed the writing process and approaches to process writing (see Section 2.2 in Chapter 2, p. 24).

At the beginning of the workshop in Week 10, I distributed the copies of the 200-word argumentative writing task entitled ‘Live Concerts’ to the participants and had them write and submit the task within 40 minutes (Appendix 6, p. 300). After submitting the written tasks, the participants had a break for 15 minutes. Similar to the participants’ written first-draft task 1s, their first-draft task 2s were also photocopied in order to provide my written feedback and returned in week 13. After the break, I returned the original first-draft tasks to the participants. Next, I had them work in pairs, based on their pairing preference, through assessing each other’s tasks. In case, the student participants had no idea of whom they had to work with or no pairing preference, the pairing criteria fell into a random selection. According to peer-review, the participants assessed their mutual written tasks by using the correction symbol worksheet (Appendix 7, p. 302) and on the basis of writing criteria and checklist (Appendix 2, p. 289 and Appendix 7, p. 302). How to do the peer-review practice was the same as what the participants did in their self-review practice. All

participants' peer-assessed first-draft tasks were submitted to me before the end of the class.

In Week 11, I returned the peer-edited 'Live Concerts' first drafts to the participant writers. Next, I assigned the writers to revise and submit their final-draft tasks based on their pairs' feedback for 30 minutes. Subsequently, I distributed the writing answer key of the writing task 2 to the participants. Any question (if any) from the participants about the teacher-assessed first drafts and the answer key was welcome.

In Week 12, I informed the participants that I would return their peer-revised final drafts with my written feedback in week 13 after they finished the writing post-test. I then welcomed any of their questions about argumentative writing and writing assessment and review. All in all, regarding data collection in the writing workshop, all participants' first drafts and self-revised and peer-revised final drafts of two argumentative writing tasks were collected and analysed to answer research question 2.

- **Step 7: In-Process Questionnaire**

In the same 12th week, after the participants had experienced the writing process and doing both self- and peer-review practices, copies of the in-process questionnaire were distributed for the participants to fill in (Appendix 9, p. 306).

- **Step 8: Post-Task Questionnaire**

In Week 13, copies of the post-questionnaire were distributed for the participants to complete in the class (Appendix 10, p. 308).

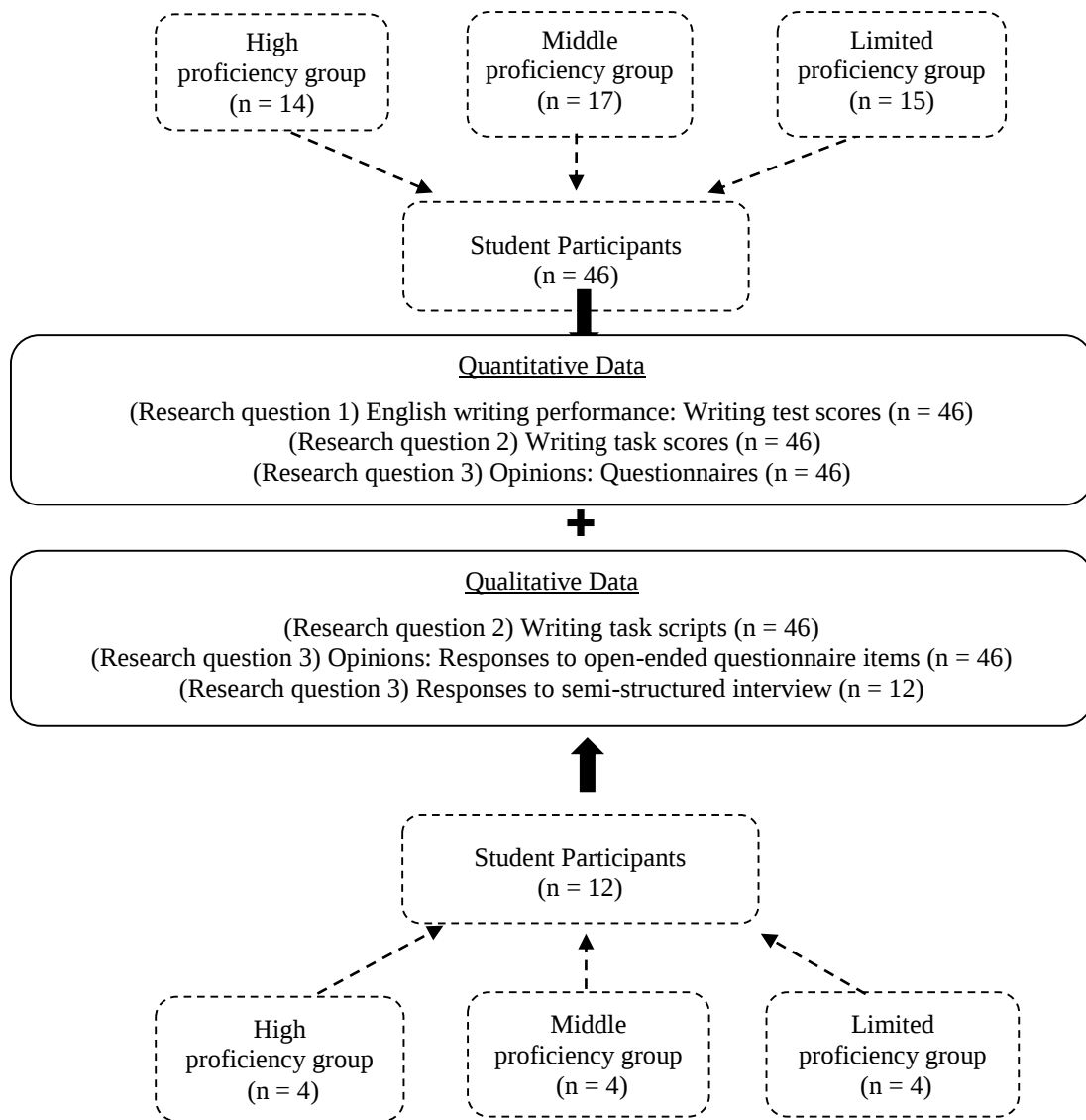
- **Step 9: Writing Post-Test**

In the same 13th week, copies of the post-test were also administered to the participants in the class (Appendix 1, p. 287). To avoid the participants' memory effect owing to the implementation of the same test, the 'pre-test' and the 'post-test' were administered during an eight-week or two-month time interval (i.e. from weeks 5 to 12) (Mackey & Gass, 2005). After the participants finished their writing post-test, I collected their test scripts. Then, the photocopied versions of their first and final drafts of two writing tasks which contained teacher written feedback were distributed to them. This could help them have more resources to prepare for argumentative writing in the coming final examination and simultaneously helped avoid the intervention of teacher feedback during the review strategy practices. Without being cautious about distributing the participants' first and final drafts which contained the written teacher feedback after their post-test, the intervention of teacher feedback could have biased the findings of the current study.

- **Step 10: Student Interview**

In Week 14, twelve voluntary participants (i.e. two students in individual high, middle, and limited proficiency groups from two classes) were randomly chosen for a semi-structured interview for additional qualitative data (Appendix 11, p. 308).

The data for analysis, collected in accordance with these ten data collection procedures, are summarised in Figure 3.4.



Note. n = number of all participants who provided valid responses used in the data analysis of this study.

Figure 3.4. Collected research data for analysis.

After completing the data collection, the data were analysed and interpreted.

3.6.2 Observational stage: Data analysis

The current study was conducted using the mixed method design (Edmonds & Kennedy, 2013). Based on the research purposes, two groups of variables are independent and dependent variables. The first group of variables are comprised of an independent variable which is review strategies while the second group includes a dependent variable which is the participants' writing performance. In terms of the quantitative design, the data were assessed through the scores from the writing pre-test and the post-test, those from the writing tasks, and those from the close-ended and the rating-scale items of the questionnaire series. As for the qualitative design, content analyses were employed in the writing scripts, the responses from the participants' open-ended items of the questionnaire series, and the interview responses from the high-, middle- and limited-proficiency participants.

The research instruments were used to triangulate the quantitative and qualitative data which were then analysed to answer the following research questions.

Research Question 1:

What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?

This study was conducted using the quasi-experimental research with one-group pre-test/post-test design (Cohen et al., 2018) as shown in Figure 3.5. As mentioned in Step 2 Test of English Proficiency (p. 89), in the 2013 academic year when the current study was

conducted, I was assigned to teach three class sections (i.e. two sections of first-year students in the Foundation English II course and the other section of second-year students in the Business English Correspondence course). There are thus two classes of first-year students in the current study. Moreover, it was found that the students' English language proficiency prior to the implementation of review strategies fell into the same middle intermediate proficiency group (Table 3.7, pp. 90-91). Based on these teaching circumstances in the 2013 academic year, the one group design was then utilised over the normal experimental design (control versus experimental group).

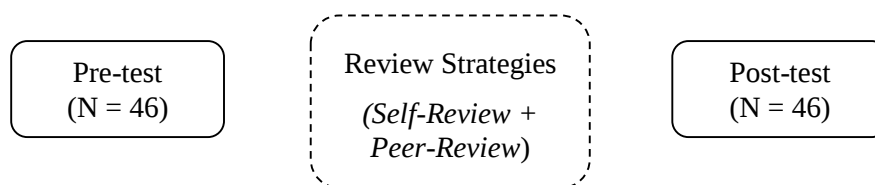


Figure 3.5. One-group pre-test/post-test research design.

To answer the first research question of the study, two main steps are needed. The two steps, occurring after the implementation of the review strategies, are as follows.

First, the analysis of data to answer research question was calculated using a dependent samples *t*-test or a paired-samples *t*-test. The participants' writing performance was measured by the participants' writing pre-test and post-test scores. To obtain the pre-test and post-test scores, the participants were asked to take the writing test twice: before the review treatment and after the treatment. If there was no significant difference between the

participants' pre-test and post-test scores, the effect size was not necessarily calculated. But if there was a significant difference between their pre-test and post-test scores, the second step then follows.

Second, to investigate to what extent review strategies (i.e. self-review and peer-review practices) influence English-language writing performance, a significant difference in the participants' pre- and post-test scores was examined using Cohen's effect-size measure. In other words, to examine what the overall size of the effect of review strategies on the participants' English language writing performance was, means and standard deviations of the pre-test and post-test scores of all the 46 participants were calculated using Cohen's effect-size (*d*) method.

To facilitate the analysis of data, the following levels of the effect size and their interpretation, adapted from Becker (2000, 2018) and Hopkins (2002), are presented in Table 3.8.

Table 3.8

Interpretation of Effect Size

Levels of the effect size	Interpretation
$0.9 < ES \leq 1.0$	Nearly perfect to perfect
$0.8 < ES \leq 0.9$	Very large
$0.5 < ES \leq 0.8$	Large
$0.2 < ES \leq 0.5$	Moderate
$ES \leq 0.2$	Small
$ES < 0.1$	Trivial

The interpretation of the effect size levels in Table 3.8, adapted from Becker (2000) and Hopkins (2002), refers to a measure of the levels of the effect of review strategies (i.e. self-review and peer-review strategies) on the participants' writing performance. Besides, the levels of effect size tell the strength or the relative magnitudes or sizes of the review treatment effect (Thalheimer & Cook, 2002; Mackey & Gass, 2005). In other words, the interpretation could tell how much the effect of review strategies (i.e. self-review and peer-review practices) is on the participants' writing performance, ranging from perfect to trivial.

Research Question 2:

Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?

This research question is aimed at examining the impact of review strategies (self-review and peer-review strategies) in relation to English-language proficiency levels (see the next Section 4.4, Chapter 4). In order to answer the second research question, the data from the first- and the final-draft scripts and scores of two argumentative essay-writing tasks of all 46 participants were quantitatively and qualitatively analysed and assessed at macro- and micro-levels.

At the macro-level, based on the task scripts, 184 writing pieces which were derived from 46 participants' first- and final-drafts of two writing tasks (i.e. 46 students x 2 essay tasks x 2 drafts per task) were quantitatively analysed through writing criteria (i.e. content, organisation and grammar) (Appendix 2, p. 289) and the writing score checklist (Appendix 7, p. 302). In order to compare how the varying-proficiency participants responded to review strategies, the results from the quantitative analysis were calculated using the proportion or percentage of the number of the students who made the final-drafted textual changes being compared with the marked feedback in their first drafts, in relation to the total number of the students in each proficiency group. The task scripts were also qualitatively assessed through content analysis using the taxonomy of revision changes of Faigley and Witte (1981) to classify revisions made by the participants.

Based upon the task scores for data analysis rated by three raters (i.e. two external raters and me, the researcher), 184 writing pieces from 46 participants' first- and final-drafts of two writing tasks were scored based on the writing rubric (i.e. content, organisation and grammar) (Appendix 2, p. 289). The results from quantitative data analysis were calculated from the scores from the participants' first and final written drafts of two argumentative writing tasks. The scores of writing task 1, entitled 'Censorship', were assessed from the participants' first drafts (i.e. before the participants' self-review practice) and final drafts (i.e. after the participants' self-review practice). Next, the scores of writing task 2, entitled 'Live Concerts', were assessed from the participants' first drafts (i.e. before the participants' peer-review) and final drafts (i.e. after the participants' peer-review).

In order to examine the impact of review strategies (i.e. the self-review strategy with writing task 1 and the peer-review strategy with writing task 2) on all participants' writing performance (see the next Section 4.4.1, Chapter 4), the differences in the mean scores of writing task 1 and writing task 2 were calculated using a dependent samples *t*-test. The differences in the writing task scores indicate that there were writing revision changes between the participants' first drafts and final drafts. If the result shows a statistically significant difference in the mean scores between writing task 1 and writing task 2, it could be said that the participants responded to the self-review strategy more effectively or better than they did to the peer-review strategy, or vice versa. This depends on which one produces the higher mean score. That is, if they have a higher mean score in writing task 1, it could mean that they respond better to the self-review practice. But if they obtain a higher mean score in writing task 2, they possibly respond to the peer-review practice better.

At the micro-level, the quantitative analysis was narrowed to investigate which review strategies the three proficiency groups responded to most effectively (see the next Section 4.4.2, Chapter 4). To do so, a dependent samples *t*-test was used to calculate whether there was any significant difference in the mean scores of writing development between writing task 1 and writing task 2 among three proficiency groups of participants (i.e. high, middle and limited) (see the next Tables 4.6 to 4.8, Chapter 4). Further multifaceted quantitative analyses of the effect of review strategies were conducted to examine how individual high, middle and limited proficiency groups performed in accordance with writing criteria in response to the self-review strategy and the peer-review strategy (see the next Section 4.4.2 (a), Figure 4.1 (p. 151) and Figure 4.2 (p. 153)). In addition, another analysis was done to

investigate whether there is any significant difference in the mean scores of writing development in the final writing tasks of the participants from Science and Education disciplines in each proficiency group following the self-review strategy and the peer-review strategy (see the next Section 4.4.2 (b), Table 4.9 (p.157) and Table 4.10 (p. 158)). The participants' differences in mean scores of writing task 1 and writing task 2 were tested to determine whether there was any significant difference among the three groups' responses and among Science and Education participants in particular to the self-review strategy and the peer-review strategy, using one-way Analysis of Variance (ANOVA).

In addition, the quantitative data from the differences in the writing scores between writing tasks 1 and 2 of the participants were used to examine the impact of review strategies on how the varying proficiency participants performed in relation to writing organisation, content and grammar. The results could, to some extent, provide some useful resources for EFL writing instruction (see the next Figure 4.1 (p. 151) and Figure 4.2 (p. 153)).

The quantitative data through task score development on the participants' revision changes were also used to support the qualitative results which were analysed and compared using Faigley & Witte's (1981) taxonomy of revision change. The qualitative framework of revision analysis of the current study employed the classification of revision changes as shown in Figure 3.6.

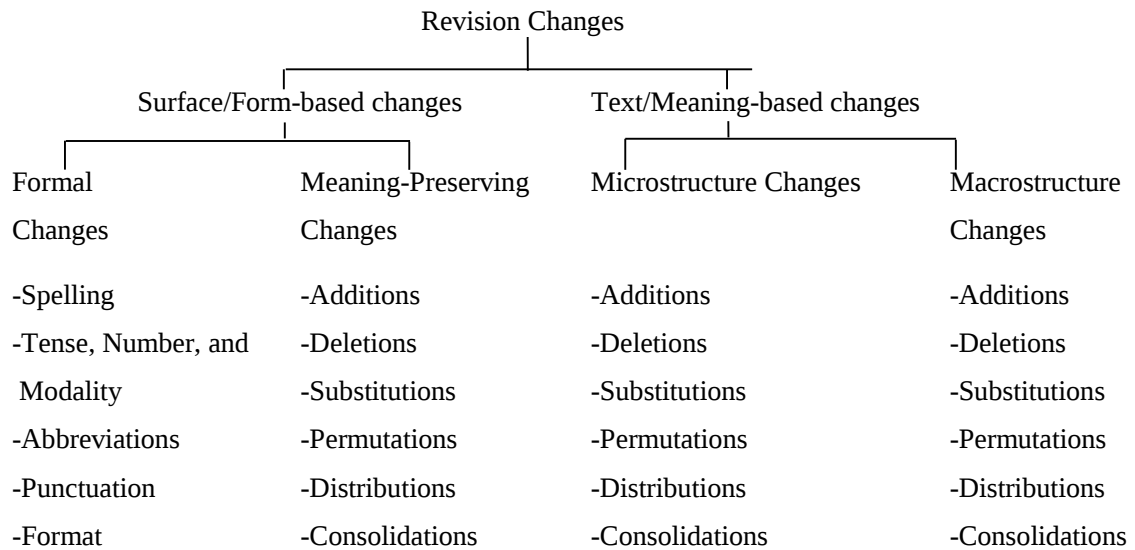


Figure 3.6. Taxonomy of revision changes (Faigley & Witte, 1981: 403).

The classification of revision changes in Figure 3.6 constituted helpful criteria for analysing changes between the participants' written first drafts and final drafts of two argumentative writing tasks. The draft scripts can qualitatively be detected and compared based on form changes (i.e. surface changes) and meaning changes (i.e. text-based changes). The surface or form-based changes were derived from a situation when the participants made local changes (e.g. revision of grammar and mechanics like spelling, punctuation, and capitalisation) in their revisions while the meaning-based changes were stemmed from a situation when the participants made global changes (e.g. revision of organisation and content) in their revisions.

Interestingly, at the micro-level, after having tried to track and analyse the revision changes of all 184 writing task scripts of the participants using Faigley and Witte's taxonomy, it was found that there was no marked tendency of revision changes at the sub-category level

(i.e. meaning-preserving changes, microstructure changes and macrostructure changes) consisting of the same six operations (i.e. additions, deletions, substitutions, permutations, distributions and consolidations) (Figure 3.6). In particular, the frequencies of the six-category revision changes were scattered and did not form a cluster of any specific changes to account for the participants' revision behaviours towards those semantic, lexical and syntactic criteria at the six-category and four sub-category levels. Additionally, it might be too complicated for students to learn how to make revisions at the micro level. For instance, they might not need to know that a meaning change in a text is by distribution or consolidations. However, it would be more practical for them to be able to identify whether a revision change affects the comprehension of meaning of the concepts in the text. Therefore, in the current study, the final decision about how a text is analysed followed a holistic approach by which a revision change is analysed in terms of form- and meaning-based changes (see Table 5.4, p. 186).

Research Question 3:

What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?

To answer the third research question, data involving the opinions towards self-review and peer-review strategies in relation to writing development were analysed from the responses to the returned questionnaire of 46 participants and the semi-structured interview of 12 participants.

There were three questionnaires, pre-task, in-process, and post-task questionnaires, used to collect data in three phases: before, during, and after the implementation of review strategies (Appendix 3 (p. 291), Appendix 9 (p. 306) and Appendix 10 (p. 308)). The quantitative data collected in the 20-item pre-task questionnaire consisting of nine-item Part 1 (i.e. three-item demographic data, four-item English language learning background, and two-item perception of English language skills) and 11-item Part 2 (i.e. 10 five-point Likert Scale items and one open-ended item) were analysed through the SPSS programme (e.g. percentages, frequency distributions, and arithmetic means). The quantitative data collected in the in-process and post-task questionnaires were likewise analysed using the SPSS programme.

In item number 8 of Part 1 of the pre-task questionnaire, the students were asked to self-rate their current levels of English language skills based on the five-point Likert scale from 5 “Strongly agree” to 1 “Strongly disagree”. Additionally, in Part 2 of the pre-task questionnaire, they were also asked to self-rate ten statements based on the same five-point rating scale related to perceptions of self-review and peer-review strategies. In order to verify the reliability of the participant’s responses, both pre-task questionnaire (Part 2) and post-task questionnaire were designed to contain ten items covering five main issues (i.e. review strategies in relation to writing skills, writing content, organisation, grammar, and usefulness). The specification of the ten items of the second part of the pre-task questionnaire and of the post-task questionnaire is demonstrated below.

	Pre-task questionnaire Item number	Post-task questionnaire Item number
- Self-review strategy helps develop writing skills.	10	2
- Peer-review strategy helps develop writing skills.	11	3
- Self-review strategy helps develop writing content.	12	4
- Peer-review strategy helps develop writing content.	13	5
- Peer-review strategy helps develop grammar accuracy.	17	9
- Self-review strategy helps develop writing organisation.	14	6
- Peer-review strategy helps develop writing organisation.	15	7
- Self-review strategy helps develop grammar accuracy.	16	8
- Self-review strategy is useful.	18	10
- Peer-review strategy is useful.	19	11

It is noted that reverse scoring was carried out before reliability analysis of the eight-item questionnaire responses. Furthermore, it is notable that item 8 and items 10 to 20 in the pre-task questionnaire (Appendix 3, p. 291) shared the same content as items 1 to 12 in the post-task questionnaire (Appendix 10, p. 308).

The means of the responses to all the five-point Likert-scale questionnaire items in the pre-task questionnaire and the post-task questionnaire were analysed based on the levels of the average rating scores obtained from the SPSS programme. The criteria for the rating scale interpretation of the mean scores are presented in Table 3.9.

Table 3.9

Average rating scores and interpretation

Levels of the average rating scores	Interpretation
4.51-5.00	Very good / Strongly agree
3.51-4.50	Good / Agree
2.51-3.50	Average / Neutral
1.51-2.50	Weak / Disagree
1.00-1.50	Very weak / Strongly disagree

The interpretation of the average rating scores in Table 3.9 refers to a measure of the participants' opinions ranging from very positive to very negative. The pre-task and post-task Likert-scale questionnaires were designed to allow the participants to indicate how good their English language knowledge is in terms of vocabulary, grammar, reading, and writing. The Likert-scale questionnaires were also constructed to show how strongly the participants agreed or disagreed with the statements relating to writing and review activities to develop writing skills.

Apart from the individual results of the participants' perceptions of the pre-use and the post-use of self-review and peer-review strategies, their perceptions of both pre-use and post-use of the review strategies were analysed and compared to see whether and, if so, how their perceptions of the review strategies changed, using an independent-samples *t*-test. The results of the analysis indicate what their perceptions were on the use of self-review and peer-review strategies in relation to their writing skills, writing content, organization, grammar, and the usefulness of the strategies.

In addition to the quantitative analyses on the participants' responses to their perceptions of self-review and peer-review strategies in relation to writing development in the close-ended and rating scale questionnaire items, the qualitative analyses of the content of the participants' responses to the open-ended items of the pre-task, in-process, and post-task questionnaires (Appendices 3, 9 and 10) and the semi-structured interview (Appendix 11, p. 308) were also utilised to support the quantitative results of the study.

Next, the summary of the research methodology and the collected data for analysis are provided.

3.7 Chapter summary

Table 3.10 provides a summary of the research methodology presented in this chapter.

Table 3.10

Research methodology matrix

Research question	Research objective	Research instrument	Data collection	Data analysis
1. What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?	1.1 To investigate whether review strategies (i.e. self-review and peer-review) influence the writing performance of first-year Thai undergraduate students	Pre-test and post-test	Scores of writing pre-test and post-test (n = 46)	<i>Quantitative analysis</i> - Descriptive statistics (e.g. frequency, percentage, arithmetic means, standard deviations, and etc.) - A paired-samples <i>t</i> -test or a dependent samples <i>t</i> -test - The effect-size method
	1.2 To investigate to what extent review strategies (i.e. self-review and peer-review) influence the writing performance of first-year Thai undergraduate students			

Table 3.10

Research methodology matrix (continued)

Research question	Research objective	Research instrument	Data collection	Data analysis
2. Does English language proficiency influence the writing performance of students when they use either self or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?	2. To examine the influence of self-review and peer-review strategies based on the English-language proficiency of:	- CU-TEP scores - Students' written tasks	- Score data in relation to self-review and peer-review strategies	<i>Quantitative analysis</i> - Descriptive statistics (e.g. frequency, percentage, arithmetic means, standard deviations, and etc.) - A dependent samples <i>t</i> -test
	2.1 All students		184 writing task scripts (i.e. 46 students x 2 essay tasks x 2 drafts per task) n = 46	<i>Qualitative analysis</i> - Content analysis through Faigley and Witte's (1981) framework
	2.2 Proficiency groups in relation to their performance in the categories of the university's:		- Developmental scores of writing task (n = 46)	- Descriptive statistics (i.e. arithmetic means)
	(a) Writing criteria		nH = 14, nM = 17, nL = 15	- A dependent samples <i>t</i> -test - Writing score criteria: content, organisation and grammar
	(b) Academic disciplines		nH = 14 (nSc = 3, nEd = 11), nM = 17 (nSc = 8, nEd = 9), nL = 15 (nSc = 9, nEd = 6)	- One-way ANOVA

Table 3.10

Research methodology matrix (continued)

Research question	Research objective	Research Instruments	Data Collection	Data Analyses
3. What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?	3.1 To explore the students' opinions of the use of overall review strategies in relation to writing development.	3.1 Pre-task questionnaire	- Responses to close-ended and the rating scale items	<i>Quantitative analysis</i> - Descriptive statistics (e.g. frequency, percentage, arithmetic means, standard deviations, and etc.)
			- Responses to open-ended items	<i>Qualitative analysis</i> - Content analysis
	3.2 To explore the students' opinions of self-review and peer-review strategies in relation to writing development.	3.2 In-process questionnaire	- Responses to close-ended items	<i>Quantitative analysis</i> - Descriptive statistics (e.g. frequency and percentage)
			- Responses to open-ended items	<i>Qualitative analysis</i> - Content analysis
		3.3 Post-task questionnaire	- Responses to the rating scale items	<i>Quantitative analysis</i> - Descriptive statistics (e.g. frequency, percentage, arithmetic means, standard deviations, and etc.)
			- Responses to open-ended items	<i>Qualitative analysis</i> - Content analysis
			- Comparison between the pre-task and post-task questionnaire responses to the rating scale items	<i>Quantitative analysis</i> - An independent-samples <i>t</i> -test
		3.4 A semi-structured interview	Students' perceptions of review strategies in relation to writing development (n = 12: nH = 4, nM = 4, nL = 4)	<i>Qualitative analysis</i> - Content analysis

Based on the research questions, the quantitative and qualitative findings of the study are reported and discussed in the subsequent chapters. That is, the findings of research question 1 and research question 2 are presented in Chapter 4 and those of the research question 3 are presented in Chapter 5.

CHAPTER 4

ANALYSIS OF INFLUENCE OF REVIEW STRATEGIES ON WRITING PERFORMANCE

4.1 Introduction

In this chapter, I will analyse and discuss the data to address the first and the second research questions of the study. The chapter is organised into three sections.

Starting with the first research question (*“What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?”*), I will analyse the students’ scores from the writing tests to investigate if the review strategies influence the students’ writing performance (Section 4.2) and the extent of this impact (Section 4.3). Next, with regard to the second research question (*“Does English language proficiency influence the writing performance of students when they use either self or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?”*), I will examine, in Section 4.4, the impact of self-review and peer-review approaches on the writing development of all students. In order to understand the influence of the review strategies, I will analyse and compare how they respond to individual self- and peer-review strategies through their writing score differences between the first and the final drafts of writing task 1 and through those of writing task 2. In this section of the chapter, I will further analyse how students in different proficiency groups respond to self-review and peer-review strategies in relation to two

aspects: the writing assessment criteria (i.e. organisation, content and grammar) and students' disciplines (i.e. Science and Education) as previously discussed in Chapter 3.

4.2 Influence of review strategies on students' English-language writing performance

Forty-six student participants from two classes (i.e. 20 Science students in class 1 and 26 Education students in class 2) received the same writing training workshop at their 1.5 hour-weekly classes for eight weeks. In order to determine if the writing training workshop and the opportunities to use review strategies for their writing tasks benefitted the participants, a pre-test/post-test evaluation (i.e. a paired-samples *t*-test) was used (Appendix 8, p. 304). A comparison of their writing scores in a pre-test and post-test situation would reveal if the participants benefitted from being taught how to use review strategies in their writing. In the current study, the data on the participants' scores of the writing tests and the effects of the review strategies on their writing performance are analysed and summarised in Table 4.1.

Table 4.1

Participants' writing performance after implementation of review strategies

Participants	Writing Score (Full Score = 20)		<i>t</i>
	Mean	SD	
Pretest (N = 46)	6.5978	3.25853	-17.06*
Posttest (N = 46)	14.9783	2.76879	

* Significant at .05 level

As Table 4.1 shows, out of the total writing score of 20, the average of all participants' writing scores in the pre-test was approximately 6.60 ($SD \approx 3.26$) and in the post-test was approximately 14.98 ($SD \approx 2.77$). A paired-samples *t*-test was conducted to compare the participants' writing performance in the pre-test and the post-test as shown in the following three paired-samples *t*-test tables.

Table 4.1

Participants' writing performance after implementation of review strategies

(continued)

		Paired Samples Statistics			
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	VAR00001	6.5978	46	3.25853	.48044
	VAR00002	14.9783	46	2.76879	.40824

Table 4.1

Participants' writing performance after implementation of review strategies (continued)

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	VAR00001 & VAR00002	46	.398	.006

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
		Pair 1	VAR00001 - VAR00002	-8.38043	3.33197	.49127			

From the tables of the pair samples *t*-test, it was found that after the implementation of review strategies, there was a significant difference in their pre-test ($M \approx 6.60$, $SD \approx 3.26$) and post-test scores ($M \approx 14.98$, $SD \approx 2.77$). That is, after the participants had practised employing review strategies in their writing processes, they appear to have performed better in their writing post-test as demonstrated by the statistically significant effect of the review strategies on the participants' writing performance; $t(45) = 17.06$; $p = .000$ at the .05 level (Table 4.1, p. 121). These results seem to indicate that teaching the students about review strategies may have an impact on their writing performance.

Since there was a statistical significance in the influence of review strategies on the students' writing performance, a further investigation into the magnitude of the significance of the review strategies followed so as to measure the extent of the impact of the intervention of the review strategies as shown in Section 4.3.

4.3 Extent of the influence of review strategies on writing performance

An investigation into the magnitude of the significant impact of the review strategies on the participants' English language writing performance was conducted using Cohen's effect-size (*d*) measure. In general, the larger the value of *d* is, the stronger the effect will be (Thalheimer & Cook, 2002; Mackey & Gass, 2005). The result of the effect size of the review strategies on the participants' writing performance is shown in Table 4.2.

Table 4.2

Effect size of review strategies on participants' writing performance

	Pre-test (n = 46)	Post-test (n = 46)
Mean	6.5978	14.9783
SD	3.25853	2.76879
Cohen's <i>d</i>	-2.772	
Effect-size <i>r</i>	-.81*	

* Significant at .05 level

The value of the effect size from Table 4.2 explains the magnitude of the impact significance of review strategies on the writing performance of the participants at the alpha level of .05. It was found that there was a very large extent of the significant effect of review strategies since the level of the Cohen's effect size was .81 which fell into the range of over 0.8-0.9 (see Table 3.8, p. 104). That is, after the participants used the review strategies in their writing process, their average score was significantly higher than that of the pre-test. In other words, the students who participated in the writing process and used review strategies improved their overall writing performance.

