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**THE EFFECTS OF DIFFERENT TYPES OF TEACHER
WRITTEN FEEDBACK ON THAI COLLEGE
STUDENT WRITING**

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**A Thesis Submitted in Partial Fulfillment of the Requirements for
the Degree of Doctor of Philosophy in English Language Studies**

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จิตติมา กาวีระ : ผลของการให้ผลสะท้อนกลับแบบเขียนชนิดต่างๆ ของครูที่มีต่อการเขียนของนักศึกษาไทยระดับอุดมศึกษา (THE EFFECTS OF DIFFERENT TYPES OF TEACHER WRITTEN FEEDBACK ON THAI COLLEGE STUDENT WRITING)

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การวิจัยครั้งนี้มีวัตถุประสงค์เพื่อศึกษาผลของการให้ผลสะท้อนกลับแบบเขียนชนิดต่างๆ ของครู อันได้แก่ การให้ผลสะท้อนกลับต่อเนื้อหา (feedback on content) และการให้ผลสะท้อนกลับต่อรูปแบบภาษา (feedback on form) ซึ่งประกอบด้วย แบบตรง (direct feedback) แบบรหัส (coded feedback) และแบบไม่มีรหัส (uncoded feedback) ที่มีต่อคุณภาพของการเขียน ความถูกต้องทางไวยากรณ์และความยาวของการเขียนเมื่อใช้ผลสะท้อนกลับทั้งสี่ชนิด กลุ่มประชากรได้แก่นักศึกษาวิชาเอกภาษาอังกฤษ จำนวน 81 คนที่เรียนในรายวิชาการเขียนอนุเจต โดยใช้วิธีการสอนแบบเน้นกระบวนการเขียน ตลอดระยะเวลา 16 สัปดาห์ ณ มหาวิทยาลัยนเรศวร วิทยาเขตพะเยา นักศึกษาเขียนอนุเจต 3 ชนิดคือแบบเล่าเรื่อง (Narration) แบบบรรยายความ (Description) และแบบเปรียบเทียบ (Comparison/Contrast) ชนิดละ 3 หัวข้อและในแต่ละหัวข้อประกอบด้วย การเขียน 3 ร่าง คือร่างที่ 1 ร่างที่ 2 และร่างที่ 3 โดยในทุกๆ ร่างที่ 1 นักศึกษาได้รับผลสะท้อนกลับต่อเนื้อหาเพียงอย่างเดียว และในร่างที่ 2 นักศึกษาได้รับผลสะท้อนกลับต่อรูปแบบภาษา ซึ่งเน้นข้อผิดพลาดในการเขียน 5 ประเภท คือ คำกริยา ส่วนเติมท้ายคำนาม คำนำหน้านาม คำพิศ และโครงสร้างประโยค ร่างที่ 2 นี้ นักศึกษาจะได้รับผลสะท้อนกลับแบบตรงในทุกหัวข้อที่ 1 ของการเขียนแต่ละชนิด ในหัวข้อที่ 2 นักศึกษาได้รับผลสะท้อนกลับแบบรหัส และในหัวข้อที่ 3 แบบไม่มีรหัส การทดสอบการพัฒนาทางการเขียนของนักศึกษาประกอบด้วย การเปรียบเทียบผลทดสอบการเขียนอนุเจตก่อนและหลังเรียน การเปรียบเทียบงานเขียน ทั้งหมด 9 หัวข้อ และการเปรียบเทียบร่างที่ 2 และ 3 เครื่องมือวัดการพัฒนาทางการเขียนประกอบด้วย (1) เกณฑ์การประเมินผลการเขียนของ TOEFL (TOEFL writing scoring guide) เพื่อวัดคุณภาพของการเขียน (2) การวิเคราะห์อัตรา การลดลงของข้อผิดพลาดในการเขียนเพื่อวัดความถูกต้องทางไวยากรณ์ และ (3) การนับคำเพื่อวัดความยาวของการเขียน การเก็บข้อมูลเชิงปริมาณใช้แบบสอบถามจำนวน 3 ชุด แบบสอบถามชุดที่ 1 เพื่อเก็บข้อมูลพื้นฐานของนักศึกษา ชุดที่ 2 เพื่อสำรวจการใช้กลยุทธ์ในการแก้ไขงานเขียน (Revision strategies) และชุดที่ 3 เพื่อสำรวจเจตคติ ความเข้าใจ ความสนใจ และปัญหาในการใช้ผลสะท้อนกลับแต่ละชนิด การเก็บข้อมูลเชิงคุณภาพประกอบด้วย การสัมภาษณ์นักศึกษาจำนวน 12 คนซึ่งมีระดับความสามารถทางภาษาอังกฤษแตกต่างกัน

ผลการเปรียบเทียบคะแนนสอบก่อนและหลังเรียนแสดงให้เห็นการพัฒนาการเขียนอย่างมีนัยสำคัญในด้านคุณภาพของการเขียน ความถูกต้องทางไวยากรณ์ และความยาวของการเขียน

เมื่อเปรียบเทียบงานเขียนทั้ง 9 ชิ้นเพื่อคุณภาพของการเขียนพบว่าคะแนนของงานเขียนเพิ่มขึ้นในงานชิ้นสุดท้าย โดยเมื่อเปรียบเทียบร่างที่ 2 และ 3 พบว่าข้อผิดพลาดในการเขียนลดลงโดยเฉพาะอย่างยิ่งเมื่อใช้ผลสะท้อนกลับแบบตรง แบบรหัส และแบบไม่มีรหัสตามลำดับ นักศึกษาเขียนยาวขึ้นอย่างมีนัยสำคัญทางสถิติจำนวน 5 ชิ้นจากทั้งหมด 9 ชิ้น

ผลการวิเคราะห์ข้อผิดพลาดในการเขียนพบมากที่สุดในการใช้คำผิดตามด้วยโครงสร้างประโยค คำกริยา ส่วนเติมท้ายคำนาม และคำนำหน้านามตามลำดับ นักศึกษาสามารถแก้ไขข้อผิดพลาดแบบแก้ไขได้ (treatable category) ซึ่งได้แก่คำกริยา ส่วนเติมท้ายคำนามและคำนำหน้านาม ได้ถูกต้องมากกว่าการแก้ไขข้อผิดพลาดแบบแก้ไขไม่ได้ (untreatable category) คือคำผิดและโครงสร้างประโยค นักศึกษาใช้กลยุทธ์การแก้ไขการเขียนมากที่สุดเมื่อใช้ผลสะท้อนกลับแบบไม่มีรหัส ตามด้วยแบบรหัส และแบบตรงตามลำดับ นักศึกษามีเจตคติที่ดีต่อการให้ผลสะท้อนกลับของครูและการแก้ไขงานเขียนของตนเอง และเห็นว่าการให้ผลสะท้อนกลับเนื้อหาในการสอนตลอดจนกิจกรรมการแก้ไขงานช่วยพัฒนาทักษะการเขียน

สาขาวิชาภาษาอังกฤษ
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CHITTIMA KAWEERA : THE EFFECTS OF DIFFERENT TYPES OF
TEACHER WRITTEN FEEDBACK ON THAI COLLEGE STUDENT
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TEACHER WRITTEN FEEDBACK/ ERROR CORRECTION/ REVISION

This study aimed to investigate the effects of teacher written feedback on content and on form, namely content, direct, coded, and uncoded feedback on the student writing quality, grammatical accuracy, and writing fluency. The feedback was given to 81 EFL major students enrolled in a 16-week process approach writing course in a Thai university. The students wrote paragraphs of three different genres (narration, description, and comparison/contrast) on nine topics, three topics and three drafts for each genre. For every first draft (Draft 1), each student was given feedback on content only and for the second draft (Draft 2) feedback on form, focusing on five error categories, i.e., verb, noun ending, article, wrong word, and sentence structure. The first topic of each genre received direct feedback, the second coded feedback, and the third uncoded feedback. Using the given feedback, the students revised their writing. The pre- and post-tests of paragraph writing and a total of 1,458 second drafts (Draft 2) and final drafts (Draft 3) were compared using three methods of measurement to see improvement. The students' writing quality was measured against the TOEFL writing scoring guide, error rate reduction means of five error categories were used to measure grammatical accuracy, and word count was used to determine writing fluency. Three separate questionnaires were also used to obtain the students'

background information, their revision strategies when utilizing different feedback types, and their attitudes towards, comprehension of, attention to, and problems regarding these feedback. In-depth interviews with 12 students with different proficiency levels were conducted.