To sum up, the findings of the first research question, from both Table 4.1 and Table 4.2, demonstrate that there was a statistically significant difference in the participants' writing performance after the implementation of review strategies. In addition, there was a statistically significant impact of review strategies on the participants' English-language writing performance ($t \approx 17.06$, $p < .05$). These results suggest that the provision of

review strategies appears to positively impact the students' abilities in English language writing. Likely reasons for this will be discussed next.

One reason why there appears to be a positive impact on teaching review strategies on the students' writing performance (Sections 4.2 and 4.3) could be derived from the cyclical steps of process-based writing. All 46 students from two classes in the Foundation English I course were required to complete two essay tasks¹, each taking three consecutive weeks to carry out the process-writing stages. In process-based writing, the cyclical writing steps (i.e. prewriting, drafting, writing and polishing) help students learn how to write systematically and effectively (Ferris & Hedgcock, 2014; Oshima & Hogue, 2007; Pritchard & Honeycutt, 2007; Puengpipattrakul, 2013; Sokolik, 2003). In other words, engaging with process-oriented writing helped to provide opportunities for the students to firstly produce writing ideas in the prewriting step, then organise the ideas and the writing outline in the drafting step, and evaluate their written texts in the polishing step (see Table 2.1, p. 29 and Figure 2.1, p. 44). Moreover, during the writing process, the students were able to add, delete and/or alter their written texts so as to improve their writing performance.

¹ Starting with the three-week essay task 1 ('Censorship'), the students were required to write their first drafts at week 4 of writing session 1, provide self-feedback their own first drafts at week 7, and then revise and re-write their self-feedback tasks as their final drafts at the same week 7. After the one-week midterm break, the students were required to write essay task 2 ('Live Concerts') as their first drafts at week 9 of writing session 2, have their classmates provide written feedback in the drafts at week 10, and revise their peer-feedback tasks as their final drafts at week 11.

In addition to process-based writing as discussed earlier, the student participants had also been trained to engage in the review-strategy practices, thereby enhancing their performance on the writing test. The review-strategy practices covered both feedback mechanism and revision practice, which were applied and implemented in the reviewing stage at the final or polishing step in the sequences of process-based writing (see Table 2.1, p. 29 and Figure 2.1, p. 44). In both self-review and peer-review strategies in the reviewing stage, the students were required to self-assess their own first drafts in the self-review practice and provide feedback for their paired classmates' first drafts in the peer-review practice and subsequently revised their own final drafts (see the training sessions in Steps 5 and 6 in Section 3.6.1 Data Collection, pp. 93-99). For all eight weeks in the training sessions, every participant utilised the review strategies through the production of six written pieces from the first and the final drafts of the writing sample ('File Sharing') and two writing tasks ('Censorship' in Appendix 5 (p. 298) and 'Live Concerts' in Appendix 6 (p. 300)). As Polio and Williams (2011) rationalise, reviewing or reflecting on writing can be seen as problem-solving in the writing process. During the review strategy practice in the current study, the participants had to make decisions on which writing aspects they were going to revise to improve their final drafts after receiving written feedback in their first drafts. Silva (1993) also points out that writing revision in the writing process is essential and helpful to improve language learners' writing performance. The improvement of the writing scores which included writing organisation, content and grammar leads to a significantly higher writing score in the post-test (i.e. from the pre-test mean score of approximately 6.60 to the post-test mean

score of approximately 14.98), thus reflecting the statistically significant impact of review strategies on boosting the students' writing performance.

Consistent with the principal results of research question 1 from Table 4.1, the study by Garrison and Ehringhaus (2013) demonstrated that self-assessment and peer assessment helped to increase students' metacognitive thinking and thus their learning achievement since they were engaged in writing criteria, self-evaluation and peer-evaluation. Moreover, the study by Iraj, Enayat, and Momeni (2016) examined the effects of self- and peer assessment on the argumentative writing performance of 36 Iranian EFL students from an institute at the higher education level whose age range was 18 to 25. In their study, although there seem to be inadequate details regarding how the self- and peer-assessment were carried out, the study indicated the significant effects of self- and peer-assessment on the students' writing performance. Their study suggested that self-assessment and peer assessment helped boost the students' intrinsic motivation, self-confidence and thus writing performance. With the aforementioned causes leading to the students' improved writing performance of the previous studies and the current study, further investigations into how the participants responded to and perceived the review strategies employed in their writing practice are next conducted.

Next, to elaborate on the statistical significant impact of review strategies on the participants' writing performance and emphasise how the participants used the self-review and peer-review strategies in relation to their writing development, a detailed account of the review strategies will be presented. The participants' first drafts of essay

task 1 were revised by themselves, and those of essay task 2 by their paired classmates, respectively. Later, they had to revise their edited first drafts and rewrite their final drafts. In the workshop, their first and final drafts of essay tasks 1 and 2 were assessed and scored by the participants themselves and their paired classmates, respectively. For data analysis of the next section in the study, their first and final drafts were assessed and scored by their instructor. The following Section 4.4 aims to answer research question 2.

4.4 Influence of the review strategies on students' writing development

Section 4.4 examines which review strategy—self-review or peer-review—was more effective for their writing development. This is evaluated through their writing development scores for each piece of work reviewed by themselves or reviewed by a peer. A comparison between the scores would reveal which strategy was more effective. The writing development scores resulted from the score differences between the students' first-drafts and their final drafts of a writing task after using a review strategy. The impact of self-review and peer-review strategies can be evaluated on the writing performance of all student participants in sub-section 4.4.1 and of the varied performance groups in sub-section 4.4.2.

4.4.1 At the macro-level: Comparison of review strategies undertaken by all participants

All 46 student participants engaged in essay writing in the writing process with the implementation of review strategies from their first drafts to the final drafts of argumentative writing tasks 1 and 2. The participants employed the self-review strategy

in writing task 1 and the peer-review strategy in writing task 2. Based on the participants' writing-task score record (see Appendix 8, p. 304) in the study, they produced 184 written essay pieces (i.e. 46 students x 2 essay tasks x 2 drafts per task) in total. Their writing performance was assessed through the scores of the writing tasks.

Differences in their writing task scores between the first draft and the final draft reveal how effective they responded to review strategies. The participants' scores of writing development between the first draft and the final drafts of self-review task 1 and those of peer-review task 2 are shown in Appendix 8 (p. 304). Two case samples of the high proficiency Science participant HSc1's developmental scores from the first to the final drafts between writing task 1, entitled 'Censorship' and writing task 2, entitled 'Live Concerts' is shown in Table 4.3 and Table 4.4, respectively.

Table 4.3

Participants HSc1's revisions of writing task 1

Self-review strategy: Writing task 1 'Censorship' (Total score: 20)	
HSc1's first draft (Obtained score: 12.50)	HSc1's final draft (Obtained score: 14.88)
I'd like to reply to Debbie's posted that censorship is absolute nonsense. Because even your 5-year-old nephew knows fully well what is happening when something is being censored. I strongly disagree to that idea. Many people my hold this idea but I'd like to present another true story. The first problem with censorship is that I in a recent news report, I saw a teenage boy who was killed and two others who were seriously injured because they were intentionally lying on the highway. Their parents said that they might have tried to copy the leading actor on a popular TV series called "Dare to Die". Another problem with censorship is that children watch TV program without their parents's suggestion may cause more violence in our society. Don't forget that TV program is a way to foster the wrong believe in children. To sum up, I believe that censorship is a way to decrease the violence in children, and it may work!	I'd like to reply to Debbie's comment that censorship is absolute nonsense. Because even you 5-year-old nephew knows fully well what is happening when something is being censored. I strongly disagree to that idea. Many people may hold this idea, but I'd like to present another true story. The first problem with censorship is that children may copy an action from what they have seen. In a recent news report, a teenage boy who was killed and two others who were seriously injured because they were intentionally lying on the highway. Their parents said that they might have tried to copy the leading actor on a popular TV series called "Dare to Die". Another problem with censorship is that children watch TV program without suggestions from their parents may cause more violence in our community. Children is recieving some bad behavior from TV program directly. Don't forget that TV program is a way to foster the wrong belief in children. To sum up, I believe that censorship could decrease the violence in children and society.
161 Words	175 Words

Note. = revision change.

Table 4.3 shows that the participant HSc1's score was increased by 2.38 from the first draft (12.50) to the final draft (14.88) of writing task 1 after undertaking the self-review strategy in writing. Out of 20 points, her increasing final-draft score after self-review was derived from increases in the scores of writing organization, content and grammar

(Appendix 2, p. 289). To elaborate on the increasing scores, each writing criterion is discussed as follows.

(a) Organisation

Based on the writing organization criterion (Appendix 2), out of 4 points, three components contain 1.5 points (i.e. 0.5 points for stating student's intention in responding to the original post, 0.5 points for the post's point of view, and 0.5 points for showing student's disagreement with the original post writer) of the first paragraph, 0.5 points of the conclusion, and 2 points of paragraph coherence. The participant obtained the average scores for organisation of 2.5 for the first draft and 3 for the final draft. Based on Faigley & Witte's (1981) taxonomy of revision change (Figure 3.6, p. 109), the increasing 0.5 points for organisation in the final draft was derived from the revision change in meaning through addition of a topic reason 1 (i.e. "*The first problem with censorship is that children may copy an action from what they have seen. In a recent news report, ...*"). The addition of the topic sentence helped link the supporting ideas (i.e. "*In a recent news report, ...*") more smoothly.

(b) Content

Based on the writing content criterion, two components contain 2 points (out of 6 points) for two topic reasons and 4 points for the supporting ideas of each reason (i.e. 2 points for a logical, relevant, and complete reason x 2 topic reasons). The participant gained the average scores for content of 3.75 for the first draft and 5 for the final draft. The first-draft average score for content of 3.75 was derived from 2 points for topic reason 1 (i.e.

zero point for no topic reason 1 and two points for supporting ideas of reason 1) and 1.75 points of reason 2 (i.e. 0.75 points for incomplete topic reason 2 and one point for illogical supporting ideas of reason 2). The 1.25 increasing average points of content in the final draft was due to a one-point increase in adding the topic reason 1 (i.e. “... *that children may copy an action from what they have seen.*”) and a 0.25-point increase in adding more relevant details of the supporting ideas of the topic reason 2 (i.e. “*Children is recieving some bad behavior from TV program directly.*”). That is, according to Faigley & Witte (1981), an increasing score of writing content in the final draft after self-review was from meaning-based changes through addition of a topic reason 1 (“...*children may copy an action from what they have seen*”) and deletion of a clause (“...~~I saw~~ *a teenage boy who was killed...*”) in the second paragraph. Additionally, in the third paragraph, the meaning change was also made in writing content change through addition of a sentence (i.e. “*Children is recieving some bad behavior from TV program directly.*”) although there were two grammatical points (i.e. subject-verb agreement of “*Children is ...*” and spelling of ‘*receiving*’) to be further revised in a future draft.

(c) Grammar

Based on the writing grammar criterion, out of 10 points, HSc1 had the average scores of grammar of 6.25 for the first draft and 6.88 for the final draft. The first-draft average score of 6.25 fell between the score ranges 5-6 and 7-8 in the writing criteria (Appendix 2). This signified that there was an improvement in grammar in the final draft after self-review. Based on Faigley & Witte (1981), in the first paragraph of the final draft, the participant’s revision led to form-based changes in spelling (i.e. from ‘*your*’ for ‘*you*’

and from ‘*may*’ to ‘*my*’) and in lexical choices (i.e. from ‘*comment*’ for ‘*posted*’) and parts of speech (i.e. from ‘*the wrong believe*’ to ‘*the wrong belief*’). Next, in the third paragraph of the draft, there was also format changes through deletion of -’s (i.e. “*their parents’s suggestion*”), addition of a preposition (i.e. “*suggestions from their parents*”), and substitution of ‘*community*’ for ‘*society*’. Moreover, in the same third paragraph, the grammatical revision also included use of noun and preposition collocations (i.e. “... *without their parents’s suggestion ...*” → “... *without suggestions from their parents ...*”) and verb collocations (i.e. ‘*belief in*’).

The developmental score of the participant was also analysed and compared between the first and the final drafts of the next writing task 2 as shown in the following section of Table 4.4.

Table 4.4

Participants HSc1's revisions of writing task 2

Peer-review strategy: Writing task 2 'Live Concerts' (Total score: 20)	
HSc1's first draft (Obtained score: 13.63)	HSc1's final draft (Obtained score: 13.88)
I'd like to present my argument against SeoulMan's comment that Live concerts are awful, and It's better to buy music product in the studio. I strongly disagree with that idea. Many people may hold this view, but I'd like to present the other side about live concerts. First, live concert would have more fun than listening music at home. We can enjoy the interaction with friends, and the rest of the audience as well as my favorite musicians. We sing, dance, and shout and have a really great time together. Moreover, if that live concert is your favorite musicians, it'd be better to see them directly. Greater than seeing through the monitor. You may have a chance to catch their hands. To sum up, I believe that live concert is showing how you can feel the real moment while performance go on.	I'd like to present my argument against SeoulMan's comment that live concerts are awful, and it's better to buy music products in the studio. I strongly disagree with idea. Many people may hold this view, but I'd like to present the other side of live concerts. First, live concerts would have more funny than listening music at home. We can enjoy the interaction with friends, and the rest of the audience as well as my favorite musicians. We sing, dance, and shout and have a really great time together. Moreover, if that live concerts is belong to your favorite musicians, it'd be better to see them really. Greater than seeing through a monitor. Don't forget that you may have a chance to catch musicians hands! To sum up, I believe that live concerts are showing how performance go on, and how you can feel in the real moment.
142 Words	148 Words

Note. = revision change.

As shown in Table 4.4, the participant gained an increasing total score of writing task 2 from 13.63 in the first draft to 13.88 (out of 20 points) in the final draft. Her increasing final-draft score after peer-review was derived from an increase in the score of writing grammar. Based on Faigley & Witte's model, in terms of form-based changes, there were changes in number (i.e. 'product' → 'products' in the first paragraph and 'concert' → 'concerts') and format (i.e. 'Live' → 'live' and 'It's' → 'it's') in the second paragraph,

as well as in subject-verb agreement in the present simple (i.e. “...concert is...” → “...concerts are...”) in the third paragraph. It was also found that changes were made in lexical choices (i.e. ‘their’ → ‘musicians’ and ‘directly’ → ‘really’) in the third paragraph. In terms of meaning-based changes, there was a change in a lexical choice found affecting the meaning of a sentence (i.e. ‘fun’ → ‘funny’) in the second paragraph. Despite the revision changes, there was no change in overall scores of organisation and content after undertaking peer-review. In contrast to the study by Berg (1999), students in the training for peer feedback group made more meaning-based changes in revision. Diab (2010) also found that her first-year university EFL students made less grammatical errors in their argumentative essays after their peer-editing training sessions. This would be because students tend to be able to spot their classmates’ errors rather than do their own (Tsui & Ng, 2000). In particular, lower English-language proficiency students tend to trust and possibly need their higher English proficiency classmates to provide feedback on writing (Fati, 2013). With these reasons, students can learn and be aware of grammatical accuracy.

From Table 4.4, the participant HSc1’s score was increased by 0.25 in the final draft of writing task 2 following the peer-review strategy in writing. This could explain why the high proficiency Science participant HSc1 effectively responded to writing task 1 through the self-review strategy (Table 4.3) better than she did to writing task 2 through the peer-review strategy (Table 4.4): the developmental score of 2.38 in the final draft of task 1 was higher than that of 0.25 in the writing task 2. This is an illustration demonstrating a comparison of which review strategies—self-review or peer-review—

the high proficiency Science participant HSc1 responded to more effectively. The high proficiency participant case in the current study is consistent with the result of Setoodeh (2015) in which the advanced Iranian EFL university students had an opportunity to make more revisions than lower proficiency groups.

Referring to Table 4.3 and Table 4.4, the high proficiency Science participant HSc1 predominantly made form-based changes in grammar through both self- and peer-review in the final drafts. Similarly, Paulus (1999) found eleven international students from a pre-freshmen composition class at a university made more form-based than meaning-based changes in revision. Sotoudehnama & Pilehvari (2016) also stated that feedback receivers tended to modify the writing content by adding some examples, paraphrasing many sentences, and making form-based changes in their revision. The participants' final drafts in the current study could, to some extent, confirm that text meanings are associated with linguistic features. That is, the participants' linguistic features (e.g. word spelling, lexical choices, collocations, and patterning and grammatical items) affected the text meaning. As shown in Table 4.3 and Table 4.4, misspelling of words (e.g. from 'may' to 'my'), poor lexical choices (e.g. from 'fun' to 'funny') or collocation (e.g. from 'the wrong believe in' to 'the wrong belief in') could affect communication between the participant writer and reader while they performed self- and peer-review.

A similar comparison of the impact of review strategies was conducted on all participants' average scores of writing development of their final-drafted writing tasks 1

and 2. The results of analysis of the participants' writing-score development are shown in Table 4.5.

Table 4.5

Comparison of the influence of self-review and peer-review strategies on participants' writing task score development

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	VAR00001 (Self-Review Dev Score)	.8341	46	.85097	.12547
	VAR00002 (Peer-Review Dev Score)	.3665	46	.49214	.07256

The participants' average score of writing development calculated in Table 4.5 was derived from the mean of the total score difference between the first drafts to the final drafts of each writing task. From the Table, all of their average writing score development in writing task 1 was approximately 0.83 ($SD \approx 0.85$) and in writing task 2 was approximately 0.37 ($SD \approx 0.49$). Next, the comparative analysis of review strategies undertaken by all participants was further conducted, using a paired-samples *t*-test.

Table 4.5

Comparison of the influence of self-review and peer-review strategies on participants' writing task score development (continued)

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	VAR00001 & VAR00002	46	-.113	.454

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	VAR00001 - VAR00002	.4676	1.03011	.15188	.1617	.7735	3.079	45	.004

Based on the analysis through paired-samples *t*-test, it was found that there was a statistically significant difference between self-review ($M \approx 0.83$, $SD \approx 0.85$) and peer-review ($M \approx 0.37$, $SD \approx 0.49$) in terms of writing score development. This means, after the implementation of the review strategies, the participants responded to the self-review strategy more effectively than they did to the peer-review strategy; $t(45) = 3.08$; $p = .004$ at the .05 level. On the whole, the results would suggest that when they used the self-review strategy, their writing performance as demonstrated by their writing scores improved more than when using the peer-review strategy.

The comparison of how all participants responded to the review strategies as previously discussed can be considered as a part of background and justification for addressing the second part of research question 2 of the study (i.e. *Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?*). This is because in authentic writing instruction, a successful and practical means of writing strategies should be helpful, to some extent, not only to language learners as a whole but also their varying proficiency levels. Thus, further investigations into how individuals with different proficiency levels responded to the review strategies follows in the next section, sub-section 4.4.2.

4.4.2 At the micro-level: Comparison of review strategies undertaken by groups of varying English-language proficiency participants

In this section, I will compare the impact of self- and peer-review strategies based upon the participants' varying English-language proficiency. In the review strategy practices, both a feedback mechanism and a revision practice were introduced together with the 'writing criteria' (i.e. organisation, content and grammar) (Appendix 10, p. 308). Since the current study focuses on their responses to the self-review strategy and the peer-review strategy in the final drafts, all errors in writing organisation, content and grammar appearing in their final draft scripts after revision were accordingly left intact. All of their revision was analysed using 184 draft scripts (i.e. 46 students x 2 essay tasks x 2 drafts per task). Owing to the large amount of data, some participants' drafts were selected as representative illustrations of observed revision cases for the purpose of discussion in this section.

Further quantitative analysis for the findings from Table 4.5 is narrowed to investigate how all three proficiency groups² responded to review strategies. The findings of the high-, middle-, and limited-proficiency groups' responses to the review strategies (Table

² Three proficiency groups consist of 14 high proficiency students whose CU-TEP scores were equal to or greater than 57 or 477 (TOEFL Equated), 17 middle proficiency students whose CU-TEP scores were 45-56 or 437-473 (TOEFL Equated) and 15 limited proficiency students whose CU-TEP scores were equal to or less than 44 or 433 (TOEFL Equated).

3.4 (p. 67) and Appendix 8, p. 304), using a paired-samples *t*-test, are shown in Tables 4.6, 4.7 and 4.8, respectively.

Table 4.6

Comparison of the influence of self-review and peer-review strategies on high proficiency group's writing task score development

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	VAR00001 (Self-Review Dev Score)	.9914	14	1.02685	.27444
	VAR00002 (Peer-Review Dev Score)	.2500	14	.32919	.08798

Fourteen high proficiency participants' average score of writing development calculated in Table 4.6 was derived from the difference between the writing scores of the first drafts and those of the final drafts in each writing task. All of their average writing score development in writing task 1 was approximately 0.99 ($SD \approx 1.03$) and in writing task 2 was approximately 0.25 ($SD \approx 0.33$). Next, the comparative analysis of data from the high proficiency group's writing score development was conducted, using a paired-samples *t*-test, as shown in the following two paired samples tables.

Table 4.6

Comparison of the influence of self-review and peer-review strategies on high proficiency group's writing task score development (continued)

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	VAR00001 & VAR00002	14	-.184	.528

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	VAR00001 - VAR00002	.74143	1.13464	.30324	.08631	1.39655	2.445	13	.029

Based on the analysis through paired-samples *t*-test, it was found that there was a statistically significant difference between the self-review strategy ($M \approx 0.99$, $SD \approx 1.03$) and the peer-review strategy ($M \approx 0.25$, $SD \approx 0.33$) in terms of writing score development. This means, after the implementation of the review strategies, the high proficiency participants effectively responded to the self-review strategy better than they did to the peer-review strategy; $t(13) = 2.45$; $p = .029$ at the .05 level.

Next, the quantitative results of 17 middle-proficiency participants' writing performance were shown in Table 4.7.

Table 4.7

Comparison of the influence of self-review and peer-review strategies on middle-proficiency group's writing task score development

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
1	VAR00001 (Self-Review Dev Score)	.9182	17	.80189	.19449
	VAR00002 (Peer-Review Dev Score)	.4559	17	.66677	.16172

From Table 4.7, 17 middle-proficiency participants' average score of writing development was from the score difference between the first drafts to the final drafts of each writing task. The average writing score development in writing task 1 was approximately 0.92 ($SD \approx 0.80$) and in writing task 2 was approximately 0.46 ($SD \approx 0.67$). Next, the comparative analysis of data from the middle proficiency group's writing score development was conducted, using a paired-samples *t*-test, as shown in the following two paired samples tables.

Table 4.7

Comparison of the influence of self-review and peer-review strategies on middle-proficiency group's writing task score development (continued)

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	VAR00001 & VAR00002	17	-.248	.337

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	VAR00001 - VAR00002	.46235	1.16313	.28210	-.13567	1.06038	1.639	16	.121

As can be seen from Table 4.7, there was no statistically significant difference between the self-review strategy and the peer-review strategy in terms of writing score development of the group of 17 middle proficiency participants. However, despite no significant difference in the mean scores between writing tasks 1 and 2, in the table, the middle proficiency participants had a higher mean score in writing task 1 than in writing task 2. This means, they responded better to the self-review strategy ($M \approx 0.92$, $SD \approx 0.80$) than they did to the peer-review strategy ($M \approx 0.46$, $SD \approx 0.67$).

Next, the quantitative results of 15 limited-proficiency participants' writing performance are shown in Table 4.8.

Table 4.8

Comparison of the influence of self-review and peer-review strategies on limited-proficiency group's writing task score development

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	VAR00001 (Self-Review Dev Score)	.8420	15	1.06671	.27542
	VAR00002 (Peer-Review Dev Score)	.3740	15	.38267	.09881

From Table 4.8, fifteen limited-proficiency participants' average score of writing development was from the score difference between the first drafts to the final drafts of each writing task. All of their average writing score development was approximately 0.84 ($SD \approx 1.07$) in writing task 1 and approximately 0.37 ($SD \approx 0.38$) in writing task 2. Next, the comparative analysis of data from the limited proficiency group's writing score development was conducted, using a paired-samples *t*-test, as shown in the following two paired samples tables.

Table 4.8

Comparison of the influence of self-review and peer-review strategies on limited-proficiency group's writing task score development (continued)

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	VAR00001 & VAR00002	15	-.078	.782

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	VAR00001 - VAR00002	.46800	1.16108	.29979	-.17499	1.11099	1.561	14	.141

As can be seen in Table 4.8, there was no significant difference in the mean scores of writing development between writing tasks 1 and 2 in the group of 15 limited-proficiency participants. However, it is notable that they had higher mean score of writing development in writing task 1 than in writing task 2. This means, they responded to the self-review strategy ($M \approx 0.84$, $SD \approx 1.07$) more effectively than they did to the peer-review strategy ($M \approx 0.37$, $SD \approx 0.38$).

Overall, the findings from Tables 4.6 to 4.8 would suggest that when these three proficiency groups of the participants used review strategies, only the high proficiency group of the participants responded more effectively to the self-review strategy than to the peer-review strategy, with their significantly improved writing performance. For the groups of the middle- and limited-proficiency participants, although there was no significant improvement in their writing score development after using either self-review or peer-review strategies, the mean scores of writing development of both groups were higher when they undertook the self-review strategy than when they implemented the peer-review strategy.

The findings (respective Table 4.5 and Table 4.6) indicate that all participants, particularly those in the high proficiency group, scored better in the self-review strategy practices in their written tasks than in the peer-review strategy ones. Such influence of self-review strategy practices on the participants' higher writing task score may be related to their independent or autonomous learning gained from the learner-centred assessment in the review-strategy training workshop. According to Dickinson (1995),

students were frequently involved in their active and autonomous learning through formal training in the classroom. Benson (2011) added that learner training is necessarily provided to promote self-directed learning for effective language learning in a learner-centred classroom. In the study by Wakabayashi (2013), she also pointed out the importance of self-review and peer-review training which led to students' writing improvement. Similar to the current study, her study also found that 51 first-year Law Japanese students' writing was more developed when doing self-review than when doing peer review. In addition to the formal writing training in the current study, the participants' independent learning and their subsequently higher writing performance in the self-review strategy practice could be attributable to their practices in learner-centred assessment. In the current study, the learner-centred assessment included self-assessment and peer-assessment, each of which contained feedback and revision on basis. When taking the self-review strategy into account, the participants had to practise providing self-feedback and doing self-revision in their writing tasks. The studies by some scholars confirmed that indirect or metalinguistic feedback involving in students' provision of corrective feedback helped encourage their self-feedback and self-revision (Brown, 2007; Ellis et al., 2008; Ferris & Hedgcock, 2005; Larsen-Freeman, 2008). This indicates the process in self-assessment which would also promote self-directed learning and thus learning autonomy (Benson, 2007, 2011; Fry et al., 2009; Wakabayashi, 2013).

The analyses of data in Tables 4.5 to 4.8, pertaining to the impact of the students' responses to review strategies, were conducted from macro- to micro-levels. A comparison of writing score development in relation to the review strategies in sub-

section 4.4.1 began with an analysis of data was applied with the total number of the participants of the study (Table 4.5, p. 137), followed by three proficiency groups of participants (Tables 4.6 to 4.8). However, only analysing results from all participants at the macro-level and from three participant groups at the micro-level does not adequately confirm practical applications of the review strategies to classroom writing instruction. Since writing criteria is a useful tool in teaching writing and students in a class vary in terms of their English language proficiency and academic disciplines, further investigations need to be conducted in the following areas. Sub-section (a) analyses and discusses how effectively the students responded to writing criteria being used principally in writing instruction. Then, in the next areas, the analyses of data will be narrowed and applied to three varying proficiency groups of the participants and their different disciplines in sub-section (b).

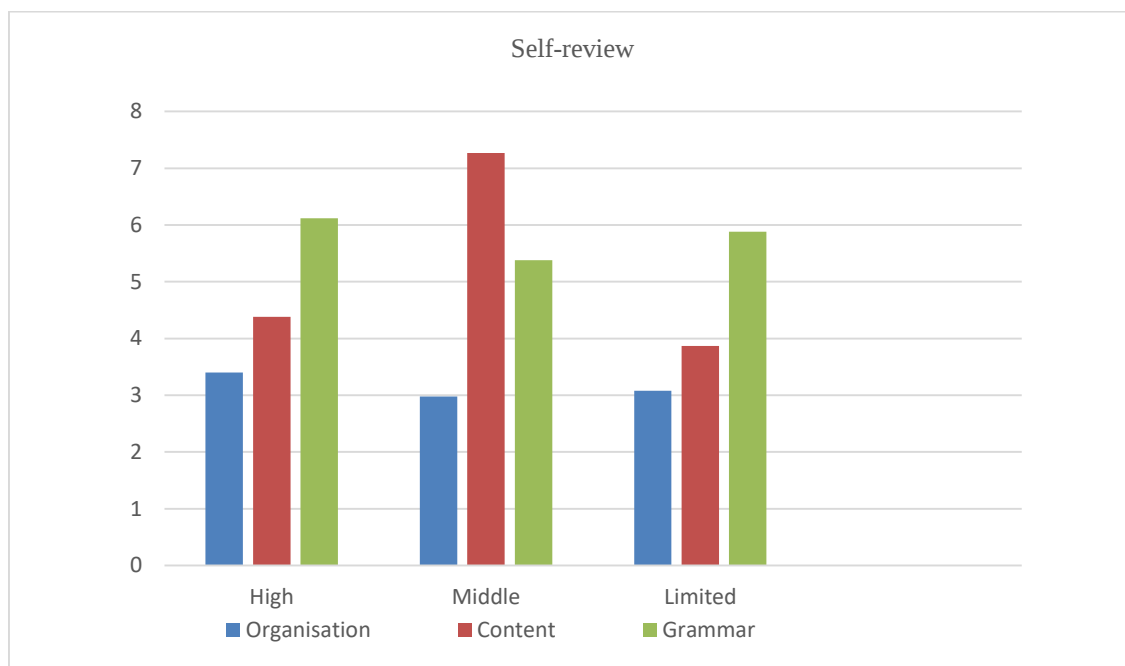
The first area about how effectively the students responded to writing criteria being principally used in writing instruction when implementing review strategies will be analysed and discussed in sub-section (a). Then, in the next areas, the analyses of data will be narrowed and applied to three varying proficiency groups of the participants and their different disciplines in sub-section (b).

(a) Across three groups of varied proficiency levels in relation to students' performance in the categories of the university's writing criteria

In the review strategy practices, the 'writing criteria' (i.e. organisation, content and grammar), which were discussed in the methodology chapter (see Section 3.5.3 (iii), p.

68, Section 3.6.2 Research Question 2 (p. 105), and Appendix 10 (p. 308)), were used in feedback provided on the writing and for revision practice. The purpose of the following analysis is to examine how the different proficiency groups performed in terms of writing organisation, content and grammar when using review strategies.

Referring to the different proficiency participants' writing task scores from the first drafts to the final drafts in Appendix 8 (p. 304), it can be seen that after the implementation of the 'self-review' strategy, the development in scores of writing organisation, content and grammar was examined (Figure 4.1).



Self-review	Organisation	Content	Grammar
High	3.40	4.38	6.12
Middle	2.98	7.27	5.38
Limited	3.08	3.87	5.88

Figure 4.1. Self-review strategy: Average writing score development in terms of organisation, content and grammar of three proficiency groups.

From Figure 4.1, the Y-axis denotes the average score of writing development. The X-axis represents the components of writing criteria (i.e. organisation, content and grammar) in the current study. The trends of the average score development tell how well the participants in the groups of high, middle and limited proficiency were able to perform on their writing in terms of content, organisation and grammar after using the review strategies.

After the participants employed the self-review strategy in writing, it was found that the high proficiency group obtained the highest mean score development compared with the middle and the limited groups in terms of writing organisation (i.e. 3.40, 2.98 and 3.08, respectively) and grammar (i.e. 6.12, 5.38 and 5.88, respectively). In terms of the writing content, the middle proficiency group gained higher score development than the high and the limited groups (i.e. 7.27, 4.38 and 3.87, respectively). Interestingly, the line graphs also indicate that when the self-review strategy was implemented, the average score of the high proficiency and the limited-proficiency groups developed most in grammar whereas those of the middle-proficiency group improved most in the writing content. The area which developed the least was organisation. This could presumably be that doing the self-review practice, the high-proficiency and the limited-proficiency groups may pay more attention to grammar, whereas the middle-proficiency group may focus more on producing relevant and logical writing content. All groups paid the least attention to writing organisation.

When the three proficiency groups employed their 'peer-review' strategy in the writing processes, their writing score development in organisation, content and grammar is illustrated in Figure 4.2.

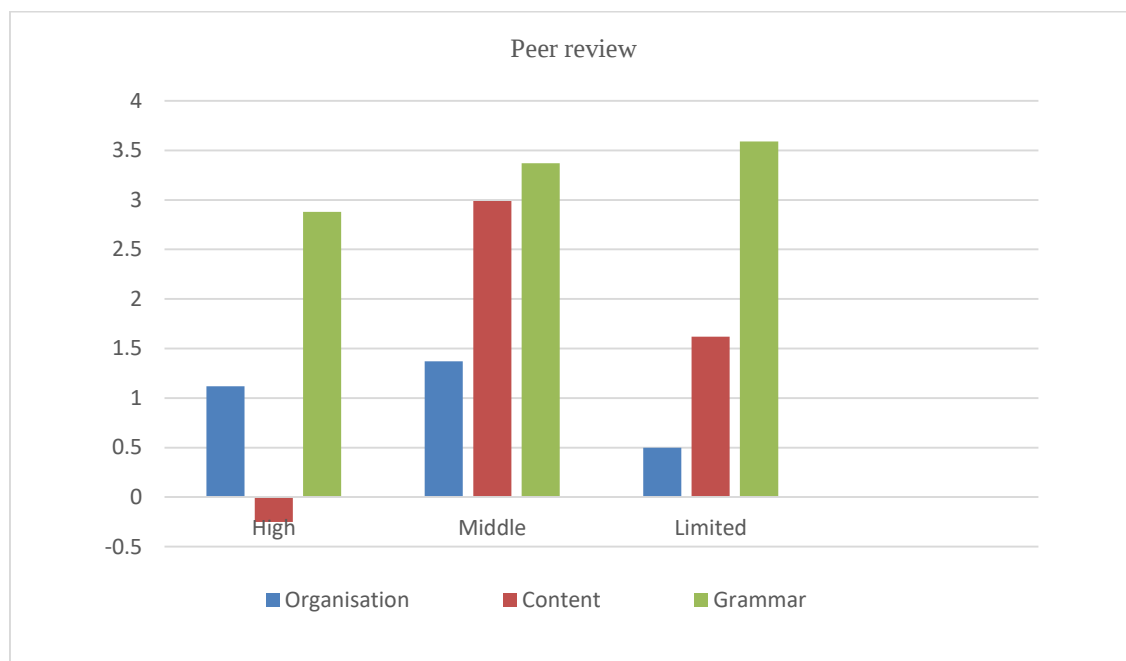


Figure 4.2. Peer-review strategy: Average writing score development in terms of organisation, content and grammar of three proficiency groups.

After the implementation of the peer-review strategy in writing, the middle proficiency group gained higher mean score development in the writing organisation than the high-proficiency and the limited-proficiency groups did (i.e. 1.37, 1.12 and 0.5, respectively). In terms of the writing content, it was found that the middle proficiency group also gained a higher mean score development in the writing content than the limited proficiency and the high proficiency groups (i.e. 2.99, 1.62 and -0.25, respectively). In terms of grammar,

the limited proficiency group had higher score development than the middle proficiency and the high proficiency groups (i.e. 3.59, 3.37 and 2.88, respectively).

While there were improvements across the participants in their scores for the writing tasks, there were still some participants who made no development in the writing task scores (Appendix 8, p. 304). There were two examples out of 17 cases of such no progress in the writing task scores between the first draft and the final draft. The first case was derived from one Science female participant's increasing scores of writing organisation and grammar and the decreasing score of content in the final draft after the self-review strategy practice (i.e. 2.75, 5 and 6.25 in the first draft and 2.88, 4.63 and 6.5 in the final draft). The second case was from one Education female participants' equal scores of all writing content, organisation and grammar (e.g. 3, 3.75 and 6.75 in the first draft and the final draft, respectively) after using the peer-review strategy. Interestingly, in the former case of no writing development from the total score of 14 for both first and final drafts, the participant's score of writing content decreased from 5 to 4.63, while the scores of writing organisation and grammar increased.

Similarly, when dividing all students into varying proficiency groups, it was found that the high-proficiency group obtained a lower mean score of writing content than the middle-proficiency group did after using self-review strategy (Figure 4.1, p. 151) and had no improvement in the mean score of writing content, compared with the middle- and limited-proficiency groups after using peer-review strategy in writing (Figure 4.2, p. 153). To sum up, after employing the self-review strategy, the high proficiency group

performed better in writing organisation and grammar but worse in the writing content than the middle proficiency group did within the same period of time (Figure 4.1, p. 151). Similarly, after using the peer-review strategy, the high proficiency group performed better in writing organisation but worse in the writing content and grammar than the limited proficiency group did during the same period of time (Figure 4.2, p. 153).

In both groups of the middle-proficiency and the limited-proficiency, it was found that the scores of their final drafts improved most in grammar after the peer-review practice. This could be on account of the impact of the paired classmates' feedback and/or the participants themselves focused more on improving grammar in their revision.

Considering both Figure 4.1 (p. 151) and Figure 4.2 (p. 153), it was clear that the middle proficiency group of participants developed most in their writing content after the implementation of both self-review and peer-review strategies. It is also notable that the high proficiency group performed better in all writing organisation, content and grammar than the limited-proficiency group when employing the self-review strategy. On the other hand, the high proficiency group made no progress in writing content and little progress in grammar, compared with the limited proficiency group when using the peer-review strategy. This may be attributable to the high proficiency participants' disregard of and/or ineffective responses to their paired-classmates' feedback and/or the paired classmates' feedback quality in the high proficiency participants' written tasks (as shown in the next Table 5.3 in Chapter 5). The study by Memari Hanjani (2016) showed that although eight intermediate proficiency students were reluctant to share how they trusted their ability to

detect errors and the validity of peer feedback, they revealed their inability to correct writing errors which were spotted by their teacher. Similarly, as Srichanyachon (2011) also found, her students trusted their teacher feedback rather than peer feedback. However, the students in her study revealed in the interview that they perceived peer-revision as a useful exercise, compared with self-revision, in the English-language writing. To be able to better explain these likely reasons for such lack of progress in the writing tasks, an investigation into the participants' perceptions of the review strategies in relation to their writing progress will be discussed in the next chapter.

Apart from the analysis of how the students performed in the aspects of organisation, content and grammar, their average writing task score development will further be analysed in terms of their different academic disciplines. The next sub-section (b) narrows the analyses of three proficiency groups in relation to their academic disciplines.

(b) Across three groups of varied proficiency levels in relation to students' performance in the categories of the university's academic disciplines

This sub-section addresses the multi-dimensions of comparisons of writing task score development in relation to three proficiency groups and their disciplines, using one-way ANOVA. The analysis of the comparisons of review strategies undertaken by three proficiency groups is summarised in Table 4.9.

Table 4.9

A comparison of writing task score development of three proficiency groups in response to self-review and peer-review strategies

Review strategy	Proficiency group (n = 46)	Mean	SD	F	Sig.
Self-review	High (n = 14)	.9914	1.02685	.087	.917
	Middle (n = 17)	.9182	.80189		
	Limited (n = 15)	.8420	1.06671		
Peer-review	High (n = 14)	.2500	.32919	.664	.520
	Middle (n = 17)	.4559	.66677		
	Limited (n = 15)	.3740	.38267		

Table 4.9 shows that there was no statistically significant difference in the mean score of writing development in the written tasks undertaken by these three groups of the participants in response to the self-review strategy. In addition, there was no statistically significant difference in the mean score of writing development in the written tasks of the three groups of participants in response to the peer-review strategy. Overall, it can be concluded that both the self-review and peer-review strategies can generally be used in processing writing tasks for all proficiency groups of students.

Next, according to research question 2, a further analysis shows the comparisons of review strategies undertaken by three proficiency groups with individual disciplines of Science and Education as in Table 4.10 below.

Table 4.10

A comparison of writing task score development of Science and Education students according to proficiency group

Review strategy	Proficiency group (n = 46)		Mean	SD	F	Sig.
Self-review	High (n = 14)	Science (n = 3)	1.5833	.81562	.356	.875
		Education (n = 11)	.7727	.57950		
	Middle (n = 17)	Science (n = 8)	.9850	1.21260		
		Education (n = 9)	.8756	.57950		
	Limited (n = 15)	Science (n = 9)	.9289	.96777		
		Education (n = 6)	.7917	1.24627		
Peer-review	High (n = 14)	Science (n = 3)	.0833	.14434	.386	.855
		Education (n = 11)	.3745	.36591		
	Middle (n = 17)	Science (n = 8)	.2813	.37100		
		Education (n = 9)	.3889	.45090		
	Limited (n = 15)	Science (n = 9)	.5144	.86658		
		Education (n = 6)	.3517	.28937		

As shown in Table 4.10, there was no statistically significant difference in the mean score of writing development in the written tasks of three groups of Science and Education participants in response to the self-review strategy. Likewise, no statistically significant difference was found in response to the peer-review strategy. Hence, both self-review strategy and peer-review strategy can successfully be employed, in writing instruction, for all proficiency groups of students from both Science and Education disciplines without too much consideration given to disciplinary differences.

While the findings in this chapter demonstrate that review strategies are useful in improving writing performance, the results from this study contrast with the results of the studies by Covill (2010) and Tigchelaar (2016). Covill (2010) revealed no significant difference in the writing quality of all 61 university students after receiving three instructional approaches (i.e. formal self-review, formal peer-review and no formal review). In the current study, the participants from the two Foundation English classes were asked to write two English language essays including a first draft and the revised final one; whereas, the students in her study wrote three 5-page literature review style papers in three Psychology classes at a university in the U.S. The lack of significant improvement in the writing quality of students in her study is probably due to the issue of the inadequate amount of writing practice. In addition, the issues of the length and the genre of writing could also be the case. Writing three 5-page literature review papers may be too lengthy and time-consuming, thereby resulting in the students' demotivation to write. However, in the current study, writing two 1-page essays, the information of which was provided from the integrated type of situational source texts might have increased the participants' motivation to write. Additionally, Tigchelaar (2016) found a no-significant difference in writing development in four written assignments of 44 intermediate-level learners of French from three classes (i.e. self-review, peer-review and a no-review group) at a university in the U.S. The increased, albeit insignificant, scores of writing were found in both self- and peer-review groups after writing four-paragraph assignments about character descriptions and plot summaries over a semester. It was partly found that in the peer-review group, a writing burden was from their disregard of their peers' feedback or the quality of their peers' feedback. That is to say, the differences

in the results of the studies by Covill (2010), Tigchelaar (2016), and the current study might briefly be a consequence of different writing genres and the set-up of the writing tasks.

Moreover, what is interesting to note about the results is the influence of situational variables (e.g. a writing situation with a topic, the nature of a writing task, and the writer's familiarity with the topic) and how these affect writers' revision and ability to respond to revision (Faigley & Witte, 1981). The writing situation, in the current study, was somewhat artificial. To illustrate, essay task 1 was entitled 'Censorship' and task 2 was entitled 'Live Concerts'. Generally, all student participants as novice writers wrote their essays in class where it was frequently difficult to make the students feel as if they were in a live concert. They may arguably have been unfamiliar with the task's nature and/or writing topics, thereby inhibiting, to some extent, their writing performance.

As regards the better response to self-review strategy of the high proficiency participants in the current study (Table 4.6, p. 141), it could be said that the students, whose general characteristics were logic- and analytical thinking-oriented, may possess some attributes of independent self-editors (Ferris, 2003; Rollinson, 2005). In the study by Ferris (2003), when high proficiency students acquired a self-revision process, they then became more self-sufficient editors or independent self-editors. As Rollinson (2005) stated, providing students with chances to assess their own writing tasks could help enhance their linguistic competence and help them to be critical readers of their classmates' written tasks. This also helped the students to be subsequently more autonomous reviewers who do not

totally depend on their teacher's feedback. As Sotoudehnama and Pilehvari (2016) and Wakabayashi (2008) state, making students engage in the writing process offers them the chance to utilise their acquired knowledge to provide writing feedback. This helps to enhance their self-confidence in writing (Iraji, Enayat, & Momeni, 2016).

Another point of interest is about peer-review partners and how feedback is given and received. Concerning the limited proficiency Science participants' more effective response to the peer-review strategy (Table 4.10, p. 158), it can be indicated that peer-review strategy better supported the participants' revision (Diab, 2010; Kamimura, 2006; Min, 2006; Paulus, 1999; Tsui & Ng, 2000). This can be seen in the limited proficiency group, Science students ($M \approx .51$, $SD \approx .87$) obtained higher average score of writing, which was developed from their first drafts to the revised drafts, than Education ones did ($M \approx .35$, $SD \approx .29$). The result from Table 4.10 also correlates with the more effective response to the peer-review strategy of the limited-proficiency group in terms of grammar in Figure 4.2 (p. 153). The result of the current study, regarding the more effective response of a limited-proficiency student (Figure 4.2) to peer-review in grammar, is consistent with the study by Diab (2010). In her study, it was found that 22 first-year university Lebanese EFL students produced less grammatical errors in their argumentative essays after their peer-editing training sessions. Tsui and Ng (2000) add that students tend to be able to spot their classmates' writing errors instead of their own. This could imply that peer review helps raise students' awareness of their own ability to provide written feedback. Given the above reasons, it could also be said that the limited proficiency participants still had more room for improvement (Sotoudehnama &

Pilehvari, 2016). Similarly, Lundstrom and Baker (2009) found that low proficiency students who experienced giving feedback to their classmates (i.e. peer-feedback) displayed the most improvement in writing skills development.

In addition to the supporting information from these scholars' studies (Diab, 2010; Fati, 2013; Lundstrom & Baker, 2009; Sotoudehnama & Pilehvari, 2016; Tsui & Ng, 2000), the limited-proficiency students' better responses to peer-revision in the current study likely stemmed from their better interaction and/or negotiation with their paired partners while doing peer review. This may lead to their higher score development in writing content and grammar than that of the high proficiency students (Figure 4.2, p. 153). As Faigley and Witte (1981) affirm, successful revision also results from a writer's skills of process-oriented writing. Fernández (2012) points out that when a student is paired with a partner of different proficiency, difficulties with pair interactions may occur. The one who edited the first draft may tend to dominate the interaction with his/her partner who revised the draft, and vice versa. This would lead to the ineffectiveness of peer-revision in the writing processes. As supported by the study by Amerian, Ahmadian, and Mehri (2014), it was found that the self-review group of students performed better than the peer-review group in terms of writing development. In their study, it was suggested to provide appropriate training of how to scaffold students in peer-revision. Fernández (2012) also adds that in peer scaffolding, a student writer should be trained to be able to negotiate with his/her partner in the thorough stages of planning, composing, and reviewing in the writing process. Furthermore, several studies point out that in the act of peer interaction in the writing process, student writers should also be able to negotiate with their paired

partners who have different backgrounds of language skills and rhetorical or cultural knowledge (Hyland & Hyland, 2006a, 2006b; Kamimur, 2006; Wakabayashi, 2013).

Another proposition for such results of the revision cases in the current study may be from the influence of the roles as a feedback giver and a feedback receiver in peer review. The study by Sotoudehnama and Pilehvari (2016) revealed that feedback receivers tended to make more surface-level changes (e.g. adding some examples and paraphrasing many sentences) than feedback givers did in their revision. The results of their study also suggest that the writing performance of the students who were trained to give feedback in peer review increased more significantly than those who received feedback. Similarly, the study by Tsui and Ng (2000) supported the results of Sotoudehnama and Pilehvari's (2016) study: the students who were engaged in providing written feedback had more advantages over those who received the feedback. Similarly, the study by Rouhi and Azizian (2012), examining the effect of peer review on L2 writing of 45 pre-intermediate EFL students with the age range of 16 to 27, showed that the group of the feedback givers significantly improved in grammar or writing accuracy than that of the feedback receivers. Nonetheless, there is a point of difference in the EFL students' age range to be considered between Sotoudehnama and Pilehvari's (2016) study and the current study. The former was heterogeneous (i.e. 18-30 years old), whereas the latter was homogeneous (i.e. 18-20 years old). For this, a further investigation into the effects of the students' varying age range on peer review would be worth conducting.

With regard to the peer review, training for how to provide feedback and revise work in the writing processes is essential to L2 novice students (Ferris & Hedgcock, 2014). In consistent with the studies by Sotoudehnama and Pilehvari (2016) and by Tsui and Ng (2000), Berg (2000) and Wakabayashi (2008) suggested the provision of training for peer feedback to novice writers. In the study by Berg (2000), she found that students in the training for peer feedback made more meaning-based changes in revision. Her result was different from what was found in the current study. In spite of the provision of review strategy training in the current study, the results of the students' revision patterns showed that they made more form-based changes in revision. Such differences in the students' responses to revision patterns of these two studies may be as a result of the different context of the studies: ESL students in her study versus EFL students in the current study. It is believed that academic contexts of a student could influence the results of a study (Berthiaume, 2009; Hughes & Overton, 2009; McAllister & Alexander, 2009). Apart from the context where a study was conducted, the design of a study also affects the result of the study: an experimental design in her study versus a quasi-experimental design in the current study. Ferris and Hedgcock (2014: 262) also point out that peer review consumes a good deal of time on training and is sometimes hard to be blended in the limited time of a course syllabus. For these reasons, some participants in the current study may not have adequately been engaged in the training; thus, they tended to make more form-based changes and those in the limited group made no revisions. However, these assumptions would be justified more through the participants' responses in the open-ended parts of questionnaires and the interview which will be presented in the next chapter.

Lastly, in the peer review practice of the current study, the participant pairs of the same and different proficiency levels were fixed and mutually revealed throughout the semester, irrespective of their pairing preference. As supported by Berg (2000) and Standley (1992), students should work with their fixed pairs along the writing processes. However, there may be the case when some participants in the current study were, to some extent, dissatisfied with working with their fixed pairs, and subsequently affected the provision and the reception of peer feedback (Hyland, 2000). This could explain why the two high-proficiency students made less progress in grammatical scores as well as no progress in their writing content scores. On the other hand, there may also be another case when some participants were satisfied with working with the different proficiency classmate, thus expediting progress in their written final drafts. As supported by the study by Wang (2015), it was found that multiple-peer groupings of different proficiency levels working in pairs could help increase students' satisfaction with their writing partners. These likely reasons will also be explored further in the next chapter.

4.5 Chapter Summary

Based on the validity and reliability of the research findings, this study measured the impact of review strategies on the writing performance of first-year Thai undergraduate students, using the mixed methods. The collected data, for the quantitative and qualitative analyses, were taken from the cross-assessments: both summative and formative. This chapter serves two purposes in the study. First, the study analysed the data taken from the summative assessment (i.e. the students' writing pre-test and post-test scores) to

investigate whether and to what extent review strategies impact on the writing performance of first-year Thai undergraduate students. Next, it analysed the data from the formative assessment (i.e. the students' writing task scores and scripts) to examine the levels of success of self-review and peer-review based on the students' varying English language proficiency levels.

The main findings based on research question 1 (*What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?*) show the statistically significant effects of the review strategies on the students' writing performance; $t(45) = 17.06$; $p = .000$ at the .05 level.

Based upon research question 2 (*Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?*), the findings of the analysis of 184 self-revised and peer-revised draft scripts of a total of 46 students indicate that there was a statistically significant level of success in the students' responses to the review strategies. At the macro-level, use of self-review had a greater impact on the students' writing task scores than did that of peer review; $t(45) = 3.08$; $p = .004$ at the .05 level. The findings also suggest that when the students utilised the self-review strategy, their writing performance was more highly developed than when using the peer-review strategy.

At the micro-level, as regards the aspect of all three proficiency groups of the students' ability to respond to review strategies, only the high proficiency group most effectively responded to the self-review strategy with their significantly improved writing performance. In the middle- and limited-proficiency groups, despite no significant improvement in their writing score development after using either self-review or peer-review strategies, their mean scores of writing development were higher when they undertook the self-review strategy than they did the peer-review strategy.

In terms of the quality of review strategies through the students' writing score development in relation to writing assessment criteria (i.e. organisation, content and grammar), the results showed that following the self-review practice, the high proficiency group performed better in writing organisation and grammar but worse in the writing content than the middle proficiency group. After the peer-review practice, the high proficiency group also performed better in writing organisation but worse in the writing content and grammar than the limited proficiency group did.

In terms of the practical use of review strategies through the students' writing score development in relation to students' different disciplines, it was shown that both self-review strategy and peer-review strategy can generally be used for all proficiency groups of the students as well as their different disciplines.

The discussion part of the chapter interprets the significance of the main results of the study being compared and contrasted with other related studies. Next, the results from the student questionnaires and interview will be presented and discussed in Chapter 5.

CHAPTER 5

PERCEPTIONS OF THE USE OF REVIEW STRATEGIES IN RELATION TO WRITING DEVELOPMENT

5.1 Introduction

This chapter explores participant perceptions (46 participants) when applying self-review and peer-review strategies in relation to their writing development. In order to answer Research Question 3 (*What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?*), I will examine the questionnaire responses of all 46 participants and present the findings followed by discussion in Section 5.2. Then, I will also assess the responses to the semi-structured interview of 12 participants, as well as reporting and discussing the results in Section 5.3. Finally, I will provide a summary of the students' perceptions of the use of review strategies in the last section, Section 5.4.

The responses to the questionnaire will provide more detailed evidence directly from the participants to explain and expand on the quantitative evidence about the impact of the review strategies on their writing development. Hearing from the participants about their experiences using self- and peer-review strategies will then provide an informed pedagogic approach to how these strategies may be incorporated in the classroom (Chapter 7).

5.2 Responses to questionnaire series

The questionnaire series included three questionnaire forms (i.e. pre-task, in-process and post-task questionnaires) which were utilised before, during and after the implementation of review strategies (Appendix 3 (p. 291), Appendix 9 (p. 306) and Appendix 10 (p. 308). The results from the analysis of the participants' responses to the pre-task questionnaire, the in-process questionnaire, and the post-task questionnaire will be shown in the respective sections 5.2.1, 5.2.2 and 5.2.3.

5.2.1 Pre-task questionnaire responses: Perceptions before the implementation of review strategies

The pre-task questionnaire was administered to collect data from all participants before the introduction of review strategies (Appendix 3). There were two parts to the form. Part 1 was designed to elicit responses to the participants' demographic data, English language learning background and perception of their English language skills. Part 2 was designed to elicit the participants' perceptions of self-review and peer-review strategies before the implementation of review strategies.

(a) Part 1 of Pre-task questionnaire

Based upon the analysis of the participants' responses to Part 1 and Part 2 of the form, the results of Part 1 of the first seven out of nine items of the pre-task questionnaire are interpreted and summarised in Table 5.1.

Table 5.1

Demographics, English-language learning background and perception of English language skills

Part 1 of pre-task questionnaire item		% of participants (n = 46)
▪ <u>Demographic data</u>		
1. Faculty		
- Science		43 (20)
- Education		57 (26)
2. Gender		
Male		35 (16)
- Science		37.5 (6)
- Education		62.5 (10)
Female		65 (30)
- Science		47 (14)
- Education		53 (16)
3. Age: 18-20		100 (46)
▪ <u>English language learning background</u>		
4. English language achievement (the final year of high school)		
A		2 (1)
B+		4 (2)
B		35 (16)
C+		39 (18)
C		15 (7)
D+		4 (2)
5. CU-TEP (TOEFL Equated) score: 45-56		37 (17)
6. Self-study of English out of class		78 (36)
- Listening		67 (31)
- Reading		41 (19)
- Vocabulary		37 (17)
- Speaking		26 (12)
- Grammar		15 (7)
- Writing		11 (5)
7. Reasons for learning English:		
- Required to take an English course to graduate		78 (36)
- Need English for my future career		78 (36)
- Interested in the English		65 (30)
- Interested in the English culture/the culture(s) of native English speaking countries		26 (12)
- Need English for travel		17 (8)
- Have friend/s who use English in communication		7 (3)

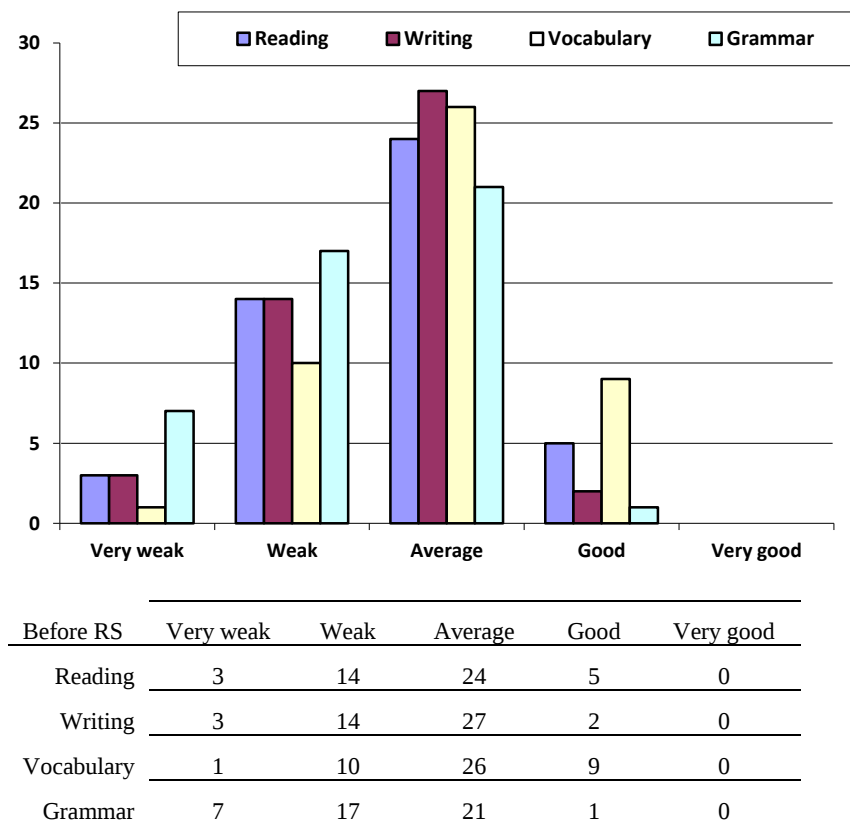
As shown in Table 5.1, the responses to items 1 to 7 in Part 1 of the pre-task questionnaire covered the participants' demographic profile (items 1 to 3) and English language learning background (items 4 to 7). From Table 5.1, the participants' responses to their background information can be summarised as follows.

Out of 46 first-year Thai undergraduate students, 20 participants (approximately 43%) were from the Faculty of Science and 26 participants (approximately 57%) were from the Faculty of Education. There were 30 females or approximately 65% (14 from Science and 16 from Education) and 16 males or approximately 35% (6 from Science and 10 from Education) with an age range of 18 to 20. Referring to their English-language achievement at the final year of their high school studies (item number 4), most of them (18 out of 46 participants or approximately 39%) obtained a C⁺ grade. In terms of the English language proficiency at their entrance to the first year of their university studies (item number 5), the majority (17 out of 46 or about 37%) obtained scores of the standardised proficiency test, known as CU-TEP, ranging from 45 to 56 which signified that they were at the middle intermediate or moderate proficiency level (see Table 3.4 and Table 3.7). In addition to English language learning in class, the majority of them (i.e. 36 out of 46 participants or approximately 78%) also did self-study out of class (item number 6) in practicing the skills of listening (31 participants or around 67%) the most, while writing (five out of 46 or about 11%) the least. With regard to their reasons for learning English (item number 7), the majority (36 out of 46 participants or around 78%)

revealed that they were required to take an English course to graduate and needed English for their future careers.

Next, the results of Part 1 of the last two items of the questionnaire regarding the perception of the English language skills (items 8 to 9) are interpreted and summarised in Figure 5.1. In terms of the current levels of the four English language skills (item number 8), the participants perceived their skills prior to the implementation of review strategies as illustrated in Figure 5.1.

No. of responses



Note. RS stands for review strategies.

Figure 5.1. Participants' perceived levels of English language skills before the implementation of review strategies.

Before using the review strategies, in Figure 5.1, all participants mostly perceived their current English-language skills of writing (27 participants or about 59%), vocabulary (26 participants or around 57%), reading (24 participants or around 52%) and grammar (21 participants or about 46%) to be at the 'average' level (item number 8). In addition, most

of them viewed writing and speaking (36 out of 46 participants or around 78%) as the skills most influential to their English language performance (item number 9).

Taking the highest number of the participants' responses in Figure 5.1 into account, it can be seen that before the introduction of review strategies, the participants considered their current English language skills to be at an average level, particularly in 'writing' (27%). Writing has been regarded as a core academic skill in English language education (Krashen, 1984; Nunan, 1992; Makalela, 2004; Rusinovci, 2015), and these students perceived writing as the English language skill most affecting their English language performance. However, only 11% practiced their writing skills for their self-study which is the lowest figure of the skills represented in Table 5.1 (p. 170). This is probably because writing is considered the most complex skill to master (Krashen, 1984; Nunan, 1992; Makalela, 2004). Furthermore, English is, in fact, not their mother tongue. These reasons could result in demotivation in their English language writing practice. Additionally, in their first year at university, they might not have good study skills nor an opportunity to practise their writing in English. This could, in turn, reveal why most students at all proficiency levels viewed their writing skills as being at an-average level at the beginning of the study before implementing review strategies.

(b) Part 2 of Pre-task questionnaire

In part 2 of the pre-task questionnaire, the participants responded to ten Likert-scale items but did not respond to one open-ended item. As the questionnaire was administered in the first term of their first-year study, it was deemed too early for them to provide

responses to the open-ended item regarding other comment(s) or suggestion(s) about any relevant issue of English language learning and/or class. Additionally, since the participants did not know exactly what self-review and peer-review strategies were before the implementation of review strategies, the definitions of both strategies were provided below the Likert-scale questionnaire part for their background information in order to elicit their perceptions of the review strategies. The responses to items 10 to 19 in Part 2 of the pre-task questionnaire which are shown in Appendix 23 are analysed and summarised in Table 5.2.

Table 5.2

Participants' perceptions of self-review and peer-review strategies before implementing review strategies

I think, ...	Perceptions of pre-use of review strategies (n = 46)		
	Mean	SD	Level of agreement
10. Self-review strategy helps develop my writing skills.	3.30	0.63	Neutral
11. Peer-review strategy helps develop my writing skills.	3.30	0.63	
12. Self-review strategy helps develop my writing content.	3.13	0.45	
13. Peer-review strategy helps develop my writing content.	3.13	0.45	
14. Self-review strategy helps develop my writing organisation.	3.00	0.56	
15. Peer-review strategy helps develop my writing organisation.	3.00	0.56	Agree
16. Self-review strategy helps develop my grammar accuracy.	3.11	0.48	
17. Peer-review strategy helps develop my grammar accuracy.	3.11	0.48	
18. Self-review strategy is useful to me.	3.81	1.14	
19. Peer-review strategy is useful to me.	3.81	1.14	

The participants' responses to the five-point rating scale questionnaire in Table 5.2 were interpreted through the mean scores (see Table 3.9, p. 113) as: 1.00-1.50 (strongly disagree), 1.51-2.50 (disagree), 2.51-3.50 (neutral), 3.51-4.50 (agree), and 4.51-5.00 (strongly agree). In the table, they rated eight pre-task questionnaire items from items 10

to 17 at the ‘neutral’ level and the other two items (i.e. items 18 and 19) at the ‘agree’ level.