A comparison of the pre- and post-test scores revealed a significant improvement of writing quality, grammatical accuracy, and writing fluency. Of all nine writing assignments, overall there was an increase in the writing quality scores in the last writing assignment. Drafts 2 and 3 of all writing assignments in all genres compared, it was found that overall the error rates were reduced significantly on revision, the most after direct feedback followed by coded and uncoded feedback, respectively. Draft 3 was longer than Draft 2 in all nine writing assignments, five with a statistically significant improvement, showing writing fluency.

Wrong word errors were most frequently made among five error types, followed by sentence structure, verb, noun endings, and articles, respectively. The students were more successful in correcting errors in the “treatable” category (verbs, noun endings, and articles) than the “untreatable” one (wrong word and sentence structure). Revision strategies were employed most frequently after uncoded feedback, followed by coded, and direct feedback, respectively. The students had positive attitudes towards all feedback types and revision. They found teacher feedback, course content, and the revising activity helped them improve their writing.

School of English

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Academic Year 2007

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CHAPTER 1

BACKGROUND OF THE STUDY

1.1 Rationale of the study

Before the 1970s the teaching of writing in L2 primarily focused on language practice in order to help students write correctly and learn new vocabulary items (Ferris and Hedgcock, 1998; Johns, 1990; Raims, 1991; Silva, 1990). Thus, grammatical rules were carefully taught and error correction was focused during this period. Then, teachers of writing English as a second language (L2) and language theorists, who have stressed the importance of grammar, error correction and accuracy, have undergone a shift in their emphasis. In the 1970s, under the influence of native-English speaking theorists, there was a major shift in the paradigm to a process approach in which the writers themselves had to construct the texts. Both L1 and L2 students were encouraged to construct texts by focusing on a process of discovering ideas, drafting, revising and editing. (Arapoff, 1969; Lawrence, 1973; Zamel, 1982). Then, in the middle of the 1980s, teachers of English as second language (ESL) emphasized the approach and philosophy associated with process writing (Reid, 1993). This approach, according to Elbow (1989), made students concentrate on ideas, regardless of mechanics, grammar and organization, as it was assumed that if students focused primarily on topics they had chosen themselves and they were empowered to make decisions about the shaping and polishing of their own texts, “final products would improve as a natural consequence of a more enlightened process” (Ferris 2002,

p. 5). For this reason, both teachers and students found it more stimulating and less tedious to focus on ideas than on accuracy, as a result of which instruction in composition entered a period of benign neglect of errors and grammar teaching.

As the process approach played a major role in the L2 writing class, some writing theorists began to be concerned about the neglect of issues of accuracy and its effects on students, especially L2 writers. According to Eskey (1983 as cited in Ferris, 2002, p. 4), "... as the ability to correct errors is crucial in many settings and that students' accuracy will not magically improve all by itself," the language-based approach should not be left until the last stage of writing in order to avoid students' fossilization of errors. Also, Ellis (1997) notes fossilization of learners' grammar does not occur in L1 acquisition, but is unique in L2 acquisition. Other scholars (e.g., Silva, 1988; Leki, 1990; Zhang, 1995) also emphasize that limitations in the linguistic knowledge of L2 writers is different from that of L1 writers in important ways. The differences may include linguistic proficiency and intuition about language, learning experiences and classroom expectations, a sense of audience and writer, preferences for ways of organizing texts, writing processes and understanding of text uses as well as the social value of different text types (Silva, 1993). Hyland (2003) also notes,

"...the most immediately obvious factor that distinguishes many second language writers is the difficulty they have in adequately expressing themselves in English. These writers typically have a different linguistic knowledge base from native English speakers, So while most of us have the grammar of the language when we begin to write in our L1, L2 writers often carry the burden of learning to write and learning English at the same time" (p. 34).

A fair amount of studies suggest L2 writing is generally shorter, less cohesive, less fluent, and contains more errors (e.g., Purves, 1988 as cited in Hyland, 2003; Ferris, 2003). According to Reid (1993), errors derived from other variables besides

first language interference are generally influenced by overgeneralization and the level of difficulty. Thus, making errors is a problem which occurs as an inevitable part of EFL student writing. According to Lalande (1982), despite the fact that the students have studied certain rules of grammar, “some students exhibit remarkable consistency: they commit the same types of errors from one essay to the next” (p. 140). It is fair to say that this sort of undesirable consistency can frustrate both students and teachers alike.

Like other EFL students, Thai EFL students have the same problems. In a Thai classroom, errors found in English written communication are apparent among college students. According to Smyth (2001), one major reason is the significant differences between the two languages. The differences are punctuation (no punctuation marks in Thai) and grammar (i.e., auxiliaries, tenses and aspects, articles, adjectives and adverbs, nouns and pronouns). Another major problem found in an English written task by Thai students is negative transference of their mother tongue, Thai, into the target language (Ubol, 1980). As a result, it is common for Thai students who have been studying English for over ten years not to be able to carry on a simple conversation or to write a short passage without making several serious grammatical errors (Wongsbhindu, 1997).

Based on insights from SLA research which have several practical implications for teachers of L2 writers, Ferris (2002) suggests that teacher feedback tailored to students’ linguistic knowledge and experience is one of the suggested techniques to solve this problem. That is to make students learn from their errors in order to avoid future errors and also to improve their writing skills. Some scholars of writing (e.g., Leki, 1992; Raimes, 1983) believe that to give feedback is one of the

important methods of helping student writers to improve their written work. Reid (1993) states, "...it must help students to improve their writing by communicating feedback detailed enough to allow students to act, to commit to change in their writing..." (p. 218). To explain how feedback can contribute to better writing, Sommer (1982) states,

"Comments create the motive for doing something different in the next draft: thoughtful comments create the motive for revising. Without comments from their teachers or from their peers, student writers will revise in a consistently narrow and predictable way. Without comments from readers, students assume that their writing has communicated their meaning and perceive no need for revising the substance of their text" (p. 149).

According to Radeki and Swales (1988) and Leki (1991), it is important for teachers to provide their feedback since studies on student attitudes towards feedback have found that many students do want the errors in their writing to be corrected and that they may be frustrated if this does not happen.

It can be concluded from many scholars' and researchers' agreement that feedback is essential and has a positive effect on student writing. Thus, feedback on writing can be selected as a means of helping students to make revisions and it can also help students improve their writing skills.

On the other hand, there is a contradiction in continually providing feedback. Truscott (1996) contends that feedback is useless for both students and teachers because it is time consuming and might cause many negative effects. He also points out that probably influenced by process approaches to teaching writing, feedback has a short-term rather than a long-term improvement. He believes that the improvement is not concerned with improvements in the accuracy of subsequent writing, but in the linguistic accuracy of one written product. However, despite this belief, Truscott also

notes that EFL student writers cannot make progress in correcting skills if no one points out their errors. Although the results from previous studies on teacher feedback are varied as to whether feedback can help EFL writers write effectively, it is clear that if no one points out L2 students' errors, they will not be able to make progress in their editing skills.

Caught between the swing of the pendulum, teachers need to be aware of the issues surrounding the methods of giving written feedback. These include the fact that there are different types of errors found in EFL writing as well as different types of written feedback (e.g. direct feedback, coded feedback, and uncoded feedback). Also, EFL students come to class with different English proficiency levels. Thus, teachers need to find out which are the appropriate feedback types for the treatment of specific types of error and which are appropriate for students at different levels. In order to provide a better understanding of these issues, the present study aimed to find out what the effects of different types of written feedback from teachers on students' writing of different genres were and what strategies they used in revising their written work. In addition, the present study considers the students' perspectives: their attitudes towards, their comprehension of, their attention to, and their problems regarding teacher feedback.