At the ‘neutral’ levels, the participants were indifferent to the notion that both self-review and peer-review strategies helped develop their writing skills, writing content, organisation and grammar with the rating scores ranged from 3.00 to 3.30 ($SD = 0.56-0.63$). This is because they did not know what review strategies were like before they were implemented. The ‘neutral’ value of the mean score rated by the participants for their perceptions of review strategies could also signify a good starting point that they had arguably no bias in initial perception of individual review strategies—self-review and peer-review strategies—towards their English language writing skills and writing assessment criteria (i.e. content, organisation and grammar accuracy) prior to the implementation of each review strategy.

Moreover, at the ‘agree’ level, the participants perceived that both self-review and peer-review strategies were useful to them ($M = 3.81$, $SD = 1.14$). That is, the students in the current study initially had positive perceptions of review strategies. According to the study by Taylor and Marsden (2014), male students had noticeably more negative attitudes to language learning than female ones. In spite of the differences in students’ age, education levels and studying contexts between Taylor and Marden’s (2014) study (i.e. 13-14 years old in secondary school in England) and the current study (i.e. 18-20 years of age in first-year university undergraduate level in Thailand), the students of both studies experienced English as a compulsory subject. Thus, it is likely that, in the current

study, there was a positive attitude or initial perception of the students because the majority of students in the current study were female (65%) rather than male (35%) students (Table 5.1, p. 170). Taylor and Marsden (2014) pointed out that students' interest in foreign language learning was directly related to their perceptions to foreign language learning. Additionally, as Bernaus and Gardner (2008) found in their study, the perceptions of the students towards the use of motivation strategies were possibly associated with their attitudes and motivation. Lamb (2017) and Ushioda and Dörnyei (2012) further added that students' motivation is an essential part in language learning success and academic performance. Therefore, such positive perceptions of review strategies of the students in the current study (see items 18 and 19 from Table 5.2, p. 176) may also be related to their interest in the unfamiliar review strategies used in the writing processes, which motivated their learning, and subsequently producing a statistically significant outcome (see Table 4.1 (p. 121) and Table 4.2 (p. 124)).

Next, the copies of the in-process questionnaire were distributed when the participants completed the peer-review strategy practice of writing task 2. Their questionnaire responses are presented in the next section.

5.2.2 In-process questionnaire responses: Perceptions during the implementation of review strategies

The in-process questionnaire contained five semi-opened-ended items focusing on how the students perceived the challenges of their review strategy practices and their writing confidence in relation to the assessment writing criteria (Appendix 9, p. 306).

The assessment criteria for writing performance in the current study are measured in two aspects: writing fluency and accuracy. Writing fluency is measured through writing organisation and content, while writing accuracy is through grammar. Through the reviewing stage in the process-based writing, the participants had repeatedly provided their corrective feedback and performed their writing for revision, thus developing their writing performance covering both accuracy (Ferris & Hedgcock, 2014; Gass et al., 2013; Srichanyachon, 2011) and fluency (Clark, 2012; Ellis et al., 2008; Gass et al., 2013; Loewen, 2012).

The responses of the participants to the five-item questionnaire are shown in Table 5.3.

Table 5.3

Participants' perceptions in the in-process questionnaire

No.	Perception of challenge(s) faced / confidence gained in relation to writing assessment criteria (% = No. of participants out of 46)		
	Open-ended section		Close-ended section
1.	In the self-review strategy practice, which of the following is the most difficult for me when I have to write in English?		
1.1	Organisation	- Sometimes being unsure of the accuracy of use of transitions (four out of 46 participants or $\approx 9\%$)	2 ($\approx 4\%$)
1.2	Content	- Creating my new reason and supporting ideas to be different from those given by the source (six or $\approx 13\%$)	11 ($\approx 24\%$)
1.3	Grammar	- Unsure of my grammatical knowledge and accuracy (11 or $\approx 24\%$)	33 ($\approx 72\%$)
2.	In the peer-review strategy practice, which of the following is the most difficult for me to provide feedback in my classmate's task?		
2.1	Organisation	- Unsure of the accuracy of my comments (two or $\approx 4\%$)	3 ($\approx 7\%$)
2.2	Content	- Unsure of the accuracy of my comments (15 or $\approx 33\%$)	24 (52%)
2.3	Grammar	- Unsure of the accuracy of my comments (seven or $\approx 15\%$)	19 ($\approx 41\%$)
3.	In the peer-review strategy practice, which of the following is the most difficult for me to revise my work which was corrected and edited by my classmate?		
3.1	Organisation	- Unsure of the accuracy of the classmate's comments (eight or $\approx 17\%$)	5 ($\approx 11\%$)
3.2	Content	- Unsure of the logical ideas commented by the classmate (24 or $\approx 52\%$)	21 ($\approx 46\%$)
3.3	Grammar	- Unsure of grammatical accuracy commented by the classmate (12 or $\approx 26\%$)	20 ($\approx 43\%$)
4.	After the self-review strategy practice, I think I developed more writing confidence in terms of:		
4.1	Organisation	- Helping remind me of which part in my essay I should check to make it well-organised (two or $\approx 4\%$)	Yes (40 or $\approx 7\%$)
4.2	Content	- Offering a chance to make my writing content to be more logical (five or $\approx 11\%$)	Yes (31 or $\approx 67\%$)
4.3	Grammar	- Being able to spot my grammatical errors when reading what I wrote again (four or $\approx 9\%$)	Yes (32 or $\approx 70\%$)
5.	After the peer-review strategy practice, I think I developed more writing confidence in terms of:		
5.1	Organisation	- Making me aware of use of transitions and the coherence from introduction to conclusion (four or $\approx 9\%$)	Yes (24 or $\approx 52\%$)
5.2	Content	- Having a chance to see more writing ideas from the classmate's task (14 or $\approx 30\%$) - Helping me think more logically (four or $\approx 9\%$)	Yes (22 or $\approx 48\%$)
5.3	Grammar	- Having chances to recheck grammatical rules while providing feedback on the classmate's task (19 or $\approx 41\%$)	Yes (35 or $\approx 76\%$)

As can be seen from Table 5.3, the rate of return of the participants' responses to the close-ended items was 100%, while that to the open-ended ones was not (see Appendix 9, p. 306). In the table, the majority of participants (33 out of 46 or approximately 72%) rated grammar as the most difficult practice in writing, followed by content and writing organisation, when they did the self-review strategy practice. With such highest rate of the grammatical challenge, most of them (11 out of 46 or around 24%) revealed that they were not sure of their grammatical knowledge and accuracy when they had to write in English (item number 1). However, after the self-review strategy practice, most of them (40 out of 46 or around 87%) thought they developed more writing confidence, particularly in writing organisation, followed by grammar and writing content. Two of them (about 4%) added that the self-review strategy developed their writing confidence in writing organisation in the way that it helped remind them of which part of the essay they should have checked to make their essays well-organised (item number 4).

In the peer-review strategy practice, the majority (24 out of 46 or 52%) rated writing content as the most challenging criterion for providing their feedback in their classmates' tasks. Approximately 33% of them added that they were unsure of the accuracy of their comments on their classmates' writing content (item number 2). Similarly, 46% of them also found that content was the most challenging writing component when they revised their tasks which were previously corrected and edited by their classmates. Approximately 52% of them admitted that they were not sure of the logical ideas commented by their classmates (item number 3). After all participants completed the

peer-review strategy practice, most of them (76%) agreed that the strategy practice helped develop their writing confidence, particularly in grammar. Forty-one percent of them viewed that the peer-review strategy practice offered them chances to recheck grammatical rules while they provided feedback on their classmates' tasks (item number 5).

The statistical data of the main results from Table 5.3 can be interpreted as follows. Based upon the writing assessment criteria for organisation, content and grammar used when doing review strategy practices, most participants perceived grammar as the major challenge in their English-language writing when doing the self-review strategy practice (item number 1) and thought the strategy practice helped them develop more confidence in writing organisation (item number 4). It seems that an organisational pattern or structure of essay writing is normally fixed and stable in accordance with types of writing, organisation appears to be the most basic writing aspect for most language learners to produce, compared to writing content and grammar (see Step 2 in Table 2.1, p. 29 and Figure 2.1, p. 44).

In the peer-review strategy practice, most of them viewed writing content as the major challenges in providing feedback on their classmates' written tasks (item number 2) and in revising their tasks based on their classmates' written feedback (item number 3). As Goldstein (2006) pointed out, one individual learner factor affecting feedback and revision is a lack of content knowledge (Ferris & Hedgcock, 2014) in addition to beliefs about content (Srichanyachon, 2011). The participants' perception of the writing content

challenge in the in-process questionnaire parallels the decreased developmental score of writing content in the high proficiency group of participants (Figure 4.2, p. 153). However, the middle-proficiency group of participants reported in the interview that after using peer-review strategies, their writing content knowledge and score improved (see Excerpts 22-24, pp. 220-221 in the next Section 5.3.2, p. 215). What is more, in the in-process questionnaire, the participants perceived that the peer-review strategy practice helped them develop more writing confidence in grammar (item number 5). Such perception of the participants in the in-process questionnaire correlates with their writing score development (Figure 4.2, p. 153) indicating that the participants at all proficiency levels performed best in grammar. This may confirm that the peer-review strategy practice most helped boost the participants' writing development and writing confidence in grammar.

Taking the results from the participants' responses to the in-process questionnaire in items 2 and 3 from Table 5.3 (p. 180) into consideration leads to a likely reason why the high-proficiency group of the participants had no development in the mean score of writing content after the peer-review strategy practice (see Figure 4.2, p. 153). The high-proficiency group's no improvement of the average score in writing content in the final drafts could raise an issue of whether the paired classmates' feedback was comprehensible to the high-proficiency participants. It is noticeable, from Table 5.3, that the majority of participants (approximately 46%) perceived writing content as the most difficult component to revise in accordance with what their classmates previously provided feedback. In the current study, among 22 out of 46 (around 48%) participants

who were paired with the high-proficiency group (see the next Table 5.4, p. 186), there were four pairs of participants in the high-high proficiency group, four pairs in the high-middle proficiency group, and three pairs in the high-limited proficiency group. Thus, it would highly be probable, with almost 50% of the participants who were paired with the high-proficiency participants, that the responses to items 2 and 3 in Table 5.3 were drawn from the paired high-proficiency group. That is, the high-proficiency participants were likely paired with the classmates whose feedback on writing content might be incomprehensible and this arguably made most high-proficiency participants unsure of their classmates' feedback (item 3 in Table 5.3, p. 180). Correspondingly, the responses of the majority of participants (approximately 52%) who could be the high-proficiency participants' classmates also perceived writing content as the most difficult criterion to be commented in the high-proficiency participants' tasks (item 2 in Table 5.3, p. 180). Therefore, the perceptions of challenges of as well as the confidence in writing assessment of content faced by the high-proficiency group paired with those of same and/or different proficiency levels could, to some extent, influence the development of their average score of writing content. Due to this, the high-proficiency participants' perceived difficulties in assessing writing content and understanding the classmate's feedback on writing content (items 2 and 3 in Table 5.3, p. 180) would be detrimental to their writing performance on content in their revised drafts (Figure 4.2, p. 151). However, most high-proficiency participants (around 76%) agreed that the peer-review strategy helped develop more writing confidence in grammar (item 5 in Table 5.3, p. 180), which may account for their improved mean score of grammar in writing development (Figure 4.2, p. 151 in Chapter 4).

There is not always a clear-cut study of the direct relationship between students' perceptions of strategy feedback and their writing performance. Several studies found students' perceptions of feedback affected writing motivation and thus writing performance (Bruning & Horn, 2000; Duijnhouwer, Prins, & Stokking, 2012; Hyland & Hyland, 2006b). Nonetheless, it does not always confirm that students' perception of peer feedback has influenced their writing performance. The study by Busse (2013) found that first year students perceived feedback practices as not beneficial despite improved writing proficiency. Strijbos, Narciss, and Dunnebier (2010) found no relationship between students' perceptions of peer feedback and the efficiency of their writing revision. Similarly, Huisman, Saab, van Driel, and van den Broek (2018) also found that there was no direct relationship between perceptions of peer feedback and students' writing performance.

In the current study, the development of three-proficiency groups' writing performance in relation to writing assessment criteria for organisation, content and grammar after the review strategy practices (Figures 4.1 and 4.2 from Chapter 4) and all of their perceptions of review strategies in relation to writing development (Table 5.3) can also be in support of the additional evidence of in-depth data collection from the final-draft writing task scripts of the participants. The overall results of revision analysis of the final drafts of all 46 participant writers, when they were paired by similarity or difference in level, based on their English language proficiency (see Table 3.4, p. 67), are shown in Table 5.4.

Table 5.4

Proportions of the participants' revision cases

Review strategies undertaken by three proficiency groups (n = 46)	The number of students undertaking revision (%)			
	Revision change		No revision change	
	Form- based	Meaning- based	Form- based	Meaning- based
▪ Self-review: Self-revision (Essay Task 1: 'Censorship')				
High (n = 15: 3HSc; 12HEd)	9 (60)	6 (40)	2 (≈ 13)	4 (≈ 27)
Middle(n = 16: 8MSc; 8MEd)	9 (≈ 56)	5 (≈ 32)	0	3 (≈ 19)
Low (n = 15: 9LSc; 6LEd)	8 (≈ 53)	2 (≈ 13)	1 (≈ 7)	13 (≈ 87)
▪ Peer-review: Paired peer-revision (Essay Task 2: 'Live Concerts')				
High (H)				
(H-H) (4 pairs / 8 students: (HEd2-HEd8), (HEd3-HEd9), (HEd4-HEd6), and (HSc11-HSc14))	6 (≈ 75)	1 (≈ 13)	0	7 (≈ 88)
(H-M) (4 pairs / 8 students: (HEd5-MEd15), (HEd7- MEd16), (HEd12-MEd19), and (HEd13-MEd17))	5 (≈ 63)	1 (≈ 13)	0	5 (≈ 63)
(H-L) (3 pairs / 6 students: (HEd1-LEd45), (HEd24- LEd33), and (HSc10-LSc46))	4 (≈ 67)	2 (≈ 33)	0	3 (50)
Middle (M)				
(M-M) (3 pairs / 6 students: (MEd20-MEd21), (MSc18- MSc26), and (MSc28-MSc29))	3 (50)	2 (≈ 33)	0	3 (50)
(M-L) (6 pairs / 12 students: (MEd22-LEd42), (MEd25- LEd32), (MSc23-LSc43), (MSc27-LSc44), (MSc30- LSc35), and (MSc31-LSc40))	6 (50)	2 (≈ 17)	1 (≈ 8)	9 (75)
Limited (L)				
(L-L) (3 pairs / 6 students: (LEd38-LEd41), (LSc34- LSc36), and (LSc37-LSc39))	3 (50)	2 (≈ 33)	0	2 (≈ 33)

- Remarks.*
1. Proportion (%) refers to the number of the students who made the final-drafted textual changes being compared with the marked feedback in their first drafts, in relation to the total number of the students in each proficiency group. The proportion was measured by two external raters and me as the participants' teacher.
 2. The participants' proficiency levels were categorised into three groups: high (H), middle (M), and limited (L) levels based on their scores of CU-TEP.
 3. Based on the English proficiency groups, the CU-TEP scores of all 20 Science (Sc) and 26 Education (Ed) participants were put together, ranked from maximum (i.e. number 1) to minimum (i.e. number 46) scores, and categorised in accordance with the standardised score ranges (see Table 3.4).
 4. Paired groups reflected their reciprocal editing in feedback mechanism (e.g. H-L refers that a high proficiency participant edited a limited proficiency participant's first-draft written task, and vice versa.) (Figure 2.1).

Table 5.4 demonstrates the proportions of different cases of revision (i.e. revision change or no revision change) in relation to self-review and peer-review strategies. It is noted that the case of no revision change in the table represents the case in which a participant writer received corrective feedback, provided by the writer himself/herself or the writer's paired classmate, on the first draft but did not actually make any change in the final draft. The reasons why the high-proficiency group had no improvement in the mean score of writing content except for grammar (Figure 4.2, p. 153) and why the group had perceived difficulties in assessing writing content and understanding their classmates' feedback on writing content (items 2 and 3 in Table 5.3, p. 180) are in support of the highest proportions of revision cases in the paired high-proficiency group from Table 5.4.

In order to elaborate more on the highest proportion of revision cases in the paired high-proficiency participants, it was found from Table 5.4 that approximately 75% of high-high proficiency pairs, approximately 63% of high-middle proficiency pairs, and approximately 67% of high-limited proficiency pairs tended to make revisions through form-based changes in grammar and produced no meaning changes to the text. Samples of final draft scripts of a high-high proficiency pair, Participants HSc11 and HSc14 are shown in Table 5.5.

Table 5.5

Peer-review: Paired participants HSc11's and HSc14's revisions

HSc11's first draft	HSc11's final draft
This is an response to Seoulman's comments that live concerts are awful. I strongly disagree with that viewpoint. Although many people hold this view and think that live concerts are bad, I'd like to present my perspective on this. First, Live concerts give you are good time with your friends. They are also funnier than listen to music albums too. According to LeAnn who really loves concerts, she said that she enjoyed the interaction with her friends, and the rest of the audience as well as her favourite musicians. She had a really great time there in singing, dancing and shouting. She also said that it is better than listen to music alone at home because it is boring. For this reason, this is why live concerts are good. Another reason is that live concerts can bring you get closer to the artists you like. You can enjoy doing many activities with them. For example, In general live concerts. They have many special souvenirs you can't buy in other places. Also, when you buy them, you may ask for artist' sign or take pictures with artists. This make live concerts more funnier. All in all, I believe that live concerts are amazing. Not only do they make relationships with your friends, it also gives you a change to meet your favourite artists too. (223 words)	This is an response to Seoulman's comments that live concerts are awful. I strongly disagree with that viewpoint. Although many people hold this view and think that live concerts are bad, I'd like to present my perspective on this. First, live concerts give you are good time with your friends. They are also funnier than listen to music albums too. According to LeAnn who really loves concerts, she said that she enjoyed the interaction with her friends, and the rest of the audience as well as her favourite musicians. She had a really great time there in singing, dancing and shouting. She also said that it 's better than listen to music alone at home because it is boring. For this reason, this is why live concerts are good. Another reason is that live concerts can bring you get closer to the artists you like. You can enjoy doing many activities with them. For example, in general live concerts, they have many special souvenirs you can't buy in other places. Also, when you buy them, you may ask for artists' autographs or take photoes with artists. This makes live concerts more funnier. All in all, I believe that live concerts are amazing. Not only do they make relationships with your friends, but it also gives you a chance to meet you favourite artists. (223 words)

Table 5.5

Peer-review: Paired participants HSc11's and HSc14's revisions (continued)

Hsc14's first draft	HSc14's final draft
I would like to give my arguments against a post by SeoulMan which it said that live concert are awful because of too crowded people. It's also incredibly noisy. Although many people hold that view, I would like to present my viewpoint about live concert. First, you can enjoy with your friends and it would be such an awesome memory in your teenage life. According to LeAnn's comment, he could enjoy the interaction with his friends, and the rest of the audience as well as his favorite musicians. They sang, danced and shout and had really great time together. So he thinks buying CDs and listen at home alone don't have as much fun as in live concert. Moreover, live concert would give you in the difference feeling from watching it through CDs. For example, in the comedy talk show, you might feel that gags are more funny when you are in live talk show with your friends around. All in all, you have to admit that live concert is awesome because you could be a part of it and enjoy with it. It would be a new experience and you would have fun a lot! (196 words)	This is a response to a post by SeoulMan which is said that live concerts are awful because of too crowded people. It's also incredibly noisy. Although, many people hold that view, I would like to give my arguments against that viewpoint. First, you can enjoy with your friends and it would be such as awesome memory in your teenage life. According to LeAnn's comment, he could enjoy the interaction with his friends, and the rest of the audience as well as his favorite musicians. They sang, danced and shout and had really great time together. So he thinks buying CDs and listen to it at home alone don't have as much fun as in live concerts. Moreover, live concerts would give you in the difference feeling from watching it though CDs. For an example, in the comedy talk show concerts, you <u>will</u> feel that gags are more funny when you are in live concerts with you friends around. All in all, you have to admit that live concert is better than watching though TV or CDs because you could be a part at it and enjoy with it. It would be a new experience and you would have a lot of fun. (203 words)

Notes. □ = form-based change; = no revision change in meaning.

In Table 5.5, paired first and final drafts which were produced by the paired participants HSc11 and HSc14 are provided together with the revisions made in their final-drafted essays entitled, 'Live Concerts'. After doing the peer-review strategy practice, it can be observed from the revisions in Table 5.5 that the revisions of Participants HSc11 and HSc14 in the final drafts could improve or worsen the quality of the writing pieces in

relation to organisation, content and grammar. This would depend on the feedback quality of the participants' paired classmates as well as the participant writer's revision quality (Ferris & Hedgcock, 2014; Goldstein, 2006).

In the aspect of the quality of the peer feedback which possibly affects the student writer's subsequent revision quality, the paired classmate HSc11's feedback was provided in relation to the writing task criteria (i.e. organisation, content and grammar) in the participant HSc14's first draft. Simultaneously, the participant HSc14 also provided feedback on the participant HSc11's first draft. What was found quite obvious relating to revision cases in Participant HSc14's final drafts is that marked feedback was provided on grammar but was not on content and organisation, thereby resulting in most changes to form-based grammar, followed by no revision change in the meaning of the texts. Interestingly, in the case of no revision change in the meaning of the text, it could be seen from Table 5.5 that Participant HSc11's no provision of feedback on writing organisation and content in Participant HSc14's first draft might worsen or not influence the quality of Participant HSc14's final-drafted essay. That is, in Participant HSc14's final draft, the second main reason on the first two lines of the last paragraph ("*... live concerts would give you in the difference feeling from watching it though CDs.*") sounds similar to the supporting ideas of the first main reason on line 6 in the second paragraph (i.e. "*... So he thinks buying CDs and listen to it at home alone don't have as much fun as in live concerts.*"). This made the content of these two paragraphs seemingly share only one main idea. In this study, the participants were taught to provide one main idea

together with supporting ideas in each paragraph in the argumentative essay. Accordingly, the writing content was scored as 3.75 out of 6 points which is somewhat low, compared with other participants in the ‘high’ proficiency group.

Referring to the main results from Table 5.4, the form-based changes in revision cases were made most in both self-revision and peer-revision. Regarding paired peer-revision, when the participants were paired with their classmates from the same proficiency levels and from the high-proficiency group to edit each other’s tasks, they tended to make form-based changes most in their revision. This is consistent with the results of the study by Srichanyachon (2011) which showed that in a writing task, ten Thai undergraduate students in Bangkok University made more form-based changes in peer-revision.

However, such results of making more form-based changes in revision in the current study are inconsistent with those of the studies by Kamimura (2006), Wakabayashi (2008), and Wang (2015). The study by Kamimura (2006) showed that 12 first-year Japanese university students in the high proficiency group tended to make meaning-based revisions, whereas those in the low proficiency group made form-based revisions. In Wang’s (2015) study, three Chinese EFL students whose English proficiency levels were high, intermediate, and low were paired with their classmates of similar levels of English proficiency (i.e. high-high, intermediate-intermediate, and intermediate-low) in a writing class. They were required to revise their first drafts through self- and peer-feedback. It was found that the high proficiency pairs predominantly made meaning-based changes, while the low proficiency pairs made mainly form-based changes in revision. However,

the study by Wakabayashi (2008) found that 25 Japanese university students at elementary and intermediate levels made more meaning-based changes than form-based ones in peer-revision.

In contrast with these three studies (Kamimura, 2006; Wakabayashi, 2008; Wang, 2015), the current study showed that the student writers in the high, middle, or limited proficiency groups all tended to principally make form-based changes and/or no meaning-based changes. This may be because every student in the current study was still regarded as being an inexperienced writer despite being engaged in the writing workshops. As Faigley and Witte (1981) rationalised, inexperienced writers are likely to change surface points, but not the meaning or concept of their texts. Similarly, Paulus (1999) also found eleven international students from a pre-freshmen composition class at a university made more surface than meaning-based changes in revision. This issue of novice writers could be a viable proposition why most students of all proficiency groups in the current study made surface changes rather than meaning-based changes in their revision. Additionally, the majority of the limited proficiency students made no change, particularly in the meaning of the text, in their revision. This could be because all of them were first-year students who had no prior knowledge of argumentative essay writing or review strategy practice.

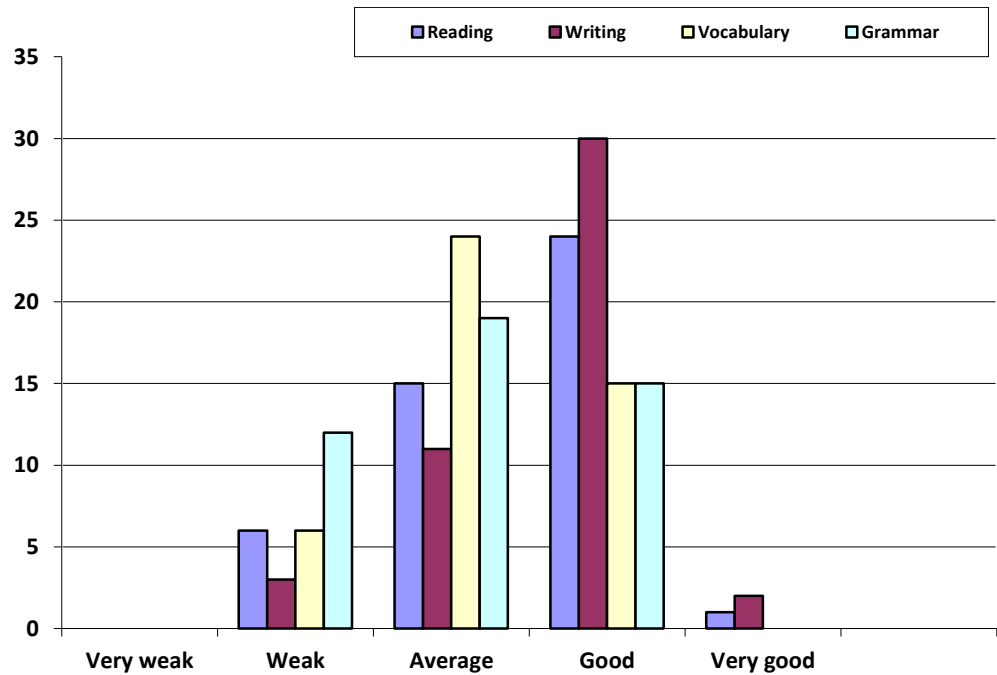
In the current study, from the final-draft writing task scripts of all 46 participants, it was also found that when participants of different proficiency levels were paired with each other (i.e. high with limited, high with middle, and middle with limited proficiency

participants) in providing writing feedback and editing their pairs' first drafts, they mainly produced similar revision patterns – no revision changes at the meaning level affecting the concept of the text – as those in the paired high-proficiency group. Although these pairs of varying proficiency participants made changes at the form-based level, such changes did not affect the content of the text (Faigley & Witte, 1981; Kamimura, 2006).

5.2.3 Post-task questionnaire responses: Perceptions after the implementation of review strategies

Referring to the 12-item post-task questionnaire, the participants' responses to the first item of the questionnaire show how they perceived their current levels of English language skills after doing the review strategy practices as in Figure 5.2.

No. of responses



After RS	Very weak	Weak	Average	Good	Very good
Reading	0	6	15	24	1
Writing	0	3	11	30	2
Vocabulary	0	6	24	15	0
Grammar	0	12	19	15	0

Note. RS stands for review strategies.

Figure 5.2. Participants' perceived levels of English language skills after the implementation of review strategies.

From Figure 5.2, after undertaking the review strategies, all participants mostly perceived their English-language skills of reading (24 participants or around 52%) and writing (30 participants or about 65%) at the 'good' level. They perceived vocabulary (24 participants or about 52%), and grammar (19 participants or about 41%) at the 'average' level.

Next, their responses to the other 10 five-point Likert scale post-task questionnaire items are shown in Table 5.6.

Table 5.6

Participants' perceptions of self-review and peer-review strategies after implementing review strategies

I think, ...	Perceptions of pre-use of review strategies (n = 46)		
	Mean	SD	Level of agreement
1. Self-review strategy helps develop my writing skills.	4.17	0.44	Agree
2. Peer-review strategy helps develop my writing skills.	4.15	0.42	
3. Self-review strategy helps develop my writing content.	4.11	0.43	
4. Peer-review strategy helps develop my writing content.	4.09	0.51	
5. Self-review strategy helps develop my writing organisation.	4.33	0.56	
6. Peer-review strategy helps develop my writing organisation.	4.35	0.53	
7. Self-review strategy helps develop my grammar accuracy.	4.09	0.41	
8. Peer-review strategy helps develop my grammar accuracy.	4.11	0.38	
9. Self-review strategy is useful to me.	4.44	0.50	
10. Peer-review strategy is useful to me.	4.39	0.49	

From Table 5.6, the participants' responses to all ten post-task questionnaire items from items 1 to 11 were interpreted at the 'agree' level from the mean scores of 4.09-4.44 ($SD = 0.38-0.56$) (see Table 3.9, p. 113). This means that after the implementation of review strategies, all participants agreed that both self-review and peer-review strategies were useful and helped develop their writing skills, writing content, organization and grammar. Referring to the last item of the open-ended post-task questionnaire item, 11 % of the participants (five out of 46) shared their responses which showed their positive perceptions in the way of their appreciation of initiating the review strategy activities for them.

Following the analysis of the data from the pre-task and the post-task questionnaires as shown in Section 5.2.1(b) (p. 174) and Section 5.2.3 (p. 193), comparisons of the participants' perceptions of the pre-use and the post-use of review strategies are demonstrated in the next section.

5.2.4 Comparisons of Perceptions of the pre-use and post-use of review strategies

The comparisons of the participants' responses to 11 items of five-point Likert scale pre-task questionnaire (Table 5.2, p. 176) and post-task questionnaire (Table 5.6, p. 195) in relation to the perceptions of their current English language skills and those of the review strategies in relation to writing development are shown in the respective sub-sections (a) and (b).

(a) Perceived current English language skills

The participants' responses to the perceptions of their current English language skills before implementing the review strategies in item 8 of the pre-task questionnaire (Appendix 3, p. 291) and those after implementing the review strategies in item 1 of the post-task questionnaire (Appendix 10, p. 308) are compared. The number of the participants' responses retrieved from Figure 5.1 (p. 173) and that from Figure 5.2 (p. 194) are shown below.

Before RS	Very weak	Weak	Average	Good	Very good
Reading	3	14	24	5	0
Writing	3	14	27	2	0
Vocabulary	1	10	26	9	0
Grammar	7	17	21	1	0

(Figure 5.1.)



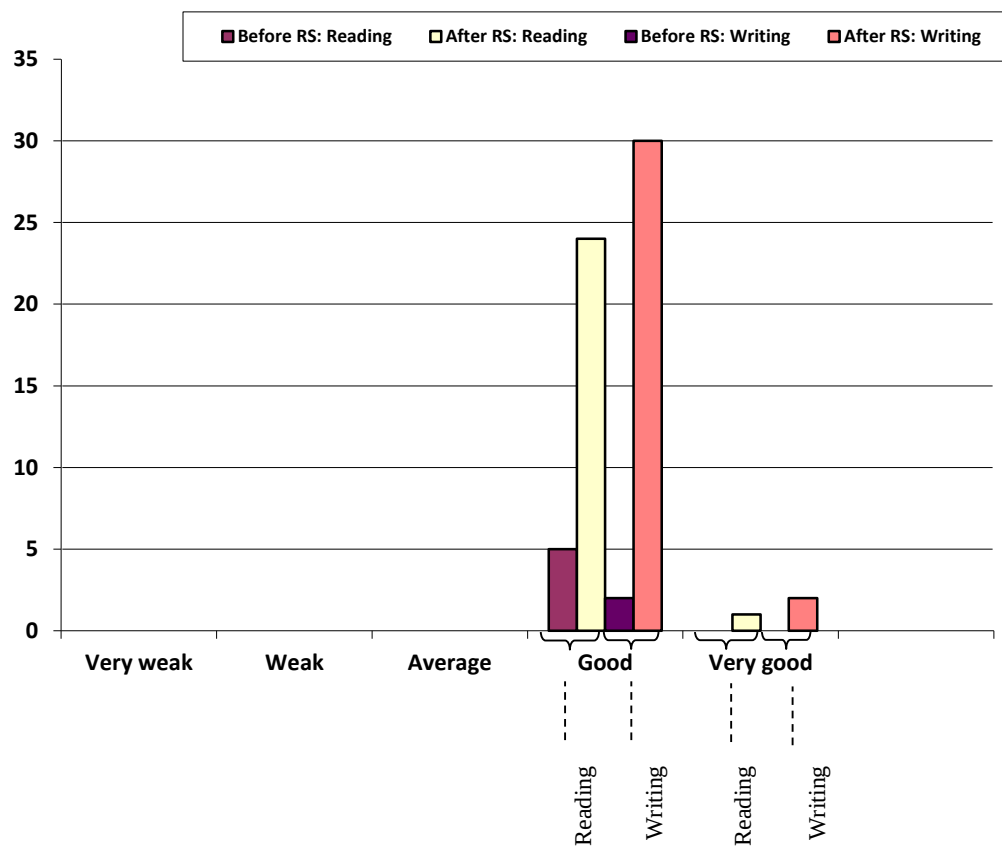
After RS	Very weak	Weak	Average	Good	Very good
Reading	0	6	15	24	1
Writing	0	3	11	30	2
Vocabulary	0	6	24	15	0
Grammar	0	12	19	15	0

(Figure 5.2.)

According to the retrieved number of the responses from Figure 5.1 and Figure 5.2 above, it is evident that the student participants viewed their current levels of English language skills differently. This could be because the implementation of review strategies may affect, to some extent, the participants' perceptions of their current English language skills. After the participants used the review strategies, they viewed their English language skills, particularly in writing and reading, at the improving level. That is, before using review strategies, the majority of participants (i.e. 27 out of 46 participants or approximately 57%) perceived their English language writing skills at the 'average' level (see Figure 5.1). However, after using the review strategies, most of them (i.e. 30 out of 46 participants or approximately 65%) viewed their writing skills at the 'good' level (see Figure 5.2).

Moreover, after utilising the review strategies, none of the participants apparently perceived any of their English language skills at the very weak level and at the same time, some of them viewed their reading skills (i.e. one out of 46 or approximately 2%) and writing skills (i.e. two out of 46 participants or 4%) at the very good level. Shifts in the participants' perception of their current English language skills are compared and depicted as in Figure 5.3.

No. of responses



Reading	Very weak	Weak	Average	Good	Very good
Before RS				5	0
After RS				24	1
Writing	Very weak	Weak	Average	Good	Very good
Before RS				2	0
After RS				30	2

Note. RS stands for review strategies.

Figure 5.3. Comparison of participants' perceived levels of reading and writing skills before and after the implementation of review strategies.

Regardless of a few participants rating their reading and writing skills at the very good level, the results provide a vital clue for the upward trends in the participants' perception shifts in their levels of the English language skills after the implementation of the review strategies. In Figure 5.3, it was also found that the majority of the participants' perceptions of their reading and writing skills substantially shifted from five to 24 participants (i.e. approximately 41% increasing) for the reading skills and from two to 30 (i.e. approximately 61% increasing) after the implementation of the review strategies.

The upward trends of the perception shift in English language reading and writing skills after the participants experienced the review strategy practice, as demonstrated in Figure 5.3, could signify that the use of review strategies arguably impacted their perceptions of their English language reading and writing skills. Both skills are obviously essential for review strategy practices. The participants needed to have adequate skills of reading and writing to comprehend an assigned writing task before starting to write it as well as their classmates' written tasks before providing their written feedback. Prior to the use of the review strategies, in one of the pre-task questionnaire items regarding the participants' out-of-class self-study (Table 5.1, p. 170), writing appeared to be the skills that the participants chose to do self-study on the least (five out of 46 or about 11%). This could indicate that the participants had relatively low levels of motivation to learn or develop their writing skills by themselves before the use of review strategies. However, after they used the review strategies in their writing, the majority of them (30 out of 46 or around 65%) perceived their skills of English language writing, in a different and positive way, to be at the 'good' level. This could also imply that they might feel

confident enough to perceive their writing skills at the ‘good’ level after the use of review strategies. Thus, it could be said that the use of review strategies is an additional input of practicing writing, and this could provide the participants with motivation to learn and develop their writing skills as well as strengthen their writing confidence (Iraji et al., 2016).

The next sub-section demonstrates a comparison drawn into the participants’ responses to the perceptions of the use of review strategies between the pre-task questionnaire and the post-task questionnaire.

(b) Perceived use of review strategies in relation to writing development

The statistical analyses of a comparison of the participants’ perceptions of the pre-use and the post-use of review strategies between the 10-item pre-task questionnaire (i.e. items 10 to 19) and the 10-item post-task questionnaire (i.e. items 2 to 11) were conducted item by item. All analyses from the Appendices are summarized in Table 5.7.

Table 5.7

Participants' perceptions of the pre-use and post-use of review strategies

I think, ...	Perceptions				F	Sig.
	Pre-use of review strategies (n = 46)		Post-use of review strategies (n = 46)			
	Mean	SD	Mean	SD		
1. Self-review strategy helps develop my writing skills.	3.30	0.63	4.17	0.44	9.865	.002*
2. Peer-review strategy helps develop my writing skills.	3.30	0.63	4.15	0.42	12.605	.001*
3. Self-review strategy helps develop my writing content.	3.13	0.45	4.11	0.43	.200	.656
4. Peer-review strategy helps develop my writing content.	3.13	0.45	4.09	0.51	.0439	.843
5. Self-review strategy helps develop my writing organisation.	3.00	0.56	4.33	0.56	6.250	.014*
6. Peer-review strategy helps develop my writing organisation.	3.00	0.56	4.35	0.53	5.691	.019*
7. Self-review strategy helps develop my grammar accuracy.	3.11	0.48	4.09	0.41	.964	.329
8. Peer-review strategy helps develop my grammar accuracy.	3.11	0.48	4.11	0.38	1.243	.268
9. Self-review strategy is useful to me.	3.39	0.54	4.43	0.50	.004	.951
10. Peer-review strategy is useful to me.	3.39	0.54	4.39	0.49	.263	.609

Note. * Significance at .05 level.

All participants' responses to the pre-task questionnaire before the implementation of review strategies and to the post-task questionnaire after the completion of review strategy practices were compared to examine whether and how their perceptions of

review strategies altered. As shown in Table 5.7, the results indicate how different the participants rated their perceptions of self-review and peer-review strategies. The levels of their perceptions were interpreted based on Table 3.9 (p. 113) regarding the rating scores used in the Likert scale questionnaires.

Four items in Table 5.7 were found to be statistically significantly different. Referring to item number 1 in the table, before using review strategies, the participants were indifferent to whether the self-review strategy helped develop their English-language writing skills ($M \approx 3.30$, $SD \approx 0.63$); however, they changed their view after using the strategy ($M \approx 4.17$, $SD \approx 0.44$). That is, they perceived that the self-review strategy significantly helped develop their writing skills after using the strategy at the .05 level of significance ($F \approx 9.87$, $p < .05$). Secondly, the participants were also indifferent to whether the peer-review strategy helped develop their writing skills (item number 2) before undertaking the strategy ($M \approx 3.30$, $SD \approx 0.63$). However, they agreed that the peer-review strategy helped develop their writing skills after using the strategy ($M \approx 4.15$, $SD \approx 0.42$). In the end, they perceived that the peer-review strategy significantly helped develop their writing skills after using the strategy at the .05 level of significance ($F \approx 12.61$, $p < .05$). Next, before implementing the strategies, they also felt indifferent to whether the self-review strategy and peer-review strategy helped develop their writing organisation ($M \approx 3.00$, $SD \approx 0.56$) stated in items 5 and 6, respectively. However, after undertaking the review strategies, they accepted that the self-review strategy ($F \approx 6.25$, $p < .05$) and the peer-review strategy ($F \approx 5.69$, $p < .05$) significantly helped develop their writing organisation at the .05 level of significance. Apart from these, the

participants' overall perceptions of the review strategies stated in the ten items from Table 5.7 were at the 'neutral' level before they implemented the strategies ($M \approx 3.00-3.39$, $SD \approx 0.45-0.63$); however, were altered to the 'agree' level to all items after undertaking the strategies ($M \approx 4.09-4.43$, $SD \approx 0.38-0.56$).

With the data of the statistically significant results previously interpreted, the significant outcomes of the participants' perceptions that the self-review strategy helped develop their writing skills (item number 1 from Table 5.7) and that the peer-review strategy helped develop their writing skills (item number 2) are consistent with the significant findings of research question 1 regarding the effect of review strategies on the participants' writing performance (Table 4.1, p. 121 and Table 4.2, p. 124). Additionally, the statistically significant result of the participants' perception that self-review strategy helped develop writing organisation in the questionnaire item number 5 from Table 5.7 (p. 202) correlates with the finding of the highest mean score of writing development in writing organisation of the high-proficiency group of participants after the self-review strategy practices (Figure 4.1, p. 151). Furthermore, the statistically significant finding of their perception that the peer-review strategy helped develop writing organisation in the questionnaire item number 6 (Table 5.7) is also related to the result of the highest mean score of writing development in writing organisation of the middle-proficiency group of participants after the peer-review strategy practices (Figure 4.2, p. 153). To sum up, it could be indicated that the significant outcomes from Table 5.7, derived from research question 3, correlate with those from research questions 1 and 2 of the study.

After the post-task questionnaire and the writing post-test were administered, an interview was conducted at the final stage of data collection procedures (see Table 3.6, p. 87). The analysis of the participants' interview responses is summarised in the next section.

5.3 Responses to semi-structured interview

In this part, in order to answer Research Question 3 (i.e. *What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?*), the semi-structured interview contains three questions:

1. *In your opinion, how useful was the writing workshop on the review strategy practices?*
2. *Please compare self-review and peer-review. Which one do you prefer? And why?*
3. *Any suggestion(s) about the workshop and/or the review strategies?*

The two questions (i.e. questions 1 and 3) are related to the writing workshop on the review strategies and other suggestions (if any) about the workshop and/or the review strategies. The second interview question is related to the perceptions of the preferences for either self-review or peer-review strategy.

Out of 46 participants, twelve of them (six males and six females) voluntarily partook in an interview. The 12 participants came from three varying proficiency groups from the faculties of Science and Education. Within three individual proficiency groups, out of

four participants, two were Science students and the other two were Education ones. On account of the 11-week long interval between the beginning of the current study and the interview week (see Table 3.6, p. 87), all 12 participants were re-informed about the conduct of the study and their voluntary participation. Based on the anonymity of the study, all of their names were identified, in the interview results, by the assigned codes: HSc1M, HSc2M, HEd3M, HEd4F, MSc5F, MSc6F, MEd7F, MEd8F, LSc9M, LSc10M, LEd11M, and LEd12F. Each code assigned to 12 participants consists of the respective initial letters of the level of proficiency groups (i.e. High, Middle, and Limited), the discipline (i.e. Science and Education), the number of a participant in the interview (i.e. 1 to 12), followed by a participant's gender (i.e. Male and Female).

Through semi-structured interview responses, the analyses of the participants' perceptions of the use of review strategies in relation to writing development are demonstrated in two following sections. These sections will focus on the aspects of the use of overall review strategies and individual self-review and peer-review strategies.

5.3.1 Perceptions of the use of overall review strategies

The interview response scripts were assessed and categorised based on the interview questions. From the interview response scripts, all 12 participants perceived the writing workshop on the review strategy practices in overall favourable ways, as evidenced by the following excerpts based on the interview question 1 (*"In your opinion, how useful was the writing workshop on the review strategy practices?"*) and the related interview question 3 (*"Any suggestion(s) about the workshop and/or the review strategies?"*):

Excerpt 1: HSc1M

I think the workshop helped enhance my writing skills which will also be used in future. [...] As the workshop was already good, I don't have any suggestion. I am satisfied with it.

Excerpt 2: HSc2M

The workshop was good. It helped develop my writing performance. [...] Hmm, no, I don't have any suggestion.

Excerpt 3: HEd3M

Overall, the workshop offered learners opportunities to practise writing. From my very first time, I didn't know how to write nor use grammar correctly. But after the workshop, I think I could organise my ideas better. When I took a writing test, I felt I could do it more easily than before. [...] My suggestion is to have the lecturer teach more various types of writing (if time allows in the course syllabus).

Excerpt 4: HEd4F

Generally speaking, I felt good about the workshop. It helped me able to review my knowledge such as grammar and vocabulary. I didn't know before that I had made errors about these or those points for so many years. But when I attended the workshop, I realised that I made those errors for so many times and this made me lose scores in those previous exams. [...] Well, the workshop was already good. My suggestion for the writing workshop is that if there was no writing score, it would help lessen my writing pressure. It may also lessen my motivation to write but just only a little.

These four high-proficiency students viewed that the writing workshop on the review strategy practices helped develop their writing skills and performance, particularly in grammar, vocabulary and writing organisation. The students' perceptions through interview responses appear correlated with those through

questionnaire responses (see item number 1 and number 2 from Table 5.7, p. 202) and with the statistically significant improvement of the participants' writing test score (see Table 4.1 (p. 121) and Table 4.2 (p. 124)). The students also revealed that the writing workshop also made almost all of them (i.e. participants HSc1M, HEd3M, and HEd4F) reflect on their previous writing experience and be aware of the usefulness of the workshop. The students' interview responses to the usefulness of the writing workshop covering the review strategy practices could signify an association with their pre-task and post-task questionnaire responses to items number 18 and 19 (Table 5.2, p. 176) and items number 9 and 10 (Table 5.6, p. 195). In addition, fifty percent of the high- proficiency participants made further suggestions about having a wider variety of writing tasks in case of class time availability and having no formative assessment score in writing. Both issues of their suggestions will be raised in the implication part of the next chapter.

In addition to the benefits of the writing workshop similarly viewed by the high- proficiency group, the middle-proficiency group found the workshop provided them with intense writing activities to practise writing and sharpen their writing skills. Their interview excerpts are as below:

Excerpt 5: MSc5F

At that time, when I heard about the workshop from the lecturer, I thought there would be some normal writing activities, not intense like this. But I found later that such intense workshop gave me chances to practise my writing much more than my friends' different sections. I even tried reading my friends' written tasks which I found not accurate. [...] (no any other suggestion).

Excerpt 6: MSc6F

I like the workshop because I had chances to practise my English language writing and grammar. And when I corrected my friend's written task and vice versa, we then knew how our errors in writing happened. We could compare the errors with each other and had a chance to revise our work. We learnt these from the workshop. [...] Hmm, no other comments for the workshop.

Excerpt 7: MEd7F

About the workshop, I had a chance to correct my own writing. This helped develop my writing, review my grammatical knowledge, and know how to give reasons to support an idea. I think this could help my writing get better and better. [...] (no any other suggestion).

Excerpt 8: MEd8F

I think the workshop was very good. I could practise writing more and this would help me feel not so nervous about taking the university writing exam. I also learnt how to write essays in the well-organised formats and with the correct use of grammar from the workshop. I also found that in other sections, my friends did not have a chance in practising their writing as much as did in this workshop. [...] For my other comments, if this workshop is organised to other students in future years, it will be so useful to them because they will have more chances to practice writing again and again through process-based writing. Practice makes perfect!

Participant MEd7F added that the workshop helped develop her writing content and organisation (Excerpt 7). These interview responses were found related to the questionnaire responses to items number 3 to 6, indicating that review strategies

helped develop their writing content and organisation (Table 5.6, p. 195) and to the statistically significant results of the questionnaire responses to items number 5 to 6 (Table 5.7, p. 202) with the confirming result.

Since students are engaged in review strategies during process-based writing, they have opportunities to use their knowledge to practise how to provide feedback and revise their written tasks. This assists the students in developing their sense of success and writing confidence (Iraji, Enayat, & Momeni, 2016; Memari Hanjani, 2016; Pritchard & Honeycutt, 2007; Sotoudehnama & Pilehvari, 2016; Wakabayashi, 2008). In the current study, three out of eight participants (approximately 38%) from the high- and middle-proficiency groups (i.e. participants HEd3M, HEd4F, and MEd8F) also shared their experience about the practicality of the review strategy practices in their exams. The high-proficiency participant HEd3M shared his sense of achievement derived from the review strategy practices: *“When I took a writing test, I felt I could do it more easily than before.”* (Excerpt 3, p. 207). Additionally, the middle-proficiency participant, MEd8F also implied her sense of writing confidence after the review strategy practices: *“... and this would help me feel not so nervous about taking the university writing exam.”* (Excerpt 8, p. 209). It can also be seen from Excerpt 8 that the participant’s acceptable level of nervousness was possibly derived from the influence of process-based writing. This is because the utilisation of the process approach is more effective than other approaches in terms of writers’ intellectual

and emotional development (Pritchard & Honeycutt, 2007). The participants' interview responses (Excerpts 3 and 8) correlate with the statistically significant writing score of the post-test (see Table 4.1 (p. 121) and Table 4.2 (p. 124)).

In addition to the mutual associations of the participants' interview responses in Section 5.3.1 with their questionnaire responses in Part 5.2 as well as with the significant findings of research question 1 (Table 4.1 and Table 4.2), there are further interesting issues to be raised from the interview responses.

The limited-proficiency group of the participants also shared more about their affective aspects of self-awareness of their English-language learning, performance and skills as the following excerpts:

Excerpt 9: LSc9M

Actually, first I felt why we got a load of work in the workshop. But when I continually did my work and had clear answers about my writing errors from the lecture, I then could find where I should have started at the beginning of the writing process. Though I am not good at and dislike English, I think this workshop motivated me to study English and write in English more. [...] My suggestion is about having a workshop for listening to and translating the English language songs.

Excerpt 10: LSc10M

I am not really good at grammar. This workshop helped me know what my grammatical errors were. Although I had English courses in my high school, particularly in my final year, my native English teacher assigned us to write essays but did not provide feedback on grammar at all. But when I attended this workshop, it really helped me know my grammatical mistakes and how to correct them. And I think, I could use what I learnt from the workshop in my future studies. [...] In writing workshop, when the

lecturer controlled the writing time for us, I felt pressured and rather forgot what I had read before while writing. ... Another of my problems is that I can't concentrate and produce ideas when I am in an air-conditioning classroom. ...

The participants' interview responses (Excerpts 9 and 10) indicate similar results of the study by Wiley and Gardner (2010) that the students who did self and peer assessment expressed their positive attitudes towards their own learning and became more aware of their learning. Wood et al. (2008) point out that self-assessment and peer assessment are regarded as two of the student-centred assessment techniques which help to create students' awareness of their learning and learning experiences. Additionally, involving themselves in the formative assessment in the writing workshop helped raise their learning awareness and develop their thinking skills (Gosling, 2009; Norton, 2009). Furthermore, Memari Hanjani (2016) revealed that all eight Persian EFL students viewed positively their paired revision tasks which helped enhance their self-awareness and self-monitoring skills.

From Excerpt 10, it is noticeable that in addition to the learner's external factor which is the classroom atmosphere, the internal factor similar to participant LSc10M's pressure on writing time is also a burden of his writing. As Goldstein (2006) adds that an external factor affecting language learners' feedback and revision is time constraints, two more excerpts regarding time constraints from two limited-proficiency students are:

Excerpt 11: LEd11M

From my opinion, I think my English is rather weak. After the writing workshop, my English especially writing was improved. Before I could not write well in English and my English writing performance was poor since my high school years. But when I practiced writing more and more, corrected my friend's work, and repeatedly correct my own work from my previous self-feedback and from my friend's feedback in the workshop, I think this is really good and could make my writing performance improve more than before. [...] (no any other suggestion).

Excerpt 12: LEd12F

I liked the workshop and felt surprised at it. I mean, I never experienced the writing processes like those in the workshop before. Since my high school years and previous university year, yes I restarted my first year university here, I was assigned to write an essay, submit it, and then take an exam. That's it. But in the workshop, I could share my work and correct it with my classmate. We could develop our writing in the workshop. This made my English writing skills develop. [...] For my suggestions about the workshop, regarding its benefits, it made me discover that I could develop myself much more than I thought. For its drawback(s), hmm, I just thought my English is poor, poorer than my classmate who I exchanged my work with. When I received his/her written work, I felt, wow, why s/he could write it so well... and as if I was surrounded by wise people. This turned out to cease my good intention of developing my English. Hmm, if possible, I want the time duration of the workshop would be longer than it was. Also, I felt stressful when I had to write within time limit. ...

In addition, all limited-proficiency participants mentioned their weaknesses of English language writing performance and skills. The limited-proficiency participant, LSc9M, also added his dislike of English (Excerpt 9, p. 211). However, the participant LEd11M pointed out that after doing the review strategy practices through the process-based writing helped enhance his writing performance (Excerpt 11). That is, these affective aspects regarding the limited-proficiency participants' perceptions of the weakness and dislike of English became positive after the participants used review strategy practices.

Similarly, the study by Covill (2010) revealed that after 61 university students in three Psychology classes received the formal self-review and peer-review approaches to revision instruction, they had positive attitudes towards the instruction. Since self-review and peer-review strategies in the current study involve self-assessment and peer assessment in the writing process, Wiley and Gardner (2010) explained that self- and peer assessment helped to create students' active engagement, learning motivation and subsequently the desired learning outcomes. Following their learning experience, their attitudes towards learning altered.

An illustration is in support of the participant LSc9M's response to the interview question 3 regarding the suggestion about adding listening to and translating the English language songs in the writing workshop. This indicates that the workshop could, to some extent, change his initial dislike of English and increase his motivation to learn the language (see Excerpt 9, p. 211). These could be due to the fact that in the review strategy practice, the students were assigned to write two pieces of argumentative essays at different but chronological weeks. Before submitting each writing task, individual students needed to provide their written feedback on the tasks as well as revise their own tasks after receiving the written feedback. With these systematic processes, they had repeatedly performed their writing in the process-based approach (i.e. participant MEd8F's Excerpt 8 (p. 209) and participant LEd11M's Excerpt 11 (p. 213)), thereby learning independently through their self-review strategy and learning cooperatively through the peer-review strategy in the reviewing stage of the writing process (Figure 2.1, p. 44). The main objective in the process-oriented approach to writing instruction is, as stated in

Pritchard and Honeycutt (2007), to enable students to utilise their cognitive and psychological skills in next writing tasks. In other words, the process-oriented approach can develop students intellectually and emotionally in the sense that the approach improves the students' writing attitudes and outcomes.

Another limited-proficiency participant LEd12F's response (Excerpt 12, p. 213) revealed her awareness of grammatical knowledge and confidence gained after the peer-review strategy practice as the benefits of the workshop. Her perceived improvements correlate with the writing score development in grammar of the participants at all proficiency levels (Figure 4.2, p. 153) and the highest rate of their perceived confidence in grammar (Item number 5 in Table 5.3, p. 180). She further shared her view on the drawback of the workshop in the way that working with a paired high-proficiency classmate frequently ceased her motivation to learn English. At this point, this drawback can be regarded as that of the peer-review strategy which will be further discussed in the next section, Section 5.3.2. Last but not least, the limited-proficiency participants LSc10M and LEd12F also experienced similar affective aspect that they felt stressful and pressured when they had to write within time limit. This issue of the necessity for time management will be pointed out in the implication part of the next chapter, Chapter 6.

5.3.2 Perceptions of the use of self-review and peer-review strategies

This section examines how the student participants perceived the use of individual self-review and peer-review strategies from their interview responses to the interview question 2.

Based upon the interview question 2, “Please compare between self-review and peer-review strategies. Which one do you prefer in relation to your writing development? And why?”, the participants’ response scripts are shown in the following excerpts.

Excerpt 13: HSc1M

I prefer peer-review strategy. I sometime didn't know my own weakness in writing and I could not find errors in my writing when doing self-review strategy practice. But when I did peer-review strategy practice, I could find my friend's writing errors. I could also adapt from what my friend wrote in my next writing. ... Since I think, I am keen on grammar, the peer-review strategy helped develop my writing content most. Sometimes, I could find a main idea from my friend's work.

Excerpt 14: HSc2M

I like both self-review and peer-review strategies. ... I think, after doing the peer-review strategy, I developed more in writing organisation. Writing content I think depends on the assigned writing topics which can be easy or difficult for me to generate ideas.

Excerpt 15: HEd3M

I think I prefer peer-review strategy. It offers me a chance in reading my friend's work. If I don't understand it, at least I know either my friend's writing errors or my reading comprehension problem. My friend and I could share and learn from our own writing errors which I tried not to repeat in the future writing exam. In the writing workshop, I think my writing content, organization, and grammar were all developed. ... If possible, I want to try to do a group review practice in the way that my written task would be reviewed by more than one friend and at the same time, I could review my friends' work. This could offer me chances to see a variety of friends' work.

Excerpt 16: HEd4F

I like both practices, particularly in the peer-review strategy. In general, we will submit our written task when we finish writing it. But with the self-review strategy, we could see our own errors. And when we do peer-review strategy practice, we can review how to assess writing content, organisation, and grammar. In the workshop, I think my grammatical knowledge was most improved.

Regarding the writing development of this high-proficiency group, the majority of them (three out of four) preferred the peer-review strategy, while one of them preferred both self-review and peer-review strategies. It is noticeable that these interview responses of the high-proficiency students run counter to the quantitative findings, despite a statistically significant difference in writing score development: after using self- and peer-review strategies. That is, in practice, the high-proficiency group had more writing development when doing the self-review strategy practices than when doing the peer-review strategy practices (see Table 4.6, p. 141). The counter-findings between the students' writing score data and their interview responses may be owing to the differences in the number of the participants involved. That is, the number of students used in the statistical calculation from Table 4.6 is all 14 high-proficiency students, while four were used in the interview. Thus, it is possible that the other ten students who did not participate in the interview process might have preferred the self-review strategy to the peer-review strategy in developing their own writing.

The high-proficiency students also found that their writing content, organisation and grammar were overall developed, albeit with different degrees. That is, participant HSc1M rated writing content, participant HSc2M rated writing organisation, participant HEd4F rated grammar, and participant HEd3M rated all content, organisation, and grammar as most developed after doing the peer-review strategy practice. Overall, these interview responses are in parallel with the statistically significant findings of writing

development after the implementation of review strategies in the group of high proficiency students (Table 4.6, p. 141).

Furthermore, participant HEd3M also suggested having a group review practice for a better opportunity to be exposed to a wider variety of written tasks (Excerpt 15, p. 216). The idea of having a group review is also highlighted across the middle-proficiency group. The middle-proficiency participant MSc5F also suggested doing review strategy practice as teamwork as shown in Excerpt 17 below.

Excerpt 17: MSc5F

I think the use of peer-review strategy could help develop my writing more than that of self-review strategy. ... I would suggest doing review strategy practice as teamwork. This could make us see a variety of idea creation and also help build up a rapport and positive working atmosphere. ... I think my writing content was developed most after the review strategy practices.

Both participants HEd3M's and MSc5F's suggestions about pair-work or teamwork in the review strategy practices are considered in Chapter 7. Further interview response excerpts are from the middle-proficiency group. Three of them are as below:

Excerpt 18: MSc6F

I like both self-review and peer-review strategies but I think the peer-review strategy helped improve more writing performance. When we self-review our own work, it is hard for us to find our writing errors. In contrast, it was much easier to find our friends' writing errors. ... I think, the review strategy practice helped develop my writing content, organisation, and grammar. The review strategy practice also made me aware of grammatical accuracy, such as tense usage, more.

Excerpt 19: MEd7F

I prefer the peer-review strategy practice. The practice developed my writing content most. I learnt how to give reasons or make the writing content logical.

Excerpt 20: MEd8F

I prefer working with my classmate and this made my writing content improved because I had a chance to learn from my classmate's different ideas which I could apply them with my future writing.

In this middle-proficiency group, all of them preferred the peer-review strategy practices in that it helped to mainly improve their writing content. Interestingly, the interview responses (Excerpts 18 to 20) of the participants in this middle-proficiency group revealed a strong connection with their highest writing score development in writing content after the peer-review strategy practices as shown in Figure 4.2 (p. 153).

Participant MSc6F added that the review strategy practice also raised her awareness of grammatical accuracy (Excerpt 18, p. 218). The participant's awareness-raising of language use is possibly derived from the revision practice which is a part of review strategies (John, 2009; Memari Hanjani, 2016; Rusinovci, 2015) and from process-oriented writing in which review strategies were implemented (Memari Hanjani, 2016; Rusinovci, 2015; Schlig, 2006). Furthermore, in Excerpt 8, the participant revealed that her writing performance improved more from practising peer review rather than self-review. Her positive perception of peer-review supports the study by Srichanyachon

(2011) which revealed the contributions of peer-review to self-awareness of writing components (i.e. organisation, content and grammar).

In the next limited-proficiency group, it was found that 50% preferred the self-review strategy (Excerpts 21 and 24), while the other half preferred the peer-review strategy (Excerpts 22 and 23) as evidenced by the following excerpts:

Excerpt 21: LSc9M

I prefer correcting and revising my own work. I know that I am not good at English and I don't like English. Even so, I was not so confident on my classmate's English proficiency in correcting my work. Instead, I felt more confident with teacher feedback rather than the classmate's feedback. ... Relating to my writing development, I think, my reading skills, vocabulary, grammar, and writing organisation were improved.

Excerpt 22: LSc10M

I prefer using peer-review strategy. The strategy offered me chances to see my friend's writing errors which were also the same as mine. But sometimes I had a writing error, while my friend did not. I then tried to figure out why I wrote like that and why my friend wrote in that way. I could also apply what my friend did well in writing with my own writing. ... I found the peer-review strategy practice helped develop my writing content, organisation and grammar.

Excerpt 23: LEd11M

I found peer-review strategy more useful because we could develop our perspectives and judgement on other person's different work. It also helped improve my reading and writing skills. I also like working with a random pair whom I didn't know before. This challenges me to get to know my paired classmate more. ... I think after doing the peer-review practice, my writing content and grammar were most improved.

Excerpt 24: LEd12F

I think the use of self-review strategy made my writing develop more because I could recognise my own writing errors which I would avoid in my next writing. As I am not good at grammar, I felt confused if it was right or wrong when I had to provide feedback on my friend's written task. However, if I had to choose a pair to work with in doing peer-review strategy practice, I would prefer to work with the random one rather than the one I knew because I would feel more confident about giving my feedback. ... I think, my writing content was developed most. My writing carelessness was less because when I wrote something, I had to re-check if it was right and fit the content. This made me know more vocabulary.