Compared to the number of research studies on error correction conducted in English speaking countries, in Thailand where English is used as a foreign language, the number has been relatively small. In other words, while most of the previous research work on error correction research has been studied with ESL and EFL learners who studied English in the United States (Lee, 2004; Ferris, 2001) or in countries where English is used as a first language (e.g. Australia) or an official

language (e.g. Hong Kong), much less has been conducted on EFL learners in a real EFL context (e.g. Japan, Thailand). Also, a fair amount of research on feedback types in L2 writing has been carried out and it is worth noting that the few reported studies on teacher feedback have focused on having the students do something with their errors besides simply receiving different types of feedback. This focus becomes an important issue because one of the problems in providing feedback comes from students' lack of attention to the feedback, no matter how useful it is. It can be seen that some previous studies surveyed students' preferences for error correction in college level writing classes (Cohen, 1987; Leki, 1991; Ferris, 1995; Lee, 2004), or investigated the effects of different feedback types on grammatical improvement in students' writing (Rob, Rod and Shortreed, 1986; Fathman and Walley, 1990; Padgate 1999; Fazio 2001; Hyland, 2003). So far, few attempts have been made to investigate strategies for dealing with the feedback or to analyze such techniques combined with different types of feedback. As such, although the beneficial aspects of teacher feedback for EFL student writing are obvious, little is known about how the students use the different types of feedback.

The present study was distinct from previously conducted research in the following important ways. First, some studies employed different types of feedback without any technique to draw students' attention to the teacher feedback. However, many scholars in L2 writing (e.g., Lalande, 1982; Cohen, 1990; Ferris, 2002; Lee, 2003) suggest that learners who have systematic approaches for dealing with feedback may well remember the feedback more successfully than those who did not. Ferris (2005) suggests that further research on error correction should examine the effects of different feedback strategies and combinations of strategies. It is, therefore, important

for researchers and teachers of writing to identify issues in error correction, feedback strategies, and techniques for assisting students to help themselves through various types of research design. Thus, this study investigated how students utilized teacher feedback in conjunction with their strategies for revising their written work.

Second, some previous studies (e.g., Kepner, 1991; Kunlasuth, 2000) analyzed the data by combining the scores of all subjects across various errors types to measure language development. This present study differentiated the total number of errors from the reoccurrence of the students' errors in new pieces of writing. It aimed to see whether the rate of errors appearing in subsequent writing would be the same number as those appearing in the previous ones.

Third, according to Ferris (2004), several studies (Lalande, 1982; Robb, Ross, & Shortreed, 1986; Kepner, 1991) are often cited as useful guidelines for future research designs on error correction. It can be said that the existing research referred to above shares the following major characteristics of an effective research design: the research should be longitudinal (at least a 10-week quarter), have a respectable number of subjects (at least 60), and examine EFL students rather than ESL students who live in a country that uses English as the first language. Thus, this study took account of these characteristics in order to gain an insight into "the state-of-the-art in error correction research" (Ferris, 2004, p. 50). The present study was a longitudinal study (over a 16-week semester), had a respectable numbers of subjects (total 81), and examined EFL students who were Thai students studying English writing in a Thai university.

Fourth, in a recent review of numerous studies on teachers' responses in the ESL and the EFL context, Goldstein (2001) calls on future researchers to pay more

attention to students' reactions to their teachers' responses. Kubota (2001) states that while a considerable number of studies have been carried out on the effectiveness of error correction, the literature on students' strategies specifically employed for error correction is scarce and has not attracted so much attention. Two recent studies by Ferris (1995) and Kubota (2001) report beneficial strategies used by ESL and EFL students in error correction in the American and Japanese contexts. The present study was different from these studies in two ways. Firstly, Ferris's study (1995) used a questionnaire to survey students' correction strategies in general without assigning them to deal with any specific feedback types, whereas the present study elicited the students' actual strategies after they utilized different types of teacher written feedback. Secondly, Kubota (2001) investigated the students' strategies in dealing with only one method of teacher feedback, error correction coding system or coded feedback, while the present study examined the students' reactions to four feedback types: content, direct, coded, and uncoded feedback.

Fifth, a number of research studies have investigated the effects of providing differential feedback on EFL students' journal writing (Hipple, 1985; Kepner, 1991; Fazio, 2001), or on one selected genre i.e., autobiography (Chandler, 2003). The present investigation focused on utilizing different feedback types in a real EFL writing class in which the students were assigned to write three different genres, namely narrative, descriptive, and comparison and contrast. It also aimed to examine the differences in the improvement in writing quality, grammatical accuracy, and writing fluency for each of the respective genres.

Finally, the present study specifically investigated the students' perspectives: their attitudes towards, their comprehension of, their attention to, and their problems

regarding different types of teacher written feedback. For these reasons, it was hoped that the results of this study would help in adding new information to fill some gaps in the existing body of knowledge about the effects of feedback on the improvement of EFL writing, particularly in a real EFL context.

1.2 The purposes of the study

The present study focused on three main areas: firstly, the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency; secondly, the revision strategies employed by the students when utilizing different types of feedback; and thirdly, the students' perspectives: their attitudes towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback. The purposes of the study were threefold:

1. To investigate the effects of students' utilizing different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency.
2. To examine the students' revision strategies in utilizing different types of teacher written feedback,
3. To examine the students' perspectives: their attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback.

1.3 Research questions

The study focused on the following research questions:

1. What were the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency?
2. What were the students' revision strategies in utilizing different types of teacher written feedback?
3. What were the students' perspectives: their attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback?

1.4 Scope and limitations of the study

1. This study was limited to second-year undergraduate students studying in a paragraph writing course at Naresuan University, Payao Campus, Thailand in the academic year 2006.

2. This study focused on the effects of four different types of teacher written feedback on students' writing. The types of written feedback used in the study were (1) content feedback on the students' first drafts; (2) direct feedback; (3) coded feedback; and (4) uncoded feedback on their second drafts.

3. The study attempted to determine how written feedback from a teacher followed by the students' revisions helped second year undergraduate students at Naresuan University, Payao Campus improve their writing quality, grammatical accuracy, and writing fluency in their written work.

4. The study examined the students' writing performances by focusing on writing quality as measured by the TOEFL writing scoring guide (cited in Weigle, 2002, p. 113), on grammatical accuracy in five categories, namely noun endings, articles, wrong words, verbs, and sentence structure errors, and on writing fluency as measured by word counts.

5. The present study investigated the effects of different types of written feedback on the improvement of writing with regard to three different genres of paragraph writing namely, narrative, descriptive, and comparison and contrast.

1.5 The operational definitions of terms

While research on the treatment of errors in writing continues to be explored within L2 writing studies, a number of similar and related terms referring to feedback and error correction are used. In order to understand the terms used in the present study clearly, definitions of terminology are addressed in this section.

Error referred to the learners' production of an incorrect form which deviates from the target language. According to Gass and Selinker (1994 as cited in Padgate, 1999), this term means "the incorrect forms... that learners produce or the deviation from a standard criterion" (p. 27). In this study, an error referred to an incorrect form which deviated from standard English grammar. Errors could be identified by comparing what learners produced with what seemed to be normal or correct in the target language which corresponded to them (Ellis, 1997). The term "error" in this study focused on five error categories, namely, noun endings, articles, wrong words, verbs, and sentence structures.

Teacher written feedback referred to the written responses provided after reading students' written work. The responses were limited to comments on grammatical errors and the content of the students' written work.

Different types of teacher feedback referred to the different strategies in providing feedback. In this study teacher feedback was divided according to the degrees of explicitness of error correction. There were four different types of teacher feedback used in the study: (1) content feedback, (2) direct feedback, (3) coded feedback, and (4) uncoded feedback.

1. *Content feedback*, the content feedback used in the present study was based on that used by Bates, Lane, and Lange (1993) and Ashwell (2000) in which the content feedback was aimed principally at multiple sentence level issues such as organization, paragraphing, cohesion, and relevance. The comments given to the students were personalized and referred to the students' texts. They offered guidance or direction where necessary and concentrated on two or three problems only. The positive comments were generally mixed with guidance and criticism.
2. *Direct feedback*, in the literature on error correction, the term 'direct' feedback could also refer to direct correction (Chandler, 2003), corrective feedback (Lalande, 1982), form-focused feedback (correction) (Fazio, 2001) and overt correction (Lee, 2004). According to Ferris (2002), direct feedback referred to the teacher providing a "correct linguistic form" for students (e.g. word, morpheme, phrase, rewritten sentence, deleted word [s] or morpheme [s]) (p. 19).

3. *Coded feedback*, coded feedback was a kind of indirect feedback (Ferris, 2002) and could refer to error identification (Lee, 2004) which occurred when the teacher explicitly indicated that errors had been committed and provided a brief explanation without any correction and left it to the student to correct by him/herself. In the present study, a code sheet containing codes of error types, their definitions, and examples of errors was provided when the teacher gave coded feedback to the students.
4. *Uncoded feedback*, as opposed to coded feedback, uncoded feedback could refer to error location (Ferris, 2002). In the present study, the teacher simply located an error by circling it, underlining it (Lee, 2004), highlighting it, or putting a checkmark in the margin (Ferris, 2002). This feedback was more complicated in that students corrected their errors by identifying them and then they had to figure out how to correct them.

1.6 The significance of the study

It is obvious in an EFL context that teacher written feedback plays an important role in a writing class. Teachers provide students with written feedback by giving comments, correcting errors, marking or indicating types of errors or sometimes by only locating them. Despite its being traditional, written feedback has some advantages. According to Arndt (1993, as cited in Padgate, 1999), written feedback is less forgettable, which may be suitable for EFL learners who have limited language proficiency. The learners can go back and read the comments as often as they want. Moreover, it is less embarrassing and more face-saving than conferencing feedback, particularly if the comments are negative. It would be beneficial to find out

how teacher written feedback could be most effectively used to help Thai EFL students write more effectively.

According to Thamraksa (1998), one of the potential problems found in the EFL writing class is student diversity. Students have different educational experiences, ages, needs, characteristics, and most importantly, mixed language ability. For example, some students are very intelligent and learn quickly, while some students are always slower than others and they cannot always grasp the meaning of the language. Thus, teachers of writing need to be aware of the issues involved in the various methods of giving written feedback. These issues are the result of the different types of errors found in EFL writing and the different types of written feedback (e.g. direct feedback, coded feedback, and uncoded feedback) given to the students and also because of the students' different levels of proficiency. Thus, teachers need to find out the effects of these feedback methods on the students' writing. In order to provide a better understanding of these issues, the present study aimed to find out what the effects of different types of teacher written feedback on the students' writing, their revision strategies employed in revising their written work. Also the present study investigated students' attitudes toward, their comprehension of, their attention to, and their problems regarding the feedback. It was expected that this study might provide an insight into how the students responded to the teacher feedback. This was mainly related to the language learning process which could be of potential value for EFL teachers. If those teacher feedback methods and revision strategies which were crucial for language learning could be identified, it might prove possible to provide more fruitful information for both teachers and students to use them effectively in a real EFL context.

In conclusion, Chapter I presents background to the present study. It begins with the rational of the study, describing why the study was needed, the related research gaps to be investigated, followed by the purposes of the study, research questions, scope and limitations, operational definitions of terms, and finally the significance of the study. Chapter II reviews related literature on the writing process and teacher written feedback.

CHAPTER 2

REVIEW OF THE LITERATURE

2.1 Introduction

This study examined the effects of different types of teacher written feedback on the improvement of EFL student writing quality, grammatical accuracy, and writing fluency. This chapter aims to provide a critical review of the related theory and literature which includes theoretical background to the writing process-based approach and revision in the writing process, feedback on students' writing, forms of teacher feedback, the different degrees of explicitness of error correction, effects of teacher feedback, recommended pattern of content followed by form feedback, and students' language learning strategies in dealing with teacher feedback. Finally it ends with students' perspectives, practices and problems regarding error feedback.

2.2 Theoretical background to the writing process-based approach and revision in the writing process

As the present study focused on the provision of teacher feedback which mainly related to the writing process, this section aims to review some of the theoretical background of the writing process approach and revision on which the present study was based. This review includes a new paradigm shift to the teaching of the writing process approach, the related models of the writing process approach proposed by Flower and Hayes (1981), Berriter and Scardamalia (1987), and White

and Arndt's framework (1991), and revision in the writing process approach.

2.2.1 A new paradigm shift to writing process approach

In the late 1970s and the 1980s, a number of developments in both composition studies and second language studies prompted second language teachers of writing to consider factors other than the properties of texts themselves and this interest began to shift from textual features to the "process of writing itself" (Matsuda, 2003, p. 108). Rather than taking the view of writing as reproduction of previously learned syntactic or discourse structures, the revolution of the process-based approach emphasizes the view of writing as a process of developing organization as well as meaning. Hairston (1982 cited in Reid, 1993) labels this revolution in the notion of teaching of writing as "a new paradigm" (p. 1). The following list presents 12 features of this paradigm.

1. It focuses on the writing process; instructors intervene in students' writing during the process.
2. It teaches strategies for invention and discovery; instructors help students to generate content and discover purpose.
3. It is based on rhetoric: audience, purpose, and occasion figure prominently in the assignment of writing tasks.
4. Instructors evaluate the written product by how well it fulfills the writer's intentions and meets the audience's needs.
5. It views writing as a recursive rather than a linear process; the activities of pre-writing, writing, and revision overlap and intertwine.
6. It is holistic, viewing writing as an activity that involves the intuitive and non-rational as well as the rational faculties.
7. It emphasizes that writing is a way of learning and developing as well as a communication skill.
8. It includes a variety of writing modes, expressive as well as expository.
9. It is informed by other disciplines, especially cognitive psychology and linguistics.
10. It views writing as a disciplined creative activity that can be analyzed and described.

11. It is based on linguistic research and research into composing processes.
12. It stresses the principle that teachers of writing should be people who write (p. 2).

It is apparent from this paradigm that writing processes cannot be fully described by a neat paradigm. This is also asserted by Zamel (1982) who states that the writing process is an approach to incorporate writing skills which occurs in the recursive nature of the composing process from the time that English language skills start developing. Silva (1990) translates this approach into the context of language classroom as stating,

... this approach focuses on the need for providing a positive, encouraging, and collaborative workshop environment within which students, with ample time and minimal interference, can work through their composing processes. The teacher's role is to help students develop viable strategies for getting started (finding topics, generating ideas and information, focusing, and planning structure and procedure), for drafting (encouraging multiple drafts), for revising (adding, deleting, modifying, and rearranging ideas), and for editing (attending to vocabulary, sentence, grammar and mechanics) (p. 15).

Reid (1993) also values the writing process and emphasizes the focus of this approach to process teaching on how the process is related to how writers approach tasks by problem-solving method in areas such as audience, purpose, and the situation for writing. Focusing on this approach, Hyland (2003) further emphasizes that writers are independent producers of texts and further addresses the issue of what teachers should do to help learners perform writing tasks. He also defines this approach stating:

the numerous incarnations of this perspective are consistent in recognizing basic cognitive processes as central to writing activity and in stressing the need to develop students' abilities to plan, define a rhetorical problem, propose, and evaluate solutions (p. 10).

As such, in attempting to process this approach in the actual situation of a writing class, this section reviews three related models of the writing process which can be implemented in a process-based approach writing class. These include Flower and Hayes' (1981) Model, Bereiter and Scardamalia's (1987) Model, and White and Arndt's (1991) Framework.

2.2.2 Flower and Hayes' (1981) Model

With regards to this influential model, it can be stated that this writing process model established by Flower and Hayes (1981) is the most widely accepted by L2 teachers of writing (Hyland, 2003). According to Zamel (1983), this model is considered as a "non-linear, exploratory, and generative process whereby writers discover and reformulate their ideas as they attempt to approximate meaning" (p. 165). The model comprises three important parts. The first part is the task environment which includes the text produced and the writing assignment. The second part is the writer's long term memory which includes knowledge of the topic, the audience, and the sources based on literature research and the stored writing plans. The third part is the composing process which comprises three main stages: planning, translating thought into text, and reviewing/ revising. For the planning stage, there are three subcomponents of generating ideas, organizing information, and setting goals. In the planning stage, the writers collect the information related to the task in their long term memory. Then, the information is carefully organized according to the goal that has been set. After that, at the second stage, translating, the ideas generated in the

planning stage are translated into written language on the paper. Finally, in the last stage, the paper is evaluated and revised. As the writer is producing a final draft, this procedure may influence his/her writing process at any time in the act of writing.