Based on the preceding interview excerpts of the middle- and limited-proficiency groups, it was found that the peer-review strategy helped promote the participants' critical thinking skills and the necessity of social interaction. To illustrate, the participant LSc10M's interview response implies his critical thinking skill was developed while doing the peer-review strategy practices (Excerpt 22). Additionally, Memari Hanjani (2016) revealed that students' paired revision tasks helped enhance their self-awareness and self-monitoring skills. Moreover, the responses of the middle-proficiency participant MSc5F and the limited-proficiency participant LEd11M reveal that social interaction is essential in the peer-review strategy practice (Excerpt 17, p. 218 and Excerpt 23, p. 220).

As can be seen from most excerpts (e.g. Excerpts 18, 22 and 23), peer assessment promoted learning process and classroom interaction between student pairs (Storch, 2003). The degree of learner engagement in writing assessment depends on learners' Zone of Proximal Development (ZPD) which is the distance between what students can do on their own and what they require assistance with (Gass et al., 2013: 532). In the

current study, scaffolding can be found in different proficiency pairs in which higher proficiency students helped lower proficiency students. Scaffolding by students themselves can also boost critical thinking skills (Vygotsky, 1978). According to Vygotsky (1978), social interaction enhances cognitive development and learning process. In the prewriting stage of the writing process (Table 2.1, p. 29), the students use the cognitive process to express their ideas or compose their writing content (Brown, 2001; Memari Hanjani, 2016). With these benefits of scaffolding, scaffolding-designed writing tasks are worth considering as a pedagogical tool and being utilised in learner-centred writing assessment.

From four limited-proficiency participants' interview responses, all found the strategies useful and helpful to develop the writing skills. Based on the interview results, the self-review strategy could enhance the writing confidence of the limited-proficiency participant LEd12F as shown in Excerpt 24 (p. 221). However, there is one limited-proficiency participant, LSc9M, who did not state his confidence in his own writing but in his lecturer's instead (Excerpt 21, p. 220). Goldstein (2006) and Memari Hanjani (2016) add that language learners' trust of the teacher's knowledge is one of the factors influencing their writing and revision. As supported by Fati (2013), low proficiency students normally have several language and writing problems. Owing to their lack of foundation, the students need to have others such as classmates to provide feedback so that they can learn. Moreover, low proficiency students tend to trust others rather than themselves in writing since they are aware of their shortcomings. At this point, the limited-proficiency student LSc9M in the current study, however, gave a different

perspective of trust in his classmate's feedback. He said that he distrusted his classmate's English language proficiency and thus feedback on his work. These counter-supports between Fati's (2013) study and the current study can explain the complexity of written feedback and revision which students who are a feedback provider and a feedback receiver need to be considered (Goldstein, 2006; Hyland & Hyland, 2006b; Memari Hanjani, 2016). Due to this, the students' prior background knowledge about texts or schematic knowledge (Ferris & Hedgcock, 2014) is also another point to be considered.

5.4 Chapter summary

This chapter addresses the last research question of the study relating to the students' perceptions of both self and peer-review strategies in relation to their writing development. The quantitative and qualitative results were obtained from the scripts of the students' responses to three series of the questionnaires and a semi-structured interview. The main results of the study in the chapter signify that the use of the self-review and peer-review strategies promotes positive perceptions of the student participants. Interestingly, the findings of research question 3 in this chapter were mostly associated with those of research questions 1 and 2 as previously discussed in Chapter 4. Moreover, the use of the review strategies also raises awareness of the actual levels of English language proficiency of the participants, particularly in the limited- proficiency group as well as enhances their motivation to learn and writing confidence. Other results from the semi-structured interview also provide some insights into the aspects of learners' affective factors and classroom atmosphere as well as their social interaction

involved in the peer-review strategy practice. The next chapter will draw the implications of the study and also make recommendations for future studies.

CHAPTER 6

SUMMARY OF FINDINGS AND CONCLUSIONS

This chapter provides an overview of the findings. In the chapter, there are five main sections – the first three sections discuss and summarise the main findings of the study based on the three respective research questions (Sections 6.1, 6.2 and 6.3). Following the overview of the findings, the limitations of the study are discussed in Section 6.4 and the conclusion of the study is entailed in the final section (Section 6.5) of the chapter.

6.1 Review strategies and students' writing performance

Research question 1: What is the influence of review strategies on the writing performance of first-year Thai undergraduate students?

To address research question 1, the study investigated the influence of review strategies on the students writing performance from two aspects. The first aspect focused on data from the students' scores of writing pre-test and post-test. These were collected and analysed to answer whether there is a significant effect of review strategies on their writing performance, using a paired-samples *t*-test or a dependent samples *t*-test. The analysis of the findings shows that there is a significant difference in the students' writing pre-test score ($M \approx 6.60$, $SD \approx 3.26$) and post-test score ($M \approx 14.98$, $SD \approx 2.77$). It was

also found that the students performed significantly better by obtaining a higher mean score on the writing post-test. Moreover, the statistical analysis through paired-samples *t*-test indicates, in Table 4.1 (p. 121), a significant impact of review strategies on the students' writing performance with $t(45) = 17.06$; $p = .000$ at the .05 level. These results suggest that when students use review strategies, their writing performance is enhanced. Having established that review strategies impacted students' writing performance, the second aspect considered the extent to which their performance was affected, using the effect-size method. The statistical result indicated a very large effect of the review strategies at the effect-size range of 0.8-0.9 (Table 3.9, p. 113).

If we consider the significant impact of review strategies on the students' writing performance ($t = 17.06$, $p < .05$; effect level $d = .81$), it could be concluded that after the students as novice writers were taught how to use the review strategies in their writing process, their average score of the writing post-test exceeded that of the pre-test. Hence the students who used review strategies improved their overall writing performance. To summarise the principal results and discussion of research question 1 in Chapter 4, what could be the primary source of the main justifications for why the review strategies used had such a positive impact on students' writing abilities lies in an integration of review strategies into process-based writing approach.

6.1.1 The integration of review strategies into process-based writing approach to writing instruction

All participants had taken part in the review strategy practices in the process-oriented writing workshop for eight weeks (Section 3.6 (p. 82) and Table 3.6 (p. 87) in Chapter 3). In writing instruction, process-based writing might be useful in the production of good English language writing (Rusinovci, 2015). With the process-oriented approach, students have opportunities to write (Busse, 2013) and discover their learning processes (Bourke, 2008; Hedge, 2000; Rusinovci, 2015). In the writing workshop, the participants were trained to produce essays through the cyclical processes of process-based writing as in Table 2.1 (p. 29) and Figure 2.1 (p. 44) (Oshima & Hogue, 2014; Schlig, 2006; Sokolik, 2003).

Using the cyclical approach, when individual participants begin the writing process of an essay, they have to write by learning how to generate ideas of the writing content in the prewriting step. This is followed by planning an essay and organising those ideas in the drafting step, then writing their first drafts in the writing step, and reviewing the work in the rewriting step (see Figure 2.1, p. 44 in Chapter 2). The recursive nature of process-based writing means that students are encouraged to go back and forth through the steps to alter and develop their ideas (Busse, 2013; Rusinovci, 2015; Wingersky et al., 2006).

Using review strategies in the writing classroom allowed the students, as novice writers of English, more chances to practise writing (Busse, 2013). The review strategies, both self-review and peer-review strategies in the study, were designed to embrace the concept

of the provision of feedback and revision practices in the final step of process-based writing - rewriting step. Through explicit instruction, it was suggested that plenty of questions pertaining to how to provide feedback and undergo revision in writing be posed to interact with the students and simultaneously to ensure their understanding (Bloom, 1971; cited in Forehand, 2005; Weimer, 2012). Following the explicit instruction of review strategies, the participants had arguably deepened their understanding of the writing process, as well as developing the writing skills through writing and rewriting, as their writing performance as the post-test scores demonstrate.

The significant results of research question 1 in the current study concur with some previous studies in the way of both self- and peer-assessment modes stimulating students' writing involvement and motivation and thus their academic performance (Garrison & Ehringhaus, 2013; Iraj et al., 2016; Wiley & Gardner, 2010). In addition to the aspects of both self- and peer-assessment, the review strategies implemented in the current study consisted of feedback and revision mechanisms, each of which eventually developed the writing performance of language learners. As discussed in Chapters 2 and 4, most studies by several scholars confirmed positive effects of corrective feedback on students' improved writing performance (e.g. Ellis et al., 2008; Ferris & Hedgcock, 2005; Loewen, 2012; Tran, 2007). Moreover, apart from most cross-sectional studies of revision from 1970 to 2004 (Table 2.3 adapted from John, 2005: 25-27), it was found in previous studies that the utilisation of revision in process-based writing promoted students' writing quality (e.g. Elgadal, 2017; Hyland & Hyland, 2006; Silva, 1993; Sotoudehnama & Pilehvari, 2016; Tsui & Ng, 2000). Hence, it is theoretically possible

that integrating feedback and revision into the reviewing stage in process-based writing in the current study has a positive impact on the student participants' writing performance and, in practice, it is demonstrated in the significant results of research question 1.

6.2 Effectiveness of review strategies: Influence on writing development

Research question 2: Does English language proficiency influence the writing performance of students when they use either self- or peer-review strategies? To what extent do varying proficiency levels influence their writing performance?

In accordance with research question 2, further investigation into the influence of review strategies based upon two dimensions was conducted. These were (1) all participants' overall English language proficiency and (2) their varying proficiency groups in relation to their performance in the categories of the university's writing criteria and academic disciplines.

The data analysis for this research question was undertaken using the participants' writing task scores in order to examine their writing development following the review strategies. In statistical terms, the analyses of all students' writing-task score from 184 self-revised and peer-revised draft scripts within the first dimension indicated

significantly higher performance in the students' responses to the review strategies. This response was more positive to the self-review strategy than the peer-review strategy; $t(45) = 3.08$; $p = .004$ at the .05 level (Table 4.5, p. 137). The findings suggest that the students utilised the self-review strategy, their writing performance was more highly developed than when using the peer-review strategy. Another dimension is the development of writing task scores in the participants' varying proficiency groups. When they were paired by similarity or difference of English proficiency level, it was found only the high proficiency group obtained a significantly higher mean score of the writing task when undertaking the self-review strategy than when using the peer-review strategy; $t(13) = 2.45$; $p = .029$ at the .05 level (Table 4.6, p. 141).

These main findings of research question 2 relating to the statistical significance possibly stem from the utilisation of learner-centred assessment in review strategies. After employing the self-review strategy, higher writing task scores were found in all participants (Table 4.5, p. 137) including the high proficiency group (Table 4.6, p. 141). Such utilisation promotes the participants' independent learning which will be discussed in the next section.

6.2.1 Utilisation of learner-centred assessment in review strategies

The provision of learner-centred assessment is suggested as a useful means of supporting student learning (Gosling, 2009; Norton, 2009). In learner-centred assessment, both practices of self- and peer assessment stimulated students' thinking, learning, and particularly decision-making processes to formulate their written responses in the

revision stage (Huba & Freed, 2000; Polio & Williams, 2011; Wiley & Gardner, 2010). In writing training, both self-review and peer-review strategies promote writing development (Bitchener & Ferris, 2012; Busse, 2013; Manchón, 2012) and autonomous learning (Tigchelaar, 2016). Through the review strategy practices in the writing training, the students had opportunities to participate in learner-centred self- and peer-assessment, each of which basically consisted of feedback and revision mechanism (see Chapter 2, step 4 of Figure 2.1, p. 44).

(a) Feedback mechanism

In the rewriting step, the participants engaged in polishing essay task 1 with the self-review strategy for the first four weeks and essay task 2 with the peer-review strategy for the other four weeks. During these eight weeks, individual participants were involved in the intense activities of providing their written feedback independently by the use of direct and indirect feedback (Section 2.4.2 (p. 33) in Chapter 2 and Figure 3.3 (p. 96) in Chapter 3). Direct feedback tends to support lower proficiency students to learn (Ferris & Hedgcock, 2014). Simultaneously, positive effects of corrective feedback, particularly indirect or metalinguistic feedback which employs written correction codes or symbols, have been found to promote learner motivation (Brown, 2007; Ellis et al., 2008; Ferris & Hedgcock, 2005; Larsen-Freeman, 2008) and develop language proficiency of the students who provided and received such feedback (Ferris et al., 2013). It is believed that the students' own learning engagement was improved through self-feedback (in the first phase of self-review strategy) and peer-feedback (in the first phase of peer-review strategy) (Wood et al., 2008).

(b) Revision mechanism

In the following week, the participants had to revise their first drafts which were self-assessed. Interestingly, it was found that during the revision practice, the participants self-corrected their writing errors which they had previously identified using error coding. This indicates that metalinguistic feedback may have helped stimulate the students' self-correction (Brown, 2007; Ellis et al., 2008; Ferris & Hedgcock, 2005; Larsen-Freeman, 2008).

On the whole, the autonomous practices through these two phases—the provision of corrective feedback and the implementation of revision of the students—possibly enhanced their learning and subsequent writing performance. That is, when the participants' review strategy practices motivated their own learning, they tended to have more confidence in how to process feedback and edit and revise essay writing tasks by themselves (e.g. their responses to the in-process questionnaire in Table 5.3, p. 180 and the interview Excerpt 24, p. 221 in Chapter 5). This most likely contributed to why the participants obtained higher mean score of the writing task in the self-review strategy practice. Wakabayashi (2013) also found that self-review facilitated her students' writing development and autonomy more than peer review did. In the current study, the participants' own reflections possibly imply their self-access of their own learning and thus self-directed learning leading to their succeeding learning autonomy (Benson, 2011; Fry et al., 2009). As defined in Benson (2011):

“self-directed learning describes a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies, and evaluating learning outcomes.”

(p. 36).

In regard to the varying proficiency groups' writing development in relation to writing criteria which were predominantly utilised in classroom writing instruction, the results revealed that the high proficiency group performed worse, while the middle proficiency one did better in terms of writing content (both Figure 4.1, p. 151 and Figure 4.2, p. 153). Explanations for this anomaly are as follows. When considering the writing content rubric established in the writing criteria (Appendix 2, p. 289), it requires students to be able to write two ideas arguing against a web post provided. Not only did the participants firstly choose one out of two given source texts but they also had to secondly produce their own logical ideas to argue against the web post. In doing so, the participants needed to think critically to produce such ideas to meet the writing content criterion. Obtaining low and high mean scores of writing content in the peer-review strategy practice could be explained if we consider two main issues: the participant writers themselves and their relatively influential pair-work interaction.

Related to the first issue concerning the participant writers themselves, some participant writers in the high proficiency group made a wrong decision of a source text selection

and/or did not provide logical arguments in their argumentative writing. By contrast, the participants in the middle proficiency group did just the opposite. According to Vygotsky (1978), cognitive development can be promoted by interaction. Student-student conversation or peer talk can also boost their critical thinking and writing development. If we accept his theory, the high and middle proficiency groups' critical thinking skill development could be influenced by their peer interaction. This leads to the second issue pertaining to the influence of the participants' pair-work interaction. The prior knowledge or content schemata of the reading texts of both a feedback provider and a feedback receiver would be a rational explanation for the high proficiency group's no progress and the middle proficiency group's substantial progress in writing content after using the peer-review strategies. This is because their content schemata or prior knowledge about the reading texts, particularly when they had to produce their own idea out of two given source texts, facilitated their reading comprehension and their idea expression in essay writing (Ferris & Hedgcock, 2014; Grabe & Stoller, 2011). It is noticeable that two source texts provided in an integrated-type task that the participants had to read before producing their writing might, to some extent, give them some clues or relate to their prior knowledge to aid generating writing content. Alternatively, the high proficiency group's lack of writing score improvement in writing content following the peer-review strategies can be supported by their perceptions of the writing content which possibly fell into the majority who viewed the writing content as the most difficult in providing feedback and doing revision (In-process questionnaire in Table 5.3, p. 180). Their views on their pair-work interaction through interview, apart from their perceptions

of the writing content, will be further supportive reasons and discussed more in Section 6.3.

Based on the findings from Table 4.6 (p. 141) and Figures 4.1 to 4.2 (p. 151 and p. 153), although the high proficiency group of participants seemed to demonstrate self-directed and independent learning tendencies and thus performed better in the self-review strategy practice. This did not appear to be related to their mastery of critical thinking skills. In the area of language learning, “self-direction tends to refer to the learner’s global capacity to carry out such learning effectively, while autonomy often refers to the particular personal or moral qualities associated with this capacity.” (Benson, 2011: 37). It could be said that this assumption based on the findings of the current study runs counter to the notion that language learners who commonly have logical and analytical thinking are inclined to have some qualities of independent self-editors and critical readers (Ferris, 2003; Rollinson, 2005). Another counter-notion is that self-review possibly helps enhance students’ cognitive skills, whereas peer review may contribute to their learning independence (Tigchelaar, 2016). Since these findings of the study for research question 2 in this section were quantitatively analysed, the qualitative results of research question 3 would shed light on some relevant causes of the counter-findings of the previous and current studies.

When turning to the positive, albeit statistical insignificant, responses to the peer-review strategy, the middle proficiency and limited proficiency groups obtained the most improved grammar scores in their essay writing. These results are most likely derived

from the effectiveness of their own and paired classmates' feedback and/or revision, particularly in grammar. Obtaining lower mean scores of writing content in the peer-review strategy practice in the high proficiency group might be due to their disregard (Tigchelaar, 2016), distrust (Memari Hanjani, 2016; Srichanyachon, 2011) or ineffective responses to their paired classmates' feedback (Fernández, 2012; Memari Hanjani, 2016) and/or from their paired partners' feedback quality (Ferris & Hedgcock, 2014; Goldstein, 2006; Memari Hanjani, 2016). The results from the participants' responses to the questionnaires and the interview in the next research question 3 may help crystallise such justifications.

Another consideration of the students' academic disciplines based on research question 2 was whether the self-review and peer-review strategies were practical for the participants' varying proficiency levels and disciplines. No significant difference in the mean scores of writing development in the writing tasks was found among three groups of the Science and Education students (Table 4.10, p. 158). The results suggested that in classroom writing instruction, both self-review and peer-review strategies were practical for all proficiency groups of students (Table 4.9, p. 157) and to both Science and Education disciplines (Table 4.10). These findings could confirm the practicality of review strategies to be employed in any disciplinary group of students and at any level of English language proficiency. One of the previous studies supported that peer review could be used as a professional development tool for any discipline-specific writing course at all levels (Klucevse, 2016). Importantly, when taking the results of the previous studies (e.g. Wesche, 1987; Wiley & Gardner, 2010) and the present study into account,

what the studies had in common highlights the importance of the utilisation of integrated task type in the discipline-specific writing tasks.

At this point, the principal results of research questions 1 and 2 suggest that teaching review strategies to students appeared helpful in enhancing their writing performance and concurrently promoted their writing development. In order to describe how the students perceive the review strategies in relation to their writing development, the next research question is needed.

6.3 Students' perceptions of review strategies

Research question 3: What are students' perceptions of the use of both self-review and peer-review strategies in relation to writing development?

From the scripts of the participants' responses to three series of questionnaires and a semi-structured interview, the results of research question 3 (Chapter 5) relate to the findings in Section 6.1 and Section 6.2 (Chapter 4). In other words, from the questionnaire (Table 5.7, p. 202) and interview responses (e.g. Section 5.3, pp. 205-222), the utilisation of review strategies encouraged the participants' positive views that both self- and peer-review strategies assisted the participants in developing their writing skills. In addition, more interview responses revealed the participants' English language awareness and discovery, learning and writing motivation and writing confidence as well

as reflecting the need for social interaction of cooperative learning. Some concerns, however, were raised by one interview respondent: time constraints and a low supportive classroom environment impeding their writing development (Interview Excerpt 10, pp. 211-212). These main results regarding the participants' perceptions of review strategies in research question 3 can be summarised in the interrelationship of the students' affective, cognitive, social and contextual aspects.

6.3.1 Affective—cognitive—social—contextual aspects

These aspects comprise the participants' satisfaction with the review strategies, their English language discovery and awareness including learning and writing motivation and writing confidence, their mutual reservations about feedback quality, the necessity for social interaction in cooperative learning, and a hardly-supportive classroom atmosphere. These five main results are discussed as follows.

The participants' positive views on the review strategies arose mainly from their overall satisfaction with both self-review and peer-review strategies. In regard to the inclusion of student-centred assessment in the feedback mechanism part of review strategies, such assessment not only encouraged autonomous learning of the participants (Section 6.2) but also provided their learning satisfaction with the student-centred practices (Interview Excerpts 1-12, pp. 207-213). It has been pointed out that the outcome from the use of learner-centred assessment can be measured by learners' assessment satisfaction (McKimm, 2009). It is noted that the participants in the current study were free to choose their classmate pairs and to decide how to provide written feedback in their classmates'

written tasks, based upon the concept of learner-centred assessment designed in both self-review and peer-review practices in the review strategies (Huba & Freed, 2011; Norton, 2009; Wood et al., 2008). Learner-centred assessment represents a technique engaging learners in examining and reflecting on their own learning (Huba & Freed, 2011; Wood et al., 2008). Self- and peer assessment are considered forms of learner-centred assessment which represents authentic assessment focusing on learners' actual learning process in the classroom (Huba & Freed, 2011; Norton, 2009). Consistent with the consequences of students' learning awareness from the implementation of student-centred assessment previously explained by Huba and Freed (2011), Norton (2009), and Wood et al. (2008), the participants in the current study revealed their language discovery and awareness-raising of English language skills as well as their actual levels of English proficiency, particularly in the limited-proficiency group after the review strategy practices (Interview Excerpts 9-10, pp. 211-212, Excerpt 12, p. 213 and Excerpt 18, p. 218). Additionally, it is believed that when language learners had direct exposure to those important steps of planning, drafting, writing and rewriting in process-based writing, this led to their language discovery, investigation and comprehension, thereby motivating them to explore and internalise their language use (Bourke, 2008; Memari Hanjani, 2016; Polio & Williams, 2011; Rusinovci, 2015). Such belief can be reflected, in the present study, in the way that the promotion of review strategies leading to the participants' motivation to learn and write and their writing confidence as discussed earlier (Section 6.1 and Section 6.2) corresponds with their questionnaire and interview responses (Table 5.3 (p. 180), Interview Excerpt 4 (p. 207) and Excerpt 9 (p. 211) in Chapter 5).

The issue of some participants' and their paired classmates' mutual reservations about the quality of their feedback provided and received was possibly related to the fact that the majority of respondents perceived the writing content as the most challenging and difficult criterion in providing corrective feedback and doing revision of a writing task (Table 5.3, p. 180). Since content conveys meaning in written communication, it would be difficult for the participants to provide written feedback and do writing revision unless they comprehend the meaning of their paired classmates' written texts and of their classmate's feedback given. As revealed in their responses to the open-ended section of the in-process questionnaire, the participant writers, as feedback providers, were unsure of their knowledge of writing content most, thereby being little confident in providing the accuracy of corrective feedback on their classmates' tasks (see Questionnaire item 2 in Table 5.3). In the perceptions of the feedback receivers, they were also unsure of their paired classmates' feedback quality in the logical ideas of the writing content most (see Questionnaire item 3 in Table 5.3). Similarly, another illustration of a limited proficiency participants' interview response LSc9M also showed his distrust of his paired classmate's English proficiency and the feedback received (Interview Excerpt 21, p. 220). The example of the participant LSc9M's interview response indicated the issue of the English language proficiency of a feedback provider. Fati (2013) also raised this issue and pointed out that lower proficiency students tended to trust those who had higher proficiency other than themselves, particularly in writing. However, in the current study, some participants in the high-proficiency group might feel unsure of their paired classmates' feedback quality and/or their responses to their paired classmates' feedback,

thereby making no improvement in their final-drafted writing content (Figures 4.1 and 4.2, pp. 151 and 153, respectively). As pointed out by Tsui and Ng (2000), writing quality depended on a learner's writing ability and a reader's feedback quality. Although Tigchelaar (2016) suggested examining an effect of the quality of feedback received through peer review on students' writing improvement, I think the effect of the quality of feedback provided should have also been investigated and/or compared to uncover a causal impact of feedback quality on language learners' writing development.

Based on the peer-review practice in the current study, there is another issue to be considered. The participant pairs of the same and different proficiency levels were fixed and disclosed at the start of the semester. In such pairing condition in the current study, there might be some students' dissatisfaction or negative attitude towards their paired classmates and subsequently affecting the provision and the reception of peer feedback. This idea has been suggested by Ferris and Hedgcock (2014), Goldstein (2006), and Hyland and Hyland (2006b). This could also be another plausible explanation of no progress in writing content scores in some high proficiency participants in the current study.

Next, the interview results provided some insights into the importance for social interaction in cooperative learning. In support of such interview responses of the students in the current study, Swan (1985: 9) expressed the notion that in the process-oriented writing approach, social interaction became indispensable to the writing classroom. In writing, an interaction of the social roles between a student writer and a reviewer was

entailed in the form of written comments or responses (Sommers, 2013). Two examples of the interview results of the middle and limited proficiency groups of the students (Excerpt 17, p. 218 and Excerpt 23, p. 220) reveal the students' realisation of the importance of cooperative learning through pair-work interaction when they undertook peer review in their process-based writing. This is because peer interaction helped the students to develop their rapport (e.g. Interview Excerpt 17, p. 218) and to achieve task objectives (Memari Hanjani, 2014, 2016; Mowlaie & Maftoon, 2015; Sukumaran & Dass, 2014). In the current study, the existence of some students' and their paired classmates' mutual distrust of feedback as discussed earlier implies that some student writers might not interact well with their paired classmates, thus leading to their mutually unclear understanding of their feedback given and received. Likewise, the group of some high proficiency students who had no progress in writing content scores, by contrast to the middle proficiency ones, might not interact well with their partners either. In peer interaction, learners normally expressed their dissatisfaction with their pair work when they did not comprehend their peer's written feedback (Memari Hanjani, 2016; Yoshida, 2008). Therefore, social interaction needs to be strengthened between student writers and their paired classmates in writing instruction so as to facilitate their mutual understanding between feedback provided and received and writing development (Gass et al., 2013; Mowlaie, 2014; Wakabayashi, 2013).

Last, the contextual factors, based on the participant's responses to the interview, cover a classroom atmosphere and time constraints which hindered their writing development. As stated in Memari Hanjani (2016), classroom atmosphere could lead to a success in

second language writing courses. A part of the interview Excerpt 10 of Participant LSc10M that raised the issue of language learners' time constraints on writing in classroom writing instruction is shown as follows:

Participant ... *In writing workshop, when the lecturer controlled the*
LSc10M *writing time for us, I felt pressured and rather forgot what*
 I had read before while writing. ... Another of my
 problems is that I can't concentrate and produce ideas
 when I am in an air-conditioning classroom. ...

In addition to the time constraints which are regarded as an external factor influencing learners' feedback and revision (Goldstein, 2006), the same participant LSc10M also revealed, from the above extract, the temperature of the classroom as another contextual burden affecting his learning and the production of his written texts.

6.4 Limitations of study

Any generalisations drawn from the results of the current study should take into account the following limitations.

6.4.1 Unexpected drop-out rate

The ethical process states that a student participant can leave a study any time as they wish. Six out of 52 participants (i.e. four Science students and two Education students) were excluded from the study because they partly participated in the writing workshop and they finally dropped out of the Foundation English I course in the 2013 academic

year. Thus, the data of the study were collected and analysed from 46 participants (i.e. 20 Science students and 26 Education students).

6.4.2 Small sample size

Forty-six participants in the study from two classes were the adequate number of sample for statistical analysis. However, they cannot be generalised to all first-year Science and Education undergraduate students from other classes at the same university in which the study was conducted in the same 2013 academic year.

6.4.3 Limited period of data collection

In this study, data collection with the same group of all participants was limited for only one semester. Regarding the University's registration policy and practice for English course curricula, students are free to enroll in the available sections which suit their timetables. As a result, not all students in a class section will be continuously in the same section in subsequent semesters. Thus, it is impossible to have the same groups in consecutive semesters 1 and 2. With the management of the registration system, a longitudinal study to investigate students' writing development after the implementation of review strategies was too complicated to conduct.

6.5 Conclusions

The great emphasis on English-language proficiency regarding global literacy in English has been placed as a yardstick for the quality of Thai education on Thai learners. A number of studies have, however, revealed the seriously-problematic writing skill of

English among Thai learners from school to university levels (MOE, 2002). In particular, most teachers and learners of higher education level in Thailand consider demanding English writing an arduous, time-consuming and tedious skill. Owing to a deficiency in teacher's effective means of developing learners' writing skill of English, a single teacher needs to handle individual learners' numerous written tasks in one large class; moreover, learners individually complete their written tasks and frequently fail to explore and be aware of their language learning through writing.

My thesis has been undertaken in the area of English language teaching in a Thai university context in response to educational issues at interconnected levels from national, institutional, to pedagogical. The national concern arises in relation to Thai students' perceived low English-language proficiency, followed by the institutional concern regarding how to produce quality graduates with English language proficiency, and the pedagogical concern over university lecturers' time-consuming provision of written feedback to large classes and over students' repeated writing errors despite their prior provision of written responses to the students' tasks.

In the thesis, the purposes of this mixed-method study were to (i) investigate whether and to what extent review strategies (i.e. self-review and peer-review strategies) impact the writing performance of first-year Thai undergraduate students; (ii) examine the effectiveness of self-review and peer-review strategies based on the students' overall English language proficiency and their varying proficiency groups in relation to writing criteria and academic disciplines; and (iii) explore the students' perceptions when

applying both strategies in relation to their writing development. The participants were 20 Science and 26 Education students who were enrolled in the Foundation English I course in the first semester of the 2013 academic year. They were 30 females ($\approx 65\%$) and 16 males ($\approx 35\%$) with the age range of 18 to 20. The main findings were as follows:

(1) The statistically significant effect of the review strategies on the students' writing performance; $t(45) = 17.06$; $p = .000$ at the .05 level, indicated that after the students were trained in the use of review strategies in the writing process, their average score of the writing post-test exceeded that of the pre-test. That is, the students who used review strategies improved their overall writing performance.

(2) The analyses of the students' writing-task score development from 184 self-revised and peer-revised draft scripts indicated a statistically significant level of success of the students' responses to the review strategies. They effectively responded to self-review strategy better than they did peer-review strategy; $t(45) = 3.08$; $p = .004$ at the .05 level. The findings suggest, when all students utilised the self-review strategy, their writing performance was more highly developed than when using the peer-review strategy. In the multi-dimensions of comparisons of writing-score development in relation to proficiency groups and writing criteria, the high proficiency group undertook the writing task better in the writing organisation and grammar but worse in the writing content than the middle proficiency group did within the same period of time when implementing the self-review strategy. Additionally, when employing the peer-review strategy, the high proficiency group performed better in the writing organisation but worse in the writing

content and grammar than the limited proficiency group did. With respect to the comparisons of writing score development in relation to proficiency groups and disciplines, both self-review and peer-review strategies can be applied to all three proficiency groups and both distinct disciplines due to no statistically significant difference in writing-task score development among three groups of the Science and Education students.

(3) From the scripts of the students' responses to three series of questionnaires and a semi-structured interview, the utilisation of review strategies promoted the students' positive views, raised awareness of English language writing performance and skills as well as their actual levels of English proficiency, particularly in the limited-proficiency group, and enhanced their motivation to learn and writing confidence. Other results from the interview provided some insights into aspects of students' affective—cognitive—social—contextual factors.

Following the conclusion of the study, implications and recommendations for future studies are further made to not only account for the limitations of the current study but also raise some useful issues for future research work in the next chapter.

CHAPTER 7

REFLECTIVE STAGE: PEDAGOGICAL IMPLICATIONS AND RECOMMENDATIONS

In this chapter, there are three main sections based upon the findings of the present study. The first section addresses reflections on writing instruction including the provision of an application of review strategies to a sample of lesson plan, followed firstly by recommendations for further research, and final statements of the thesis.

7.1 Pedagogical implications of the study

In the light of the findings of the study, the practical implications for writing instruction of the study are as follows:

7.1.1 Implications regarding the extent to how review strategies affect writing performance of students' varying proficiency groups

- **Middle-proficiency group: Careful attention in writing instruction**

In an authentic EFL writing instruction classroom, students have varying proficiency levels. Frequently, both high and limited proficiency groups of the students are given most attention, while middle proficiency group seems to be hardly regarded in writing instruction. However, one of the findings of the study proved that after the implementation of self-review strategy and peer-review strategy, the middle-proficiency group, compared with both high- and limited-proficiency groups, developed most in their

writing content (Figures 4.1 and 4.2, pp. 151 and 153, respectively). This implies that when planning and undertaking a writing activity and/or lesson, a lecturer should consider the middle-proficiency group of the students and their needs apart from the high and the limited proficiency groups. The middle-proficiency group should be paid more attention since they could step forward to higher levels of writing performance or backward to lower levels of writing performance, depending upon what they learnt how to write and how they experienced from their lecturer's teaching strategies in a writing instruction class. Devising review strategies in the students' writing process was practical to develop the middle-proficiency students' writing performance to reach the higher levels.

▪ **High-proficiency group: Counter-improvement in writing content score**

In contrast to the result revealing the middle-proficiency group of the students' highest mean score in the writing content progress previously mentioned, the high-proficiency group's no progress in writing content and little progress in grammar would raise the issue of a ceiling effect on their content score improvement. Since ceiling effects impeded foreign language students' learning outcomes in a traditional classroom instruction, the effects are one of the reasons for a failure of their learning growth and language performance, particularly in advanced students (Brecht, Davidson & Ginsberg, 1995; Rees & Klapper, 2008; Rifkin, 2005). With reference to the high-proficiency group's ceiling effect on writing score improvement, the distinctions among three proficiency groups of students' increasing scores of content in their final drafts were quite subtle but were obvious in their first drafts (Appendix 8, p. 304). This means,

compared with the middle- and limited-proficiency groups, the high-proficiency students mostly obtained higher scores of writing content in their first drafts and had similar scores of content in their final drafts; thus, they gained little improvement in writing content.

Other thought-provoking issues include the high-proficiency students' reservations about their classmates' feedback quality discussed in Section 6.3 (p. 237) will be suggested in Section 7.3.2 (b).

7.1.2 Implications regarding students' evaluation of the strategies

▪ Limited-proficiency group: Time management in writing

Both limited-proficiency Science and Education participants LSc10M's and LEd12F's responses to the interview question 3 (Excerpt 12, p. 213) raises the issue of the necessity for time management. Since the issue of time management, particularly in the exam, is a factor affecting the writing outcome of most students who said, from my previous teaching experience (Puengpipattrakul, 2013), that they could not frequently finish their writing part in the exams in time, I then added the concept of time management in the writing workshop in the current study. However, according to the interview responses of the participant LEd12F:

[...] Oh, if possible, I want the time duration of the workshop would be longer than it was. Also, I felt stressful when I had to write within time limit. [...]

From the above interview excerpt, assigning writing time limit was sensitive to the group of limited-proficiency students to be considered. Nevertheless, time management is one of the important tips particularly in writing examination. A future experimental study would be worthwhile being conducted on the effects of timed and non-timed essay writing on limited proficiency students' writing performance.

7.1.3 Implications regarding syllabus design

- **Issue of scoring system in writing: Writing assessment rubrics**

One of the interview excerpts of the study showed the seeming mismatch between a teacher's and the student's writing focuses based on his high school learning experience.

From a part of the interview excerpt of Participant LSc10M (Excerpt 10):

“...my native English teacher assigned us to write essays but did not provide feedback on grammar at all. But when I attended this workshop, it really helped me know my grammatical mistakes and how to correct them....”

The student's interview excerpt could stress the benefits of learner-centred assessment which shows the learner and the teacher having mutual understanding of how to assess a written task through the use of writing rubrics (Wood et al., 2008). In the present study, apart from the student-centred assessment, the focus-on-form writing assessment was made in the criteria for rating writing organisation, content and grammar. The issue of how to balance between content and form is still questionable because in the specified writing criteria (Appendix 2, p. 289), the score proportions were unequally allocated to

writing organisation (4 marks), content (6 marks) and grammar (10 marks). Therefore, supplementary research into if there is any significant difference in findings, when the score proportions of writing organisation, content and grammar are equal may prove fruitful on future syllabus design for Foundation English courses.

Nevertheless, since individual students had varied needs, a high proficiency participant HEd4F viewed differently on scoring system in writing. Referring to her interview response, she revealed that her writing pressure would lessen and she might be motivated to write more unless there was scoring system in writing. Next is the excerpt of her interview response:

[...] Well, the workshop was already good. My suggestion for the writing workshop is that if there was no writing score, it would help lessen my writing pressure. It may also lessen my motivation to write but just only a little.

Although an English language teacher is aware of students' writing assessment needs, here is the issue how the teacher can tailor such needs, especially in a large class. As suggested, formative assessment and summative assessment are necessarily introduced in classroom writing instruction to EFL and ESL students for the sake of their writing skill development (Ferris & Hedgcock, 2014). As long as they realise the assessment purposes and benefits to their learning opportunity and writing development, their diverse needs could, as appropriate, be tailored. It would be the win-win situations for both teaching and learning communities to provide the language learners

opportunities to be involved in and familiarise with the processes of formative assessment through being able to assess their writing task scripts as well as of summative assessment by being able to evaluate their writing test scripts. Equipping the learners with the review strategies proposed in this thesis can be an eclectic means to the above suggestion.

- **The provision of writing opportunities through explicit instruction of review strategies**

The emphasis on providing writing opportunities as much as possible (Busse, 2013) was one of the writing workshop purposes in the study. With the limited time allotment in a three-hour weekly class, explicit teaching of review strategies offered the students, as novice writers of English, more chances to practice writing (Duijnhouwer et al., 2012). Only practice can the writing skills be mastered. As Patel (2018) states, “*Talent helps, but it’s not essential in writing.*”

According to the Foundation English I course syllabus, required class time was rather limited for writing instruction when being allocated for teaching other English language skills like reading, listening and speaking. It would be helpful to demonstrate a lesson plan with the implementation of review strategies as in the next section, Section 7.2.

7.2 Application of review strategies: A sample of suggested writing lesson plan

Based on the significant findings of the study (Table 4.10, p. 158), the review strategies in process-based writing were beneficial to first-year Thai students from different

proficiency groups and disciplines. In this section, a sample of a writing lesson plan is drawn in order to share how a conventional writing lesson was adjusted and applied with the review strategies.

With the teaching of three hours a week and fifteen teaching weeks a semester, a sample of the writing lesson plan in Table 7.1 was designed for hour-by-hour classroom instruction to facilitate the ease of instructors' use. The lesson plan was implemented through the stages of Introduction, Presentation, Practice, Evaluation and Application. The following is a sample of the three-hour lesson plan, each hour of which is spent on practising process-based writing, self-review and peer-review, respectively (see Section 3.6.1, Step 5 at week 5, pp. 93-97).

Table 7.1

Analysis and synthesis of conventional lesson plan: A writing lesson plan with review strategies

HOOR 1: PROCESS WRITING (1 week, 3 hours total)			
Part/Stage	A. Current lesson plan	B. Proposed lesson plan (based on the present study)	Commentary
1/ Introduction (5 mins)	(Whole class) 1. Informs Ss of writing objective (Appendix 4).	(Whole class) 1. Informs Ss of writing objective (Appendix 4).	- It is always good to raise Ss' awareness of the writing purpose. However, it is hard for students to know in which writing aspect in the holistic writing objective they should improve in the writing lesson (Appendix 4).
	2. Asks about the meaning of the argumentative essay and Ss' experience in writing this type of essay.	2. Asks about the meaning of the argumentative essay and Ss' experience in writing this type of essay.	
2/ Presentation (25 mins)	3. Distributes copies of a writing lesson handout to Ss.	3. Distributes copies of a writing lesson handout to Ss.	
	4. Explains an argument in a web posting and useful expressions to be used in a web posting.	4. Explains an argument in a web posting and useful expressions to be used in a web posting.	
	5. (-)	5. Asks Ss about their self-study of searching via the Internet or book(s) for: What is process-based writing?	- Since Ss never experienced process-based writing, it will better to have Ss self-study what process-based writing is before starting practicing writing.
	6. Gives Ss and explains the answer through writing lesson handout (Appendix 4).	6. Gives Ss and explains the answer through the process-based writing handout.	- In the process-based writing handout (Table 2.1), the polishing or rewriting stage (step 4) was adjusted and developed through the review strategies (self- and peer-review strategies) as in Figure 2.1.
	7. (-)	7. Informs Ss that they're going to practise process-based writing and review strategies.	- Through explicit instruction of process-based writing, Ss will have a chance to practice process writing and review strategies.

Table 7.1

Analysis and synthesis of conventional lesson plan: A writing lesson plan with review strategies (continued)

HOOR 1: PROCESS WRITING (1 week, 3 hours total)			
Part/Stage	A. Current lesson plan	B. Proposed lesson plan (based on the present study)	Commentary
3/ Practice (30 mins)	<i>(Whole class)</i> 8. Explains and guides Ss how to brainstorm ideas, and plan the essay outline.	<i>(Whole class)</i> 8. Explains and guides Ss how to: 8.1 brainstorm ideas; 8.2 plan the 3-paragraph argumentative essay outline:	
	<u>Paragraph 1</u> : Introduction	<u>Paragraph 1</u> : Introduction	- <i>Begin this part by stating your purpose and intention in responding to a post.</i> - <i>State your intention by using a useful expression (e.g. This is in response to ... in the first sentence and "I'd like to present ... in the last sentence of the paragraph).</i>
	<u>Paragraph 2</u> : Main argument 1 and supporting evidence	<u>Paragraph 2</u> : Main argument 1 and supporting evidence	- <i>Choosing one given source text for the first reason and supporting ideas</i> - <i>State your main argument by using a useful expression</i>
	<u>Paragraph 3</u> : Main argument 2 and supporting evidence	<u>Paragraph 3</u> : Main argument 2 and supporting evidence	- <i>Creating one own different reason and supporting ideas</i> - <i>State your main argument by using a useful expression</i>
	<u>Paragraph 3</u> (continued): Conclusion or final thought	<u>Paragraph 3</u> (continued): Conclusion or final thought	- <i>State your conclusion or final thought by using a useful expression</i>
	8.2 write an essay and submit it to an instructor.	8.3 write and rewrite their written essays in process-based writing.	- Through process-writing sequences, Step 8.3 is introduced in the proposed lesson plan (B). - In Step 8.3, before submitting a written essay, Ss are required to use review strategies in the way of producing their written feedback (through writing criteria in Appendix 2 and writing correction symbols in Appendix 7) and doing revision.

The lesson plan after the analysis and synthesis of the conventional writing lesson plan became more learner-focused. Firstly, it can be seen from Table 7.1 that the holistic writing objective in a writing lesson of the conventional lesson plan (Appendix 4, p. 293) had a limitation for students to be able to understand which writing aspects they should develop. Thus, in the lesson plan, the writing objective was adjusted to be more analytic based on the writing task criteria (i.e. organisation, content and grammar in Appendix 2, p. 289). Additionally, in the first hour of the lesson plan, the main focus is the introduction of process-based writing. The process writing was introduced through students' involvement in self-study (at Step 5 in Table 7.1) which helped promote, to some extent, independent learning (MOE, 2002).

Moreover, in the argumentative writing process guided in Table 7.1, the students were required to state their main argument 1 (paragraph 2) by choosing one out of two given source texts as the first reason and its supporting ideas. In doing so, language teachers need to understand their students' lack of prior knowledge about the reading texts in the writing tasks and the writing test. The source texts provided in the integrated-typed writing tasks and test could be used as writing input to generate the written responses of the students who were novice writers in their first year of study and might not have prior knowledge about the test topic entitled 'Work & Travel' (Brown et al., 2005; Weigle, 2004). At the same time, for those who had, to some extent, prior knowledge about the topic, the integrated writing test helped fill the gaps in their prior knowledge of the test topic (Read, 1990). Since the students were required to use the information of the sources given in the integrated writing tasks and writing test in producing the writing content for

the main argument 1, their prior knowledge (if any) in this case would not affect their writing content scores unless they selected the wrong source.

Furthermore, in Table 7.1, the students had to state their main argument 2 (paragraph 3) by creating their own reasons and supporting ideas. With this challenging requirement, the student writers would need to have some content schemata to be familiar with the tasks and the test topics so as to be able to give their own different reasons with supporting ideas as required. In this case, the students' prior knowledge would affect their scores of writing content. Conceivably, the more logical a reason and the more relevant and complete supporting ideas the students gave, the higher writing content score they would have.

After the students understood the purpose of argumentative writing and how to equip the writing with process-based writing sequences (Figure 2.1, p. 44), the self-review strategy and the peer-review strategy were respectively introduced and trained as shown in the next two hours of the lesson plan (Table 7.1).

Table 7.1

Analysis and synthesis of conventional lesson plan: A writing lesson plan with review strategies (continued)

HOOR 2: SELF-REVIEW (1 week, 3 hours total)			
Part/Stage	A. Current lesson plan	B. Proposed lesson plan (based on the present study)	Commentary
3/ Practice (30 mins)	(Individually) 9. Assigns Ss to write an argumentative essay, 'File Sharing' from the given writing lesson handout (Appendix 4).	(Individually) 9. Assigns Ss to write an argumentative essay, 'File Sharing' from the given writing lesson handout by following from the steps of brainstorming ideas to writing a three-paragraph essay (Steps 8.1 and 8.2).	- Ss should have a chance to practise and review their writing in the process-writing sequences with review strategies. - The self-review strategy started at the polishing/rewriting stage (Step 8.3) in essay paragraphs 1-2 (Choosing one given source text for the first reason and supporting ideas).
(5 mins)	10. (Break)	10. Distribute copies of handouts (Writing task criteria, Appendix 2 and Writing task checklist and correction symbols, Appendix 7).	- To prepare Ss for analytic assessment with the distributed handouts in the proposed lesson plan.
4/ Evaluation (25 mins)	11. Has Ss submit their essays in front of the class.	11. At the polishing step, direct Ss to the self-review strategy by: 11.1 assigning Ss to give corrective feedback at paragraphs 1-2 in their own written essays by using the distributed handouts (Appendices 2 and 7; 11.2 assigning Ss to revise paragraphs 1-2 (as appropriate) in the essays.	- By adjusting holistic assessment (in conventional lesson plan) to analytic assessment according to writing task criteria, Ss should know how their work is assessed to provide them room for writing improvement.

Table 7.1

Analysis and synthesis of conventional lesson plan: A writing lesson plan with review strategies (continued)

HOOR 3: PEER-REVIEW (1 week, 3 hours total)			
Part/Stage	A. Current lesson plan	B. Proposed lesson plan (based on the present study)	Commentary
5/ Practice (10 mins)	(Individually) 12. Assigns Ss to write an argumentative essay, 'File Sharing' from the given writing lesson handout (Appendix 4).	(In pair) 12. Asks Ss to pair up with their classmates by preference.	- Ss should have a chance to practise and review their writing in the process-writing sequences with review strategies. - The peer-review strategy started at the polishing/rewriting stage (Step 8.3) in the essay paragraph 3 (Creating one own different reason and supporting ideas).
6/ Evaluation (30 mins)	13. Has Ss submit their essays in front of the class.	14. At the polishing step, direct Ss to the peer-review strategy by: 14.1 assigning Ss to give corrective feedback at paragraph 3 in their classmates' written essays using the given handouts (Appendices 2 and 7); 14.2 assigning Ss to switch their papers and revise paragraph 3 (if any) in the essays.	- By adjusting holistic assessment (in conventional lesson plan) to analytic assessment according to writing task criteria, Ss should know how their work is assessed to provide them room for writing improvement.
7/ Evaluation (10 mins)	14. Show Ss the suggested answer of the essay.	15. Show Ss the suggested answer of the essay.	
8/ Application (10 mins)	15. Assigns Ss to write Task 1 'Censorship'.	16. Assigns Ss to write Task 1 'Censorship'.	

As shown in the last two hours of the lesson plan (Table 7.1), apart from the adjustment of the holistic assessment in the conventional or teacher-based lesson plan, the lesson plan focuses on the self-review and peer-review strategy practices. The students had an opportunity to produce their own argumentative essays, entitled 'File Sharing', by taking part in the process-based writing sequences (i.e. brainstorming ideas, outlining and composing). At the polishing or rewriting sequence, both self-review strategy and peer-review strategy were implemented. In the self-review strategy practice, individual students experienced how to provide corrective feedback and do revision on the essay paragraphs 1 to 2 regarding stating their purpose and intention in response to a post and choosing one logical source text for the first reason and supporting ideas in their own essays. In the peer-review strategy practice, each student engaged in providing corrective feedback on his or her paired classmate's essay paragraph 3 regarding creating the second own reason and supporting ideas as well as revising his or her essay and vice versa.

Following the process-writing sequences with argumentative writing outline (Table 7.1) can assist the students in learning how to write systematically and effectively (Bourke, 2008; Hedge, 2000; Rusinovci, 2015). Equipping them with review strategies which blend feedback and revision mechanism can help them learn how to write accurately, more critically, and with good quality (Hedge, 2000; Roehampton, 2008; Tsui & Ng, 2000).

7.3 Recommendations for further research

Based upon the findings and the implications of the study, the following areas are recommended for further studies.

7.3.1 For institutional policy-making considerations

This study had been conducted by promoting the learner-centred assessment to accommodate the existing teacher-based writing instruction in Thailand's classrooms. For the sake of writing assessment in Thailand, it would be worthwhile equipping students with review strategies to lessen the burdens of teaching and assessment of writing. The following are some recommendations for relevant educational policy-makers to consider:

(a) Implementation of review strategies in writing syllabi and courses

The overall results of the statistically significant impact of review strategies on the students' writing ability (Tables 4.1-4.2, pp. 121 and 124 and Table 4.10, p. 158) provide some good evidence of a teaching and learning tool to be utilised in varying academic disciplines from the first-year university undergraduate level onwards. In order to examine the widespread and practical use of review strategies, both self-review and peer-review strategies should be further examined through comparative studies on the effects of review strategies on the writing ability of multi-disciplinary university undergraduate students in EFL contexts. The results of such studies would be helpful in some ways; for example, syllabus design and material development in writing courses.

(b) Facilitative classroom contexts

With regard to the issue of validity and reliability of the review strategy processes of the study, it is noted that the students' handwritten essays which were completed and submitted in class were then transformed into the typed version. Before the typed-version essays were used in the feedback and revision practices, they were checked for their script precision and identification with those of the handwritten-version. Transforming handwritten texts into a typed anonymous version helps to distance the students from their own writing. This could also help the students to provide their written feedback objectively, particularly in their own essays. For further studies, proposed changes would be feasible if personal computers are provided and available in all classrooms for the students to write, complete and submit their real-time essays. Otherwise the students can bring their own portable computers. However, the second option might cause inconvenience for some of them who do not have portable computers or any Information Technology devices. Additionally, it would not be possible for them to submit their typed anonymous essays on time if they forget to bring their computers. Therefore, classroom contexts should also facilitate the students' learning and writing processes through, for instance, the provision of computers in every classroom as budgets allow. Having students write their essays via computers suggests the need to examine their usefulness in the writing process and/or compare the impact of writing essays in handwritten form in future studies. Spady (1994: 9) highlights an assumption under the concept of learner-centredness to be kept in mind during the implementation of an outcome-based syllabus, *"all students can learn and succeed, but not on the same day in the same way."*

Consequently, the results from these suggested studies would be useful resources for providing fair university standards with regard to the medium of written examination.

A future investigation into the impacts of computerised essay writing and handwritten essay writing on EFL learners' writing performance. A comparative study between the effect of computerised essay writing and that of handwritten essay writing on EFL learners' writing performance use would be needed.

Another point to be concerned is of the students' sensitivity to classroom contexts. As students' preferences are diverse, one of the students' interview responses in the current study revealed his sensitivity to the classroom temperature which impeded his learning and writing production (Excerpt 10, pp. 211-212). To account for similar needs, institutional surveys may be conducted to explore learners' classroom and university environment preferences.

7.3.2 For classroom writing instruction

In classroom writing instruction of the study, review strategies had been trained in the Foundation English I course as part of the writing process. The results from the quantitative and qualitative analyses suggest some thought-provoking messages in the following areas.

(a) Peer-review strategy practices: Extension of pair-work interaction

The Thai EFL students' paired participation in the writing process in the present study was examined through writing tests and tasks, a series of questionnaires (distributed before, during and after the review strategy practice) and the semi-structured interview. The questionnaire (Table 5.3, p. 180) and interview results pertaining to the students' distrust in the quality of feedback provided and received (Interview Excerpt 21, p. 220) highlight an influence of pair-work interaction on the way of the high and middle proficiency students' counter-performance in writing content after peer review strategies (Figure 4.1, p. 151 and Figure 4.2, p. 153). However, the study did not focus much on the students' act of negotiation during their pair-work interaction. Thus, it would be worth conducting a comparative and/or case study of the effects of the act of peer negotiation along the writing processes of student writers of different proficiency levels in between the EFL and the ESL contexts. The results of the proposed study would demystify the students' disbelief in their own and their paired classmates' feedback quality and be useful to writing instruction in both EFL and ESL settings where students are heterogeneous (e.g. proficiency levels and English language learning background).

Furthermore, in view of the students' fixed pairing throughout the semester, despite the learner-centred pairing preference, based on one of the participants' interview responses in the peer-review practice (Excerpt 15, p. 216), discussed in Section 5.3.2, further studies are suggested to conduct with flexible pairing and/or grouping. Doing pairing practice and/or group practice would offer a better opportunity to be exposed to a wider variety of writing ideas from different written tasks.

In addition, since the written tasks of the students and their paired classmates were disclosed during the review strategy practices in the present study, further studies are suggested to measure the impact of the use of anonymity on students' writing performance. Alternatively, the comparative study of the use of anonym and the use of pseudonyms on the quality of feedback and revision of the students who are paired with those in the same and different proficiency levels.

(b) Learners' factor analysis

The students' writing performance after implementing the review strategies has raised the issues of what determining factors influenced the quality of feedback and revision. Was it their prior knowledge of a reading text, the integrated writing task type, outside class activities (e.g. Internet surfing) or others? A factor analysis could be conducted on the situational variables (e.g. the type of a writing task and the writer's familiarity with the topic and/or prior knowledge) influencing writers' qualities of feedback and revision in the writing processes and their writing performance.

(c) Possible research design

Although the one-group design is less robust than a conventional experimental research design (control versus experimental group), the current study was based on my actual teaching circumstances and therefore I chose the one-group design and a convenience sampling method. This is because I was assigned to teach the Foundation English course to two groups of first-year students whose initial English language proficiency fell into

the same group level as discussed (pp. 82-83, 89-93, and 102-103). Additionally, the current study utilised the action-research base as in Freeman's teacher-researcher cycle (Table 3.1 and Figure 3.1) which is effective when a class teacher conducts research by himself or herself. In order to prevent data analysis bias, two external raters were employed (Table 3.5. pp. 81-82). Moreover, all participants were informed and aware that I (the researcher and their teacher) was not the one who marked their midterm and final exam papers. They were also aware that the current study did not affect their course grades but for writing research and development (pp. 82-83 and 86). Nevertheless, it may be worthwhile conducting a future study which applies the control versus experimental research design. With such research design, extraneous variables (e.g. students' prior knowledge, surroundings and researcher's characteristics) which could affect the findings of the experiment are controlled. Regarding the issue of the teacher being the researcher, it might also be fruitful to conduct a review strategy study in which the teacher and the researcher are not the same person so as to see whether similar results are found.

7.4 Final statements

In a globalised world, investing in people in the area of education is crucial for nations' sustainable growth. My research study is aimed at developing, the English-language writing skills of first-year university Thai students through using a teaching-and-learning approach which is the use of review strategies. My study will hopefully benefit Thailand's higher education at both the levels of individual learners and at institutional levels.

From the classroom perspective, the study helps to support teacher-led classroom instruction in Thailand. With the combination of a feedback-and-revision mechanism, the review strategies are regarded as an approach to assist the students who are novice writers in developing their existing and future English language writing successfully. At the same time, the strategies help relieve lecturers of English in their time-consuming written feedback to large classes and limited time of large writing classes. To my knowledge, no university in Thailand has yet achieved the effective use of feedback-revision techniques as the review strategies examined in my thesis. The strategies are recommended for introduction into English-language course syllabi to the first-year undergraduate levels

At the nationwide and global community, the research will foster the emergence of an effective means to enhance non-native English learners' writing performance and thereby promote literacy in English as one of the yardsticks for the quality of global citizens. Instilling and familiarising the students with such review strategies will be profitable as a basic technique in forming long-term writing habits. This will also help generate and strengthen professional bonds among native/non-native English teachers in both EFL and ESL contexts as a demonstration of best practice in the global English-language teaching community.

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PPENDIX 1

Writing test with answer keys

Instructions: Write a well-organized 3-paragraph web post that responds to the following web post. You must **argue against** the writer's opinion in the web post.

posted by Matilda

Many university students are now participating in a Work & Travel (W&T) program in the US where they can work and spend their holidays traveling around the country. For me, this is a great idea. They can get work experience that they can't find anywhere else. And they can improve their English because they have a chance to interact with American people or international students. This is an opportunity they may not get when living in their own country!

- From the two sources below, find **ONE** source that argues against the web post writer.
- Use examples and/or evidence from that source to write a reason and supporting ideas.
- Think of **one** more reason of your own and an example or a piece of evidence to support your reason.
- Write between 180 and 200 words in length with proper sequence markers and connectors.

Source 1

Jantima, a 20-year-old student, shared her summer experience while joining a W&T program with her friends:

"I spent a lot of time with my host family. We celebrated Thanksgiving Day and Christmas together. They showed me how to make traditional meals, like turkey for Thanksgiving. We decorated the Christmas tree and exchanged gifts. I even joined the neighbors caroling (singing Christmas songs in a group) from door to door. What a wonderful experience!"

Source 2

The Bangkok Post published a news report about a W&T company that took advantage of their participants. They interviewed a 19-year-old student, Suchart, about his experience in the program. He told the reporter that:

"The Work and Travel company confirmed that I would work in a theme park. But when I arrived in California I was sent to work as a janitor in a supermarket. I had no choice so I had to take that job. The working hours were too long and the pay was so little that I barely survived. It was totally the worst nightmare."

Answer key
(Answers may vary.)

This is in response to Matilda's comments that joining a Work and Travel (W&T) program can help students gain work experience and improve their English skills. I couldn't disagree more. Many people share his idea and while I know I can't change their mind, I'd like to present the other side of the story.

First, what you might not know is that students joining the program may be cheated by the W&T company. In one case for example, *The Bangkok Post* reported that a student named Suchart was assigned a janitor job when he arrived in California, which was different from what had been agreed to earlier with his agency. He had to accept this job with long hours and low pay because he didn't have any option.

Another disadvantage of a W&T program is that students may suffer from loneliness when participating in the program. One of my relatives who had a winter job in New York felt isolated without his family around. He was so miserable that he did not finish the program and flew back to Bangkok. To sum up, I believe that university students should think carefully before deciding to join W&T programs. (197 words)

APPENDIX 2

Writing test and task criteria

Total points: 20

ORGANISATION (4 POINTS)		
The organization in the argumentation/persuasion is:		
1 st paragraph (1.5 points):	0.5 points are given to the sentence(s) that states the student’s intention in responding to the original post;	
	0.5 points to the sentence(s) that refers to the post’s point of view;	
	0.5 points to the sentence(s) that shows the student disagrees with the original post writer.	
3 rd paragraph (0.5 points):	0.5 points are given to the conclusion.	
Paragraph coherence (2 points):	Points	Descriptors
	2	logical, well-organized, and coherent (e.g. proper use of transitions)
	1	logical but not well-organized e.g. misuse of transitions (e.g. misuse of transitions)
	0	illogical and poorly-organized (e.g. no use of transitions)
	Remark: 1 point from the total score (20) will be deducted if students do not write with a 3-paragraph format.	
CONTENT (6 POINTS)		
Students must <u>argue against</u> the web post presented in the prompt.		
2 points:	1 point is given to each reason (total of 2 reasons).	
4 points:	2 points are given to the supporting ideas of each reason (total of 2 reasons).	
	The criteria for supporting ideas are as follows:	
	Points	Descriptors
	2	logical, relevant, and complete
	1	logical, relevant but incomplete (additional details are required to make the argument convincing)
0	illogical or irrelevant	
- One reason and its supporting ideas must come from the source that is <u>against</u> the prompt. (There is only one source that can be used.) - The other reason and supporting ideas are <u>of their own</u>, which must be <u>different</u> from the ones from the source given.		
Remarks: (1) For the reason that comes from the source, if students use the support as their reason, they will not get any point for the reason. However, if the following sentence(s) is logical, they can still get a point for the support. That is, they will get 0 for the reason but can still get up to 2 points for the supporting ideas if the supporting ideas are complete. (2) If students’ web posts agree with the web post in the prompt, their content score will be 0 , their maximum organization score will be 2 , and maximum grammar score will be 3 . Therefore, their maximum total writing score can only be 5. (3) If students’ content score is between 1 and 2, their maximum grammar score will be 5. (4) Students will not be penalized if they do not cite or paraphrase the source. (5) A total of 0.25 points will be deducted for irrelevant or excess detail. (6) If students write more than 220 words, 1 point will be deducted.		

GRAMMAR (10 POINTS) <i>The argumentation/persuasion:</i>	
Points	Descriptors
9-10	- shows excellent language use and appropriate expressions for this type of web post (e.g. a variety of sentence structures and appropriate word choices) - contains no or few major grammatical errors / may contain a few minor grammatical errors
7-8	-demonstrates the ability to vary sentence structures and use appropriate expressions for this type of web post -contains a few major and minor grammatical errors -contains a few inappropriate word choices
5-6	-contains a moderate number of major and minor grammatical errors -contains some inappropriate word choices
3-4	-contains many major and minor grammatical errors -contains some wrong word choices
1-2	-contains a lot of major and minor grammatical errors -contains a limited range of vocabulary and many wrong word choices
<i>Remarks:</i>	- Major grammatical errors interfering with the meaning (e.g. tense, S-V agreement, voice, fragments, run-on, voice, spelling—causing communication breakdown) - Minor grammatical errors (e.g. article, preposition, punctuation, capitalization, misspelling—not causing communication breakdown)

APPENDIX 3

Pre-task questionnaire

Part I: Bio-data and English Language Learning Background

Directions: Please tick (✓) in the appropriate box and give a written answer for the information below that describes yourself.