Figure 2.1 shows the procedure of Flower and Hayes Model.

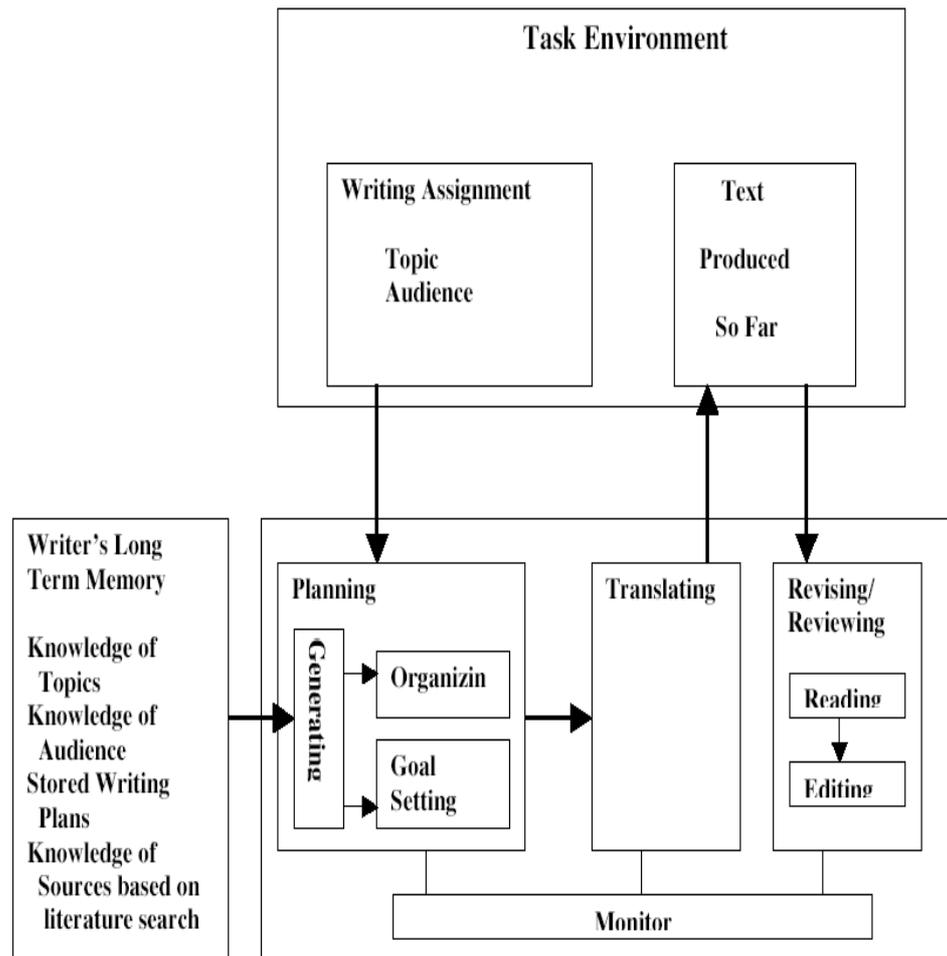


Figure 2.1 Flower and Hayes' (1981) Model

In attempting to provide a more concrete picture of this writing process, Flower and Hayes identify four features of composing stating

1. Writing consists of distinctive processes (planning, translating, and reviewing).
2. The processes of writing are hierarchically organized and embedded in other processes (processes are recursive).

3. Writing is a goal-directed process (global for affecting an audience and local that guides the act of writing).
4. Writers continually create new goals and subgoals (p. 167).

This model considers writing as dynamic and recursive processes of developing and editing text within various constraints. Accordingly, writers do not write in a linear fashion, meaning that they do not typically write by planning first, then drafting, and finally revising and they can utilize many constraints in order to satisfy the demands of the writing task, the audience, and their personal goals. This theoretical basis is considered very helpful for the present study in designing an effective process for the students to complete their tasks in the writing cycle.

2.2.3 Bereiter and Scardamalia's (1987) Model

Different from Flower and Hayes' (1981) Model having a single model of planning, translating, and revising process for all students of writing, Bereiter and Scardamalia (1987, cited in Hyland, 2003) argue that at least two process models are needed to account for the differences in the complexity of processing writing for skilled and novice writers who employed different writing processes. They describe that novice writers use a model labeled knowledge-telling characterized as being simple and linear in nature. By contrast, more expert writers use a knowledge-transforming model, which is more sophisticated in its involvement of complex problem-solving processes.

The knowledge-telling model, the mode of novice writers, involves the construction of a representation of an assignment, followed by the location of topic and genre identifiers which require less planning and revising. This model accounts for solving the fundamental problem in writing, how beginning writers generate

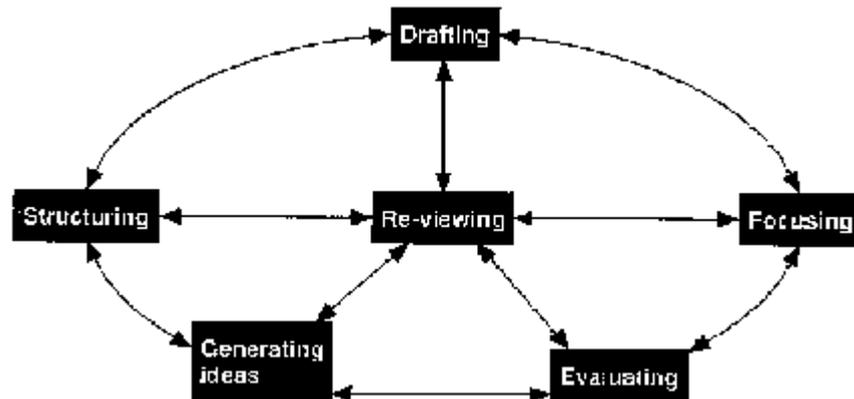
information from assignments, topics, and genres easily and effectively in their minds. If the information collected is appropriate to the topic, it should be written down and used. The purpose of this model is just simply to tell the writers what they should know about a particular topic, not shedding light on any writing task which demands the complex composing process.

The knowledge-transforming model for skilled writers is different from the first model because it has two problem-solving spaces: one pertains to content and the other is rhetorical. In the content space, “problems and beliefs are resolved through operations of hypothesizing and inferring. In the rhetorical space, knowledge states are representations of expression production, which includes both texts and goals” (Cameron and Moshenk, 1996, p. 1). Thus, in this process of writing, not only more complex writing tasks are involved, but also the skilled writers themselves are needed to utilize their acquired knowledge to solve the problem created by the components of writing at anytime, such as the problems of content generation, audience expectation, genre form, and linguistic style.

In short, Bereiter and Scardamalia (1987) propose the developmental view of writing, with two models; less skilled writers operate at the level of knowledge-telling (as in simple narrative), while more skilled writers are involved in knowledge-transforming (as in expository writing). These models provide a helpful notion in the teaching of writing in which students’ individual differences are considered as one of the significant factors for designing the complexity of the writing task on which the present study was based. Therefore, the scope of the present study also was to take the students’ individual differences (in English proficiency levels: high, moderate, and low) into consideration for designing their writing tasks.

2.2.4 White and Arndt's (1991) Framework

White and Arndt's (1991) framework offers teachers a framework whose process involves many useful activities for the composing process. This includes generating ideas, focusing, structuring, drafting, and reviewing which can be recursive. Furneaux (2008) describes each stage in this framework as a very useful technique for the composing process. For activities to generate ideas, he recommends brainstorming, which helps writers tap their long-term memory and define the topic of writing by answering the question "What can I say on this topic?" In focusing, writers learn how to set their overall purpose in writing. The activities for dealing with organizing and reorganizing text to present ideas in a way that is acceptable to readers are considered in the stage of structuring activity. These activities include experimenting with different types of text after reading various different sorts of examples. Drafting is a transition stage from writer-based thought into reader-based text. Multiple drafts are produced, each influenced by feedback from a teacher and/or peers. Activities such as reformulation and the use of checklists in guiding feedback can develop essential evaluating skills. The feedback used should focus initially on content and organization followed by comments on language in a later draft. Finally, re-viewing is an activity to recheck the text and review the overall paper for the completion of the revised version. Figure 2.2 presents the framework proposed by White and Arndt (1991).