1. Faculty..... Department
2. Gender Male Female
3. Current age:
4. I obtained ☐ A (เกรด 4) ☐ B, B+ (เกรด 3) ☐ C, C+ (เกรด 2) ☐ D, D+ (เกรด 1)
☐ F (เกรด 0) in English at the final year of my high school.
5. My CU-TEP (TOEFL Equated) score:
6. At present, I am studying additional English language by myself (self-study) in addition to what is taught in class:
☐ 6.1 Yes: []11.1.1 Vocabulary []11.1.2 Grammar []11.1.3 Reading
[]11.1.4 Writing []11.1.5 Listening []11.1.6 Speaking
☐ 6.2 No, (Reason/s):
.....
.....
7. Why do you want to learn English? (*Can choose more than one item, if necessary*)
 - 7.1 ☐ interested in English
 - 7.2 ☐ interested in the English culture/the culture(s) of native English speaking countries
 - 7.3 ☐ have friend/s who use English in communication
 - 7.4 ☐ required to take an English course to graduate
 - 7.5 ☐ need English for my future career
 - 7.6 ☐ need English for travel
 - 7.7 ☐ Others:

8. My current levels of English language skills are:

My Current English Language Skills		Level				
		1	2	3	4	5
		Very Weak	Weak	Average	Good	Very Good
8.1	Reading					
8.2	Writing					
8.3	Vocabulary					
8.4	Grammar					

9. Which English skill affected your English performance most? (List the skills in order: **6**— *affected* your performance **MOST** and **1**—*affected* your performance **LEAST**. If a particular skill did **NOT** *affect* your performance, please put a ‘0’ in the [])

[]9.1 Vocabulary []9.2 Grammar []9.3 Reading []9.4 Writing
[]9.5 Listening []9.6 Speaking

Part II: Students’ Perceptions of Self-Review and Peer-Review Strategies

		Level				
		1	2	3	4	5
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
10.	I think that using self-review strategy helps develop my writing skills.					
11.	I think that using peer-review strategy helps develop my writing skills.					
12.	I think that self-review strategy helps develop my writing content.					
13.	I think that peer-review strategy helps develop my writing content.					
14.	I think that self-review strategy helps develop my writing organisation.					
15.	I think that peer-review strategy helps develop my writing organisation.					
16.	I think that self-review strategy helps develop my grammar accuracy.					
17.	I think that peer-review strategy helps develop my grammar accuracy.					
18.	I think that self-review strategy is useful to me.					
19.	I think that peer-review strategy is useful to me.					

Notes: Self-review strategy: Correcting, editing, revising, and rewriting my own work.

Peer-review strategy: Correcting and editing my classmate’s work as well as revising and rewriting my work which was previously corrected and edited by my classmate.

20. Other comment/s or suggestion/s (about any relevant issue of English language learning and/or class):

.....
.....
.....
.....
.....

APPENDIX 4

Writing Lesson

Putting forward an Argument in a Web Posting

I. Writing Objective

The objective of putting forward an argument in a web posting is to express your opinion in response to other people's ideas. In this unit, the focus is to **argue against** another writer's opinion. To do so, you have to use sound reasons to back up your ideas and support the reasons with strong evidence such as statistics and facts, examples, or quotes from experts. A sample of arguments in a web posting is given below.

II. Sample arguments in a web posting

Instructions: Write a well-organized 3-paragraph web post that responds to the following web post. You must **argue against** the writer's opinion in the web post.

Posted by Jay C @ 11.16 p.m.

There's nothing wrong with file sharing. Everyone does it – and if everyone does it and the police haven't stopped it, then it must be OK.

- From the two sources below, find **ONE** source that argues against the web post writer.
- Use examples and/or evidence from that source to write a reason and supporting ideas.
- Think of **one** more reason of your own and an example or a piece of evidence to support your reason.
- Write between 150 and 200 words in length with proper sequence markers and connectors.

This is in response to JayC's comments that file sharing is not wrong at all and that it must be OK because the police haven't stopped it. I couldn't disagree more. Many other people also hold this view. Although I know I can't change their mind, I'd like to present the other side of the story.

First, it's important to remember that file sharing is an intellectual property crime. One of the most common forms of file sharing is sharing digital media, such as online music and movies, with friends or people on the Internet. However, these are creative assets belonging to people who produced or created them. For this reason, sharing them without the owners' consent equals theft which is a crime.

Another problem with file sharing is that it can harm the digital media industry. Don't forget that artists create their work for commercial purposes. Thus, sharing files instead of buying them legally will deprive producers of the financial resources they need to remain in the business. The difficulty of the market for movies and music on CDs and DVDs is a case in point. Several researchers who study the effect of file sharing on media industry profits have found that file sharing reduces sales, ranging from 3.5% for movies to 30% for music. All in all, it's clear that file sharing is not only wrong but also harmful, and something must be done to stop it!

Key: Sample Answer
(Answers may vary.)

Posted by JayC @ 11.16 p.m.

There's nothing wrong with file sharing. Everyone does it – and if everyone does it and the police haven't stopped it, then it must be OK.

Posted by Justin @ 01.35 a.m.

State your intention — This is in response to JayC's comments that file sharing is not wrong at all and that it must be OK because the police haven't stopped it. I couldn't disagree more. Many other people also hold this view. Although I know I can't change their mind, I'd like to present the other side of the story.

State your main argument — First, it's important to remember that file sharing is an intellectual property crime. One of the most common forms of file sharing is sharing digital media, such as online music and movies, with friends or people on the Internet. However, these are creative assets belonging to people who produced or created them. For this reason, sharing them without the owners' consent equals theft which is a crime.

State your main arguments — Another problem with file sharing is that it can harm the digital media industry. Don't forget that artists create their work for commercial purposes. Thus, sharing files instead of buying them legally will deprive producers of the financial resources they need to remain in the business. The difficulty of the market for movies and music on CDs and DVDs is a case in point. Several researchers who study the effect of file sharing on media industry profits have found that file sharing reduces sales, ranging from 3.5% for movies to 30% for music.

State your conclusion or final thought — All in all, it's clear that file sharing is not only wrong but also harmful, and something must be done to stop it!

III. Organization of an argument in a web posting

As with any kind of writing, arguments in a web posting may have several organizational patterns. However, the example argument in Unit 6 (p.52) consists of three parts:

Paragraph 1 Introduction

Begin this part by stating your purpose and intention in responding to a post.

Paragraph 2 Main argument 1 and supporting evidence

This is where you provide your arguments in response to the ideas in a web posting. Make sure that your arguments are clear and well supported. Support can be in the form of statistics and facts, examples, or quotes from experts.

Paragraph 3 Main argument 2 and supporting evidence, and conclusion or final thought

In this paragraph, in addition to the second main argument and supporting evidence, you will write a concluding sentence that shows your viewpoint towards the posting you are responding to and that follows logically from what you have already presented. This may be followed by your final thought following from the discussion. An important point to keep in mind here is not to introduce any new ideas at this point, i.e. ideas that are not directly connected to your arguments, as this will confuse the reader.

IV. Useful expressions for putting forward an argument in a web posting

A. Stating your intention

This is in response to / This is a response to / I'd like to reply to + A's comments + that + clause.

e.g. ***This is in response to / I'd like to reply to / This is a response to JayC's comments that file sharing is not wrong at all and that it must be OK because the police haven't stopped it.***

I'd like to present + my arguments/evidence against + A's comments + that + clause.

e.g. ***I'd like to present my arguments/evidence against JayC's comments that file sharing is not wrong at all and that it must be OK because the police haven't stopped it.***

I'd like to present my view/viewpoint/point of view/perspective on this.
I'd like to have my say about this.

B. Showing disagreement

I couldn't disagree more.

I (strongly) disagree with that idea/view/viewpoint/perspective.

I (strongly) object to that idea/view/viewpoint/perspective.

I'm (strongly) opposed to that idea/view/viewpoint/perspective.

C. Stating your main arguments

First/Second/Third, + clause (argument).

e.g. ***First, file sharing is an intellectual property crime.***

The first problem (with X) is that + clause.

The first/second/third problem (with X) is that + clause.

e.g. ***The first problem (with file sharing) is that it is an intellectual property crime.***
Another problem (with X) is that + clause.

- e.g. **Another problem (with file sharing) is that** it can harm the digital media industry.
- It's important to remember that + clause.
e.g. **It's important to remember that** file sharing is an intellectual property crime.
- Another benefit is that + clause.
e.g. **Another benefit is that** you won't be judged on the basis of your real-world age, health, appearance, job, or financial status.
- What you might not know is that + clause.
e.g. **What you might not know is that** millions of such works of intellectual property are being stolen every day, hurting everyone involved – the owners, producers, or artists.
- Don't forget that + clause(s).
e.g. **Don't forget that** artists create their work for commercial purposes.
- But consider this for a moment. + Sentence.
e.g. **But consider this for a moment.** Artists create their work for commercial purposes.
- Sentence. + For this reason, + clause.
e.g. *These are creative assets belonging to the people who produced or created them. **For this reason,** sharing them without the owners' consent equals theft which is a crime.*
- Sentence. + Thus,/Hence,/Therefore, + clause.
e.g. *Don't forget that artists create their work for commercial purposes. **Thus,** sharing files instead of buying them legally will deprive producers of the financial resources they need to remain in the business.*

D. Referring to other people's views

- Subject + say that/have found that/have long recognized that/have claimed that + clause.
e.g. **Experts say that** because consumers copy and share their CDs and DVDs, businesses have to adapt by selling their products online instead.
A lot of people have found that the government has spent much money on a sculpture for the park.
Psychologists have long recognized that there are many forms of experience.
Many gamers have claimed that because of this, they've felt free to express themselves better, make decisions more confidently, and become more independent.
- According to (source e.g. people, newspaper), + clause.
e.g. **According to psychologists from Northwestern University,** creative problem solving is a two-stage process.

E. Giving examples

For example,/For instance,/To illustrate, + clause.

- e.g. **For example**, the failure of the market for music on CDs shows the deterioration of the digital media industry.

Noun / Noun Phrase + is a case in point.

- e.g. The failure of the market for music on CDs **is a case in point**.

F. Stating your conclusion or final thought

All in all, you have to admit that + clause.

- e.g. **All in all, you have to admit that** that's not a bad result!

All in all, it's clear that + clause.

- e.g. **All in all, it's clear that** file sharing is not only wrong but also harmful, and something must be done to stop it!

To sum up, I believe that + clause.

- e.g. **To sum up, I believe that** file sharing is not only wrong but also harmful, and something must be done to stop it!

At the end of the day, + clause.

- e.g. **At the end of the day**, file sharing is not only wrong but also harmful, and something must be done to stop it!

APPENDIX 5

Writing task 1: Censorship (self-revision) with answer key

Instructions: Write a well-organized 3-paragraph web post that responds to the following web post. You must **argue against** the writer’s opinion in the web post.

Posted by Debbie

Many parents let their children watch TV programs on their own. However, considering the content of some programs, others strictly control what their children are exposed to on TV. They also want some TV programs to be censored. But, to me, censorship is absolute nonsense. Even my 5-year-old nephew knows fully well what is happening when something is being censored. When an actor is holding a blurred gun toward someone, what else can he be trying to do but to kill? Is this type of censorship going to work? I don’t think so!

- From the two sources below, find **ONE** source that argues against the web post writer.
- Use examples and/or evidence from that source to write a reason and supporting ideas.
- Think of **one** more reason of your own and an example or a piece of evidence to support your reason.
- Write between 150 and 200 words in length with proper sequence markers and connectors.

Source 1

Our survey shows that 77% of producers feel censorship damages their creativity, and 85% believe that the quality of their work is diminished as a result of censorship. These findings indicate the severe effects of TV censorship on producers’ creativity.

ABAC Poll

Source 2

In a recent news report, I saw a teenage boy who was killed and two others who were seriously injured because they were intentionally lying on the highway. Their parents said that they might have tried to copy the leading actor on a popular TV series called “Dare to Die.”

A concerned mother

Answer Key
(Answers may vary.)

I'd like to present my arguments against Debbie's comments that TV censorship may not be an effective way to protect children. Many other people also hold this view. Although I know I can't change their mind, I'd like to have my say about this.

First, without censorship, children may copy dangerous behavior they have seen on TV. According to a recent news report, three teenage boys copied the leading actor on a series, "Dare to Die." They intentionally lay on the highway. As a result, one was killed and two others were severely hurt in this incident.

Moreover, censorship can reduce parents' concerns about what their children watch on TV. A lot of parents want to monitor their children watching TV, but some are not always available to do that. Many agree that, with censorship, they do not have to keep an eye on their children all the time. All in all, you have to admit that it is sensible to censor TV programs.

(164 words)

APPENDIX 6

Writing task 2: Live Concerts (peer-revision) with answer key

Instructions: Write a well-organized 3-paragraph web post that responds to the following web post. You must **argue against** the writer's opinion in the web post.

Posted by SeoulMan

"Live concerts are awful. They're too crowded, you can't see anything and the audience is incredibly noisy. It's better to buy CDs or download albums of music produced in the studio."

- From the two sources below, find **ONE** source that argues against the web post writer.
- Use examples and/or evidence from that source to write a reason and supporting ideas.
- Think of **one** more reason of your own and an example or a piece of evidence to support your reason.
- Write between 150 and 200 words in length with proper sequence markers and connectors.

Source 1

I really love live concerts. I enjoy the interaction with my friends, and the rest of the audience as well as my favorite musicians. We sing, dance, and shout and have a really great time together. I think when I listen to music albums alone at home, I don't have as much fun.

LeAnn

Source 2

There's nothing in the world I hate more than live concerts. The huge crowd is unbelievably irritating and people are pushing others around to get closer to the artists. At the last concert I went to, one of the fans almost knocked me down. He didn't even say he was sorry. Others in the audience were trying to start fights. It all got a little out of control. In my opinion, live performances are bad experiences. After that concert, whenever my friends ask me to go to one, I usually say no.

Ryan

Answer Key
(Answers may vary.)

I'd like to present my arguments against SeoulMan's comments that live concerts are terrible because of the crowds and noisy audience and that CDs or downloading music from the internet is better. I don't agree. Although I can't change the mind of people like SeoulMan, I'd like to give my opinion on this.

First, live concerts are really fun experiences. When you're at a live concert, you're interacting with your friends and others in the audience and your favorite musicians. The excitement from singing, dancing, and shouting together is much more fun than when you listen to music at home by yourself.

Second, you're exposed to real live music at concerts. CDs recorded in a studio are electronically enhanced so the music isn't really genuine. A lot of people think the occasional slips at live performances add to the whole experience, making it very spontaneous and real, which is not the case with music produced in the studio. At the end of the day, I think, although the crowds are noisy and the performances might not be perfect, live concerts are places where you can have a really fun experience as well as hear authentic music performances.

(197 words)

APPENDIX 7

Writing checklist and correction symbol worksheet

Writing checklist

SCORING CRITERIA	Actual Score			
ORGANIZATION [4]				
The paragraph has all three parts: Introductory, body, and concluding sentences. (3)				
- The introductory sentence has a topic sentence that identifies the writer's point of view.	0	1		
- The body sentences include reasons that support the writer's position.	0	1		
- The concluding sentence restates the topic sentence in different words.	0	1		
The content in the paragraph is well-organized, logical, and coherent. (1)				
- Correct transitions are used for well-organized, logical, and coherent sentences in the paragraph.	0	1		
CONTENT [6]				
- Each paraphrased reason taken from the given sources is stated in each body sentence.	0	1	2	3
- Relevant supporting details or examples paraphrased from the given sources are used to support each point.	0	1	2	3
GRAMMAR [10]				
- Excellent language use (e.g. a variety of sentence structures and appropriate word choices); No major but a few minor grammatical errors	9		10	
- The ability to vary sentence structures; a few major and minor grammatical errors; a few inappropriate word choices	7		8	
- A moderate number of major and minor grammatical errors; some inappropriate word choices	5		6	
- Many major and minor grammatical errors; some wrong word choices	3		4	
- A lot of major and minor grammatical errors; a limited range of vocabulary and many wrong word choices	0	1		2
<i>Remarks:</i> - Major grammatical errors (e.g. tense, voice, S-V agreement, fragments, run-on sentences) - Minor grammatical errors (e.g. article, capitalization, punctuation, preposition) do not cause communication breakdown.				
GRAND TOTAL	20			

Correction symbol worksheet

SYMBOL	MEANING	EXAMPLE
sp	spelling mistake	- She <u>speeks</u> French fluently.
ww	wrong word	- He gave the wrong <u>factory</u> .
wo	wrong word order	- They <u>never are</u> at home when I call.
cap.	capitalization error	- I go to <u>chulalongkorn</u> university and plan to become a <u>Doctor</u> .
p.	punctuation error	- Judie lives in Bangkok; but works in Chiangmai. - This dissert is made with eggs_milk_and sugar.
sv	subject-verb agreement mistake	- Most people <u>eats</u> the same thing for breakfast everyday.
T	wrong tense usage	- Most people <u>have eating</u> the same thing for breakfast everyday.
wf	wrong word form	- He is a very nice and <u>kindness</u> manager.
^ \ ^	word missing unnecessary word	- He ^ working at the McDonald's now.
RO	run-on	- They ate breakfast then they went out. {Correct: They ate breakfast. Then they went out. or They ate breakfast, and then they went out.}
FRAG	Fragment (not a complete sentence)	- <u>The dinner that we had last night</u> . {Correct: The dinner that we had last night was very good.}
sing. / pl.	Singular/plural required or error	- Peter likes fast music and fast <u>car</u> .
π	paragraph	
??	<i>I don't understand this!</i>	

Adapted from: - *Experiential English*. 2008. Chulalongkorn Language Institute (CULI).
- Hogue, A. 1996. *First steps in academic writing*.

APPENDIX 8

Participants' English achievement and proficiency data and writing test and task score profiles

Faculty	Participant		Writing Profile														English proficiency score (Before Review Strategy Training) (120)	Final Year Grade in High School
			Writing Task 1 (Self-revision)						Writing Task 2 (Peer revision)									
	Word Count (200-220 words)		Writing Score (20)				Word Count (200-220 words)		Writing Score(20)									
			First draft / Final draft						First draft / Final draft									
No.	Gender	1 st draft	Revised (After self-review)	Organization (4)	Content (6)	Grammar (10)	Total (20): Difference	1 st draft	Revised (After peer-review)	Organization (4)	Content (6)	Grammar (10)	Total (20)					
Science	1	F	161	175	2.5/3	3.75/5	6.25/6.88	12.5/14.88: +2.38	142	148	2.63/2.63	4.63/4.63	6.38/6.63	13.63/13.88: +0.25	65 (H)	B		
	2	F	196	173	2.75/2.25	3.75/4	5.63/6.5	12.13/12.75: +0.62	196	203	3.13/3.13	5/5	6.63/6.63	14.75/14.75: -	62 (H)	B		
	3	F	189	188	2.63/3	5.38/5.5	7.25/7.5	15.25/16: +0.75	167	166	2.75/2.75	4.13/4.13	6.13/6.13	13/13: -	57 (H)	B		
	4	M	200	200	3/3.13	5/4.63	6.63/7	14.63/14.75: +0.12	153	153	2.88/2.88	5/5	7.13/7.25	15/15.13: +0.13	53 (L)	B		
	5	F	165	203	2.38/2.88	3.5/5	6/6.63	11.88/14.5: +2.62	156	157	3/3	4.38/4.5	6.63/6.63	14/14.13: +0.13	52 (L)	C+		
	6	F	151	184	2.88/3	4.25/5	7/7.25	14.13/15.25: +1.12	154	162	2.88/2.88	4.13/4.38	5.88/6	12.88/13.25: +0.37	48 (L)	C+		
	7	M	211	192	2.38/2.38	3/3	5.25/5.75	10.63/11.13: +0.5	172	175	3.13/3.13	4/4	6.38/6.5	13.5/13.63: +0.13	47 (L)	B		
	8	F	211	213	2.63/3.25	4.25/5.5	6.88/7.5	13.75/16.25: +2.5	172	176	3.13/3.25	5/5	7.5/7.5	15.63/15.75: +0.12	47 (L)	C+		
	9	F	148	156	2.75/2.75	4/4	6.5/6.75	13.25/13.5: +0.25	112	135	2.38/3.13	3.63/5.13	6/6.5	12/14.75: +2.75	46 (L)	C		
	10	F	181	190	2.63/3	5/5.63	6.5/7	14.13/15.63: +1.5	207	206	2.38/2.38	3.88/3.88	6.13/6.38	12.38/12.63: +0.25	45 (L)	C+		
	11	M	163	151	2.38/2.38	4.38/4.63	6/7.25	12.75/14.25: +1.5	179	173	3/3	4/5	5.88/6	12.88/14: +1.12	45 (L)	C		
	12	M	189	203	2.5/2.88	4.13/4.75	6/6.63	12.63/14.25: +1.62	159	159	2.75/3	4.5/4.5	5.63/5.88	12.88/13.38: +0.5	41 (L)	C+		
	13	F	175	189	2.63/2.63	3.75/4	5.75/6	12.13/12.63: +0.5	201	202	2.88/2.88	5/5	6.38/6.38	14.25/14.25: -	41 (L)	C+		
	14	M	154	152	2.63/2.63	3.88/4	6/6.5	12.5/13.13: +0.63	189	188	2.75/2.75	4.38/4.38	6.13/6.25	13.25/13.38: +0.13	39 (L)	C+		
	15	F	187	186	2.88/2.88	4.75/4.75	6.3/6.38	13.75/14: +0.25	166	164	3/3.13	5/5	6/6.63	14/14.75: +0.75	38 (L)	C+		
	16	F	182	194	2.75/2.88	5/4.63	6.25/6.5	14/14: -	171	165	2.63/2.63	4.63/4.63	5.88/6	13.13/13.25: +0.12	38 (L)	C		
	17	M	171	192	2.68/3.38	3.88/5.5	6.5/7.38	13/16.25: +3.25	165	157	3.13/3.25	4.63/4.63	6.5/6.5	14.25/14.38: +0.13	38 (L)	C		
	18	F	195	192	3/3.13	5/5	6/6.63	14/14.75: +0.75	172	173	2.88/2.88	4.63/5.63	6.63/7	14.13/15.5: +1.37	35 (L)	C		
	19	F	189	181	2.38/2.5	3.38/3.38	4.75/4.75	10.5/10.63: +0.13	162	162	3/3	4.5/4.5	6.38/6.38	13.88/13.88: -	32 (L)	C		
	20	F	198	197	3.5/3.5	5.75/5.75	6.63/7.38	15.88/16.63: +0.75	175	186	3/3	5.5/5.5	6.5/7	15/15.5: +0.5	28 (L)	D+		
Note: The writing task scores, both individual criteria scores and the total scores, were the <u>average scores</u> rated by two external raters whose inter-reliability of the mean scores was .89 (<i>p</i> < .01).																		

Faculty	Participant		Writing Profile												English proficiency score (Before Review Strategy Training) (120)	Final Year Grade in High School
			Writing Task 1 (Self-revision)						Writing Task 2 (Peer revision)							
	No.	Gender	Word Count (200-220 words)		Writing Score (20)				Word Count (200-220 words)		Writing Score(20)					
					First draft / Final draft						First draft / Final draft					
			1 st draft	Revised (After self-review)	Organization (4)	Content (6)	Grammar (10)	Total (20)	1 st draft	Revised (After peer-review)	Organization (4)	Content (6)	Grammar (10)	Total (20)		
Education	1	M	193	170	3/3	5.5/5.5	6.5/6.5	15/15: -	201	202	3.63/3.63	4.5/4.5	6.75/6.75	14.88/14.88: -	75 (H)	A
	2	F	182	176	2/3.5	5/6	6.5/7.75	13.5/17.25: +3.75	198	198	3.5/3.5	6/6	6.5/6.5	16/16: -	72 (H)	B
	3	F	199	212	3.25/3.25	5/5.38	6.5/6.5	14.75/15.13: +0.38	145	149	2.5/3.25	4/4	6/6.25	12.5/13.5: +1	68 (H)	C+
	4	M	172	213	3.38/3.5	4.75/5.63	6.88/7	15.01/16.13: +1.12	223	223	4/4	6/6	7.5/7.5	17.5/17.5: -	67 (H)	B+
	5	M	180	217	3.25/3.38	4.88/5.13	6.5/7.25	14.63/15.75: +1.12	149	149	2.88/2.88	5.38/5.38	5.5/6.13	13.75/14.38: +0.63	67 (H)	B+
	6	M	233	232	3.75/3.75	5.63/5.75	6.38/6.5	15.75/16: +0.25	151	154	3/3	5.25/5.25	6.25/6.5	14.5/14.75: +0.25	67 (H)	B
	7	M	180	170	3.13/3.13	4/4	6.5/6.63	13.63/13.76: +0.13	136	135	2.88/2.88	4.75/4.75	6.5/6.5	14.13/14.13: -	66 (H)	B
	8	F	156	189	3.25/3.25	5.5/5.5	6.38/7.5	15.13/16.25: +1.12	129	135	2.63/3	5.25/5	6/6.25	13.88/14.25: +0.37	65 (H)	B
	9	F	193	206	3/3	5/5.25	6.5/6.75	14.5/15: +0.5	158	158	2.88/2.88	5.25/5	6.75/7.25	14.88/15.13: +0.25	65 (H)	B
	10	F	192	183	3.25/3.25	5.63/5.63	5.5/5.75	14.38/14.63: +0.25	151	149	3/3	5/5	6.5/6.5	14.5/14.5: -	61 (H)	C+
	11	M	200	198	3.38/3.5	5.25/5.25	6.5/6.88	15.13/15.63: +0.5	148	164	3/3	4.75/4.75	6/6.75	13.75/14.5: +0.75	60 (H)	B
	12	M	182	194	3.25/3.5	4.25/5.38	7.5/7.38	15/16.26: +1.26	187	154	3.25/3.25	5.63/5.5	6.75/7	15.63/15.75: +0.12	56 (L)	C+
	13	F	162	180	3/3	5/5.25	7/7	15/15.25: +0.25	147	150	3/3	4.5/4.5	6/6.38	13.5/13.88: +0.38	54 (L)	B
	14	M	159	159	3.38/3.38	5.5/5.5	6.75/6.88	15.63/15.75: +0.12	134	136	3/3	5.25/5.25	7/7	15.25/15.25: -	54 (L)	C+
	15	F	202	211	3.75/3.75	5.38/5.5	5.5/5.75	14.63/15: +0.37	136	151	2.25/2.25	4/4	5.5/5.75	11.75/12: +0.25	53 (L)	C+
	16	F	161	178	3/3	5.25/5.75	5.75/6.25	14/15: +1	143	143	2.88/2.88	3.75/4	6/6.38	12.63/13.25: +0.62	53 (L)	C+
	17	F	198	191	2.88/3.13	5.5/5.5	6.13/6.13	14.5/14.75: +0.25	173	171	2.88/3.38	5.63/5.63	6/6.13	14.5/15.13: +0.63	52 (L)	B
	18	F	130	163	3.13/3	4.5/5.5	6.38/6.5	14/15: +1	132	131	3/3	3.75/3.75	6.75/6.75	13.5/13.5: -	52 (L)	C+
	19	M	160	170	2.38/3.25	5.12/5.38	6/6.13	13.5/14.75: +1.25	157	156	3.25/3.25	5.5/5.5	6/6	14.75/14.75: -	50 (L)	C+
	20	F	214	200	3.25/3.25	4.75/4.75	6.5/6.5	14.5/14.5: -	235	234	3.5/3.5	5.5/5.5	6.25/7	15.25/16: +0.75	49 (L)	B
	21	F	179	175	3/3	5.5/5.5	6.75/6.75	15.25/15.25: -	155	141	2.88/2.88	5.13/4.75	5.63/6.13	13.63/13.75: +0.12	44 (L)	B
	22	F	221	181	1.75/3	3.5/5.13	6.5/6.88	11.75/15: +3.25	125	123	2.25/2.25	4.75/4.75	5.5/5.75	12.5/12.75: +0.25	42 (L)	C+
	23	F	201	220	2.88/2.88	5.13/5.13	5.75/6.13	13.75/14.13: +0.38	155	175	2.5/2.5	4.25/4.75	5.38/5.75	12.13/13: +0.87	38 (L)	C+
	24	F	181	179	3/3.25	5.63/5.63	7/7	15.63/15.88: +0.25	167	163	2.25/2.25	4.25/4.75	5.5	12/12.5: +0.5	38 (L)	D+
	25	F	162	171	2.88/3	5.5/5.5	5.75/6.5	14.13/15: +0.87	148	147	2.88/2.88	5/5	5.5/5.63	13.38/13.5: +0.12	36 (L)	B
	26	M	196	198	3.25/3.25	5.5/5.5	7.25/7.25	16/16: -	196	191	3.38/3.38	6/6	6/6.25	15.38/15.63: +0.25	31 (L)	C
Note: The writing task scores, both individual criteria scores and the total scores, were the average scores rated by two external raters whose inter-reliability of the mean scores was .89 ($p < .01$).																

APPENDIX 9

In-process questionnaire

Directions: Please tick (✓) in the appropriate box and give a written answer for the information below that describes yourself.

1. In the self-review strategy practice, which of the following is the most difficult for me when I have to write in English?

☐ Organisation ☐ Content ☐ Language/Grammar

Please provide us with more details on the challenges of each criterion.

1.1 **Organisation**
.....

1.2 **Content**
.....

1.3 **Language including vocabulary, punctuation, and etc.**
.....

2. In the peer-review strategy practice, which of the following is the most difficult for me to provide feedback in my classmate's task?

☐ Organisation ☐ Content ☐ Language/Grammar

Please provide us with more details on the challenges of each criterion.

2.1 **Organisation**
.....

2.2 **Content**
.....

2.3 **Language including vocabulary, punctuation, and etc.**
.....

3. In the peer-review strategy practice, which of the following is the most difficult for me to revise my work which was corrected and edited by my classmate?

☐ Organisation ☐ Content ☐ Language/Grammar

Please provide us with more details on the challenges of each criterion.

3.1 **Organisation**
.....

3.2 **Content**
.....

3.3 **Language including vocabulary, punctuation, and etc.**
.....

4. After the self-review strategy practice, I think I developed more writing confidence in terms of:

- | | | | |
|----------------------|------------------------------|-----------------------------|---------------------------------|
| 4.1 Organisation | ☐ Yes | ☐ No | ☐ Unsure |
| 4.2 Content | ☐ Yes | ☐ No | ☐ Unsure |
| 4.3 Language/Grammar | ☐ Yes | ☐ No | ☐ Unsure |

Please provide us with more details on how the self-review strategy helped you gain the writing confidence in each criterion.

4.1 **Organisation**
.....

4.2 **Content**
.....

4.3 **Language including vocabulary, punctuation, and etc.**
.....

5. After the peer-review strategy practice, I think I developed more writing confidence in terms of:

- | | | | |
|----------------------|------------------------------|-----------------------------|---------------------------------|
| 5.1 Organisation | ☐ Yes | ☐ No | ☐ Unsure |
| 5.2 Content | ☐ Yes | ☐ No | ☐ Unsure |
| 5.3 Language/Grammar | ☐ Yes | ☐ No | ☐ Unsure |

Please provide us with more details on how the self-review strategy helped you gain the writing confidence in each criterion.

5.1 **Organisation**
.....

5.2 **Content**
.....

5.3 **Language including vocabulary, punctuation, and etc.**
.....

APPENDIX 10

Post-task questionnaire

Direction: Please tick (✓) in the appropriate box that describes yourself.

Perceptions of:		Level				
		1	2	3	3	4
		Very Weak	Weak	Average	Good	Very Good
1.	My current English-language knowledge in terms of:					
	1. 1 Reading					
	1. 2 Writing					
	1. 3 Vocabulary					
	1. 4 Grammar					
		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
2.	I think that self-review strategy helps develop my writing skills.					
3.	I think that peer-review strategy helps develop my writing skills.					
4.	I think that self-review strategy helps develop my writing content.					
5.	I think that peer-review strategy helps develop my writing content.					
6.	I think that self-review strategy helps develop my writing organisation.					
7.	I think that peer-review strategy helps develop my writing organisation.					
8.	I think that self-review strategy helps develop my grammar accuracy.					
9.	I think that peer-review strategy helps develop my grammar accuracy.					
10.	I think that self-review strategy is useful to me.					
11.	I think that peer-review strategy is useful to me.					

12. Other comment/s or suggestion/s (about self-review and peer-review strategies):

.....

APPENDIX 11

Semi-structured interview questions

1. In your opinion, how was the writing workshop on the review strategy practices?
2. Please compare self-review and peer-review. Which one do you prefer? And why?
3. Any suggestion(s) about the workshop and/or the review strategies?