(White and Arndt, 1991, p. 11)

Figure 2.2 White and Arndt's (1991) framework

According to Furneaux (2008), this framework creates meaningful and purposeful writing tasks that develop writers' skills over several drafts. Collaboration between student writers and teachers is also essential. The writing cycle in the present study was, therefore, designed based on this framework because it concentrated on students' thinking, translating ideas to draft, and producing subsequent drafts by utilizing teacher feedback as a guideline to help them revise their writing.

2.2.5 Revision in the writing process approach

Based on the theories of the writing process approach mentioned earlier, it is clear that the process of writing comprises three important stages: planning, drafting, and revising. The following reviews the key term "revision," which plays a crucial role in a writing process.

Revision is commonly regarded as a central and essential part of the writing process (Lowenthal, 1980; Scardamalia and Bereiter, 1986; Fitzgerald, 1987; Kunlasuth, 2000). Stallard (1974) views revision as correcting, changing, adding to

or deleting text from the original written draft. Nold (1979) defines revision as it is not just the lexicographic and syntactic infelicities of written prose,

It also includes (1) changing the meaning of the text in response to a realization that the original intended meaning is somehow faulty or false or weak. . . ; (2) adding or substituting meaning to clarify the originally intended meaning or following more closely the intended form or genre of the text . . . ; (3) making grammatical sentences more readable by deleting, reordering, and restating . . . ; as well as (4) correcting errors of diction, transcription and syntax that nearly obscure intended meaning or that are otherwise unacceptable in the grapholect (cited in Fitzgerald 1987, p. 483).

Sommers (1980) states that revision enables writers to muddle through and organize what they know in order to find a line of argument, to learn anew, and to discover what was not known before. Reid (1993) also defines revision as a stage of monitoring and identifying a writer's own weaknesses and strengths in writing.

As mentioned above, revision can be viewed as a broader process than editing for errors. According to Williams (2004), revision is a problem-oriented process in which the writer must come to realize that there are parts of a draft that could be better. Although it might be possible that this realization does not always lead to improvement in the text, it is important in that the student learns to detect a problem as the first step. Terms used in this problem-oriented perspective vary, but the process is generally seen as having three stages as follows:

1. Detection/evaluation/comparison

Detection may be initiated by writers, as they compare their developing text to their meta-knowledge or to their vision of how they want the text to evolve, which often occurs when they realize that their intentions have changed. Detection may also

be initiated by someone other than the writer: a teacher, a peer, or, in the case of a writing center, a tutor.

2. Diagnosis/identification:

The writer must then decide what the problem is or how the text, or section of text, can be improved. This may be done simultaneously with detection. The problem may be anywhere from surface level to the level of planning. Not all writers will be able to articulate what the problem is. Again, a writer may do this alone or with help from someone else.

3. Operation/execution/correction:

Finally, the writer must evaluate alternatives and decide on the best course for revision. How effectively a writer does this will depend on many factors, but it is likely that “success at the first two steps is a prerequisite for success at this later stage” (Bartlett, 1982; Bereiter & Scardamalia, 1987; Van Gelderen, 1997 cited in Williams 2004, p. 174). Thus it can be seen that revision requires an ability to solve a problem and “to test a number of solutions for the same problem, to accept failure and inadequacy as a necessary part of the learning process” (Newkirk, 1981, p. 60). This demonstrates a complex process of cognition and decision which underlines the process of revision (Sun, 1989).

However, Kunlasuth (2000) states in research on EFL writing that teachers cannot expect student writers to make revisions by themselves because they do not know what their problems are. In order to make revision more successfully, “the students need some sources of input from a superior system” (p. 6). The present study, taking revision as a vital stage of the writing process, was based on the assumption of the provision of input for EFL students that feedback is considered one kind of input that is equivalent to a superior system leading to revision.

2.3 Feedback on students' writing

Traditionally, in a writing cycle, students compose their work and receive responses which can vary in the forms of comments, marks, or corrections. As mentioned in the previous section, by focusing on the writing process, feedback can be considered as an input used to respond to any information related to the text produced. Feedback on EFL writing means advice, criticism or information about how good students' writing is or what errors are in the students' writing. It can be provided by writers themselves, peers, teachers, or innovative computer programs.

Self-directed feedback refers to an activity whereby students edit their writing by themselves. The students can, for example, consult a grammar reference book or a dictionary. It aims to develop the students' ability to read their own writing and to examine it critically so as to learn how to improve it. This is appropriate for students who have a high level of language proficiency because it can encourage them to develop a self-monitoring technique that needs as much knowledge as possible to define their errors and to correct them (Ferris, 2002). However, in an EFL context, this type of feedback is not appropriate for EFL student writers who have a limited knowledge of English.

Peer-directed feedback refers to an activity in which students read and assess other students' writing (Hyland, 2003). It is not productive just to expect students to exchange and actually mark each other's papers. They tend either to say that the composition is very good or they mark everything wrong. However, one of the disadvantages of this type of feedback is that it is quite similar to self-directed feedback. In the case of group work with students whose language proficiency is especially limited, it is undoubtedly more difficult for them to benefit from their peers.

Computer-directed feedback or computer assisted language learning

(CALL) uses innovative computer programs which are increasingly assuming the teachers' role and function of identifying the learner's errors and providing appropriate feedback. Error correction and feedback have been considered to have an impact on second language acquisition; thus, the capability of the computer to generate immediate feedback has contributed to its enhancement as a learning tool (Brandle, 1995). Nevertheless, these programs cannot provide feedback on all categories of errors, especially idiosyncratic errors of EFL students.

Teacher feedback refers to an activity during which a teacher edits students' writing by correcting errors, writing comments, and giving the paper a grade if needed. This type of feedback seems to be the most traditional method for responding to student writing and can still be observed in many L2 writing classes (Hyland and Hyland, 2006). Despite its being traditional, feedback from the teacher is preferred by L2 student writers. According to Leki (1991), Zhang (1995), and Ferris and Roberts (2001), L2 student writers found teacher feedback significantly more preferable than either peer or self-directed feedback.

It is apparent that for an EFL context where a majority of EFL students have limited knowledge of English language, feedback from teacher might be considered a suitable output for them who produced "idiosyncratic" errors (Ferris, 2003, p. 19). Therefore, the present study aimed at studying issues surrounding this method for improving students' writing skills.

2.4 Forms of teacher feedback

Feedback provided by teachers can be in two forms: conferencing feedback and written feedback. According to Reid (1993), **conferencing feedback** is a face-to-face conversation between teachers and students. Hyland (2003) contends that although L2 student writers receive individual attention and are able to fully discuss their writing product face-to-face with their instructors, they are not always in a good position to make the most of this. He states:

Conferences differ considerably from the typical classroom situation, and some students may lack the experience, interactive abilities, or aural comprehension skills to benefit. Some learners have cultural inhibitions about engaging informally with authority figures, let alone questioning them and this can result in students passively incorporating the teacher's suggestions into their work without thought, leading to the (a) kind of 'appropriation' of students' texts (p. 192).

According to Charles (1990), although conferencing is certainly one ideal form of feedback, it is not actually a real solution. He states "...the problem for most students in most institutions is that the time is simply not available for this kind of individual editorial discussion" (p. 287), hence, it can be noted that in the case of too many students in a class, writing conferences are not advised. In other words, conferencing, especially taken in an EFL context where there are too many students enrolled in a class and when students in this context have limited interaction as well as listening comprehension skills, cannot be considered as a means of effective feedback.

Different from conferencing and being traditional as it is, **written feedback** has some advantages that can be matched in an EFL context. Written feedback can be

provided through comments, praises, and suggestions. In case of errors related to the surface level, the errors can be corrected, marked or indicated by teachers. Despite its being traditional, written feedback is less forgettable, which may be suitable for L2 learners who have limited language proficiency (Arndt, 1993). The learners can go back and read the comments as often as they want. Moreover, it is less embarrassing and more face-saving than conferencing feedback, particularly if the comments are negative.

It can be seen that when written feedback is provided by a teacher, it seems to be the most appropriate method of all feedback types in helping students to produce better writing in an EFL context where students have a limited knowledge of English writing.

2.5 The different degrees of explicitness of error correction

According to Ferris (2002), teacher written feedback can be divided into two types: **direct feedback**, an activity during which a teacher provides written feedback in corrected forms directly and **indirect feedback**, an activity during which a teacher provides hints, advice, and suggestions in words and as well as in visual forms, such as underlines and codes of error types. The difference between these two feedback types is the explicitness of the correction forms. Some researchers (Semke, 1984 cited in Padgate, 1999; Ferris, 2001) question the effects of overt error correction. Others suggest that indirect feedback (i.e., symbols, codes, or marginal feedback) can be used as an alternative to give written corrective feedback. The teacher may circle or underline the mistakes and write the symbol in the margin. Alternatively, they may choose to only write the symbol in the margin without circling or underlining and the

students are required to find the errors and correct them by themselves. The approach using indirect feedback cues may be useful in that it involves the learners taking more responsibility for their own learning. Ferris and Hedgcock (1998) conclude after reviewing many studies that indirect ways of providing grammatical feedback, such as locating the errors and requiring the students to correct their errors by themselves, seem to be more effective in improving overall accuracy than explicit error corrections.

To provide a better understanding of this issue, the present study focused on the provision of teacher written feedback with different degrees of explicitness, namely direct, coded, and uncoded feedback. These feedback are ranged from the most explicit to the least explicit error correction. Figure 2.3 presents a conceptual framework of the treatment of errors in the present study using three different types of teacher written feedback. Teacher responses are exemplified here.

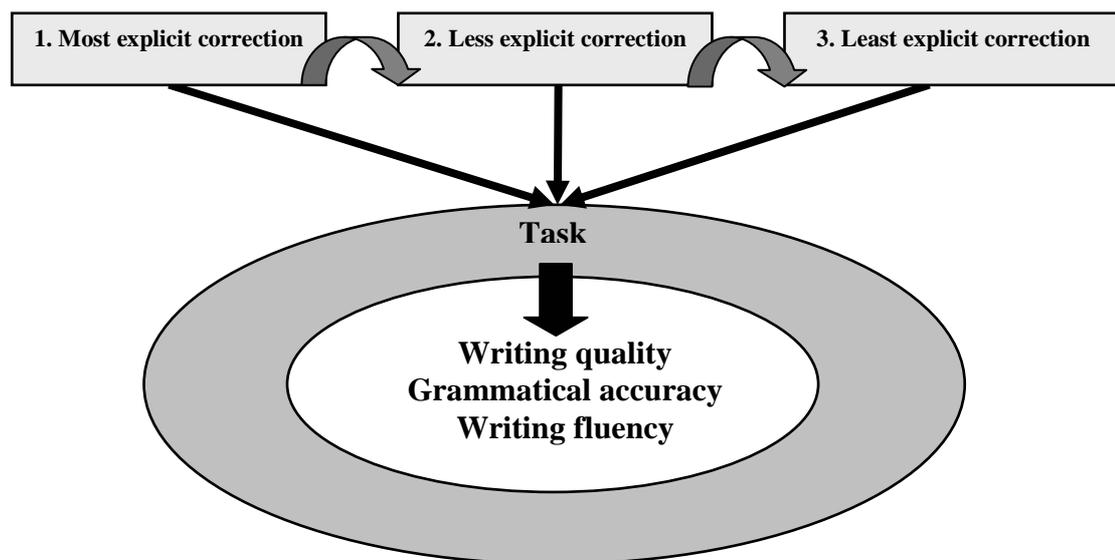


Figure 2.3 A conceptual framework of the treatment of errors in the present study

2.5.1 The most explicit correction (Direct feedback)

It is suggested that a good proportion of errors committed by L2 writers are in “untreatable category,” meaning that there is no rule to which students can turn to correct an error when it is pointed out to them. According to Ferris (2002), the most common errors of this category are word choices, word forms, and awkward or “unidiomatic sentence structure” (p. 23). In such a particular case of L2 writing, it might be more helpful for the teacher to suggest a different word or a restatement of the sentence (i.e., direct correction) than to ignore the errors or simply underline or mark the word or sentence. Although direct correction may be easier for the teacher and may please the students because it requires less effort from them to rewrite a paper, a danger of this method is that finally students may simply copy the teacher’s corrections rather than doing their own editing. Thus, direct feedback should be used with great care and only under the specific circumstances (Reid 1994).

Example of direct feedback

I don’t like Supha because she is ^{talkative} ~~speak non-stop~~.

2.5.2 Less explicit correction (Coded feedback)

To quote Ferris (2002), this type of feedback places more responsibility on the student writers to figure out types of their errors. As the nature of this feedback is to provide information about errors, the students can learn and know the types of their errors from this feedback, so that they can call upon their own prior knowledge or use other sources of information, such as grammar reference books and dictionaries to help understand, remember the rules, and correct their errors.

Example of coded feedback

I came to the university. At that time I ^vdrive very fast.

2.5.3 The least explicit correction (Uncoded feedback)

Uncoded feedback provides the least explicit correction, and in this case teachers require the maximum effort on the part of the students to figure out both the types of their errors and how to correct them. This might be very beneficial for students to employ more problem-solving strategies when revising their errors (Lalande, 1982). However, this feedback type should be provided to students who are advanced enough to make use from it (Ferris, 2002). According to Kubota (2003), this is due to the fact that when the learners' proficiency increases, their ability to make the appropriate grammatical judgments improves.

Example of uncoded feedback

I came to the university. At that time I drive very fast.

2.6 Effects of teacher feedback

There is a wide body of research into teacher feedback on student writing in the second and foreign language classroom which has been conducted from various perspectives, one of which has been to look into the effects of manipulating the types of feedback given by teachers. Some studies in this area examined the effects of different types of corrective feedback (Lalande, 1982; Robb, Ross, & Shortreed, 1986), while others compared different types or combinations of form and content feedback (Semke, 1984; Fathman and Whalley, 1990; Kepner, 1991; Lee, 1997; Chandler, 2003; Hyland, 2003; Bitchener, Young, and Cameron, 2005). Thus, this section reviews the literature on the effects of different types of teacher feedback on students' writing.

Lalande (1982) proposed one of the theoretical implications in the professional literature on error correction in which the components of an effective strategy for the development of writing skills consists of *Comprehensive error correction*, *Systematic marking of compositions* and *Guided learning and problem-solving*. In this study, a total of 60 students were divided into an experimental and a control group. For the first group, the teacher corrected all students' errors; in the second group, the teacher gave correction codes and the students were required to note the types of errors they had made and then rewrite their compositions using the given feedback. It was found that the second group, who had to work on the errors themselves, produced fewer errors by the end of the semester. The results of this study indicated that the combination of error-awareness and problem-solving techniques had a significant effect on the development of writing skills within the context of the experiment. Specifically, the techniques designed for, implemented, and tested in this investigation effectively prevented students from making more grammatical and orthographical errors.

Robb, Ross, and Shortreed (1986) contrasted four methods of providing feedback on errors in the written work of 134 Japanese college EFL freshmen. They showed a keen interest in the degrees of salience provided to the writer in the revision process and investigated the relative merits of indirect and direct feedback. The students were divided into four groups. The first group received direct correction covering all categories of lexical, syntactic, and stylistic errors. Substantive errors in content or organization were not corrected. Once the papers were returned, the students in this group needed only to copy their original compositions. The coded feedback group was given an abbreviated code system in which the types of errors were indicated on the

students' papers. The students in this group revised their compositions by using a guide to discover the meaning of the instructor's marking on their papers. For the uncoded feedback group, only the locations of errors were marked over with a yellow text-marking pen. The uncoded feedback differed from the coded feedback in the salience of the marking as only the locations of errors were marked, but no further information was provided. The marginal feedback group was given the least salient method and received information about the number of errors per line, but nothing else. The results of their research did not support the efficacy of direct correction and suggested that "less time-consuming methods of directing student attention to surface errors may suffice" (p. 91). This result led the researchers to discourage the practice of direct correction of surface errors, since highly detailed feedback on sentence level mechanics might not be worth the teacher's time and effort.

The effectiveness of teacher feedback focusing on form and content was also studied by Fathman and Walley (1990). The study examined the effects of different feedback types on accuracy and content writing of 72 students from mixed language backgrounds, primarily Asian and Hispanic. The subjects of this study were 72 students in intermediate ESL college composition classes at an American university. These students were from different first language backgrounds but possessed similar levels of English language proficiency. The students were randomly divided into four groups and were assigned to write a composition. Each group received one of the following types of feedback: (1) no feedback; (2) grammar feedback, where all grammar errors were underlined, but correct forms were not given; (3) content feedback, where positive comments or short general suggestions were given; and (4) grammar-content feedback. After receiving the feedback on their writing, the students

were required to make revisions of their original compositions. The grammar scores (the number of grammar errors) were used to measure accuracy, whereas the writing content was measured by the content scores based on holistic scoring. The results showed that all groups improved significantly in content; however, the number of grammar errors significantly decreased in only two groups: the grammar feedback and grammar-content feedback groups. Moreover, it was found that the no-feedback group wrote longer in the rewrites. Fathman and Whalley explained that this reflected the effect of teacher error treatment on length or quantity of writing, although length was not an indication of quality of writing. They concluded that both form and content feedback, whether when given alone or simultaneously, positively affected rewriting and that focused on grammar did not negatively affect the content of writing.

It can be seen that Fathman and Whalley's study chooses only one type of indirect feedback (all grammar errors were underlined, but correct forms were not given) with an absence of studying the differences in the degrees of salient or explicit correction (i.e., coded feedback, marginal feedback). It is also noted that this study showed the students' improvement in accuracy between assignments or in the short-run, not in the long term. In other words, the research focuses on improvement measured by comparing the students' original compositions with their rewrites ignoring their long-term improvement.

Padgate (1999) examined the effects of different feedback types on grammatical improvement in the journal writing of Thai EFL college students. This quasi-experimental study investigated the effects of four different written feedback types (content, remodeling, metalinguistic, and corrective) on grammatical accuracy, syntactic complexity, and writing fluency in the journal writing of EFL students. It

also examined the relationship between grammatical accuracy and the factors of attention to, comprehension of, and attitudes towards feedback and writing. The subjects were 69 Thai second year students enrolled in the Oral English Practice course at a Thai university. In this study, grammatical accuracy was limited to five verb categories (tense/ aspect, subject-verb agreement, copula be, verb form, and passive voice). Accuracy was assessed by two measures, the passage correction (PC) test and the students' journal writings. Syntactic complexity was measured by six criteria, and writing fluency was measured by the number of words per journal. The data on the subjects' attention to, comprehension of, and attitudes towards feedback and writing were sought through a questionnaire given at the end of the experiment. Concerning grammatical accuracy, the results showed that three groups performed significantly better on the PC post-test. However, none did significantly better on journal writing. While the corrective group maintained its accuracy level, the other four groups produced significantly more mistakes in some verb categories. No feedback types resulted in significant differences in syntactic complexity and writing fluency both within and between groups. Grammatical accuracy correlated significantly with attitudes towards feedback when it was measured by journal writing, but correlated with attention to and comprehension of feedback when it was measured by the PC test. The results suggested that explicit form feedback might have a potential role in helping students to maintain their level of grammatical accuracy. The researcher concluded that written feedback, when used alone in the absence of other form-focused activities, might not be powerful enough to result in grammatical improvement.

Another study comparing different methods of giving teacher feedback was conducted by Ashwell (2000). Four different patterns of teacher feedback were given to EFL students producing a first draft (Draft 1), a second draft (Draft 2), and a final version (Draft 3) of a single composition. The pattern usually recommended within a process writing approach of content feedback on Draft 1 followed by form feedback on Draft 2 was compared with the reverse pattern, another pattern in which form and content feedback were mixed at both stages, and a control pattern of zero feedback. It was found that the recommended pattern of feedback did not produce significantly different results from the other two patterns in which feedback was given in terms of gains in formal accuracy or in terms of content score gains between Drafts 1 and 3 and all groups receiving feedback made gains in formal accuracy. A post-hoc analysis of changes made by students revealed that students might rely heavily on form feedback and that content feedback had only a moderate effect on revision.

Also, Fazio (2001) conducted a classroom-based experimental study which examined the effect of differential feedback, namely corrections, commentaries, and a combination of the two on the journal writing accuracy of minority- and majority-language students being educated in the same classroom. Journal writing samples were collected from 112 students (46 minority-language and 66 majority-language) over a period of four months in four Grade 5 classrooms where the language of instruction was French. The two student groups were randomly assigned to feedback conditions, and feedback to writing was provided weekly. For both groups, the results indicated no significant difference in accuracy due to feedback conditions. The overall findings revealed that minority-language and French students did not experience a significant change in their accuracy in grammatical spelling as a consequence of

receiving corrections, commentaries, or a combination of the two conditions in their journal writings. With regards to these results, it should be noted that someone other than the familiar classroom teacher was providing the feedback, and this might have an effect on the manner in which the students reacted to their feedback. In addition, grammatical spelling was a challenging aspect that was not easily and significantly improved over the span of a few months.

Chandler (2003) conducted a recent research study that dealt with the effects of various kinds of teacher feedback on both revision and subsequent writing. It aimed to investigate the students' correction of grammatical and lexical errors between assignments in subsequent writing over one semester. The study was also designed to examine what the best method to correct students' writing was. The study aimed to examine the following items: (1) the improvement in accuracy in each assignment; (2) the improvement in accuracy over 10 weeks between the experimental group (which corrected their errors between assignments) and the control group (which did not correct their errors). The outcomes measured were: (a) number of errors per 100 words on both revision and on subsequent writing chapters before revision (accuracy); (b) holistic ratings of overall writing quality of the first draft of both the first and the last chapters of each student's autobiography; (c) time students reported spending writing each chapter (fluency); (d) immediate student responses to each feedback type, including the time they took to make corrections and to a questionnaire comparing the four types at the end of the semester; and (e) a rough comparison of time spent by the teacher in giving each method of feedback, both initially and over two drafts. The results of the study revealed that both correction and simple underlining of errors were significantly superior to describing the types of errors, even with underlining, for

reducing long-term errors. Direct correction was best for producing accurate revisions, and students preferred it because it was the fastest and easiest way for them as well as the fastest way for teachers over several drafts. On the other hand, the students felt that they learned more from self-correction, and simple underlining of errors took less teacher time on the first draft. However, it is worth noting that this study made an effort to fill all gaps of using teacher feedback, but it failed to see if the feedback can prevent students' replication of the same type of errors in their subsequent writing assignments.

Hyland (2003) explored the relationship between teacher feedback and student revision in two writing classes by adopting a case study and looking at all the feedback given to six students over a complete course. The data was gained by think aloud protocols, teachers' and students' interviews, and student texts. The research investigated the effects of teacher written feedback on the revisions and products of the ESL writers on a full-time 14-week English proficiency program course at a university in New Zealand. It examined the extent to which teachers focused on formal language concerns when they gave feedback and that of students' use of this feedback in their revisions. Two classes were observed, and the written data consisted of student writings (drafts and final versions), and related feedback. Each piece of writing was first examined to identify all the separate written interventions made by the teacher on each student text. Any comment, underlining or correction made on the student text by the teacher was considered as a written intervention. Each written intervention was then categorized as a feedback point and the total number of feedback points for each piece of writing was calculated. The students in this study reported that when they revised, they dealt with each issue as it appeared on their texts

and did not differentiate between different types of feedback. The teacher protocols revealed that teachers gave feedback on both meaning and form-related issues as they occurred and did not consider them separately. It was also found that both teachers used a set of codes for showing form-related problems, but they often supplemented this with comments in the margin, complete corrections, and generalized comments at the end of the essay. The range of interventions varied from simple circling or underlining of mistakes to complete corrections of errors and more than half of the feedback focused on form. The findings showed that the students were quite successful in carrying out the revisions after receiving teacher feedback. Interviews and discussions with the students showed that at least two of the participants used spouses or friends as informants to help them revise their assignments. It was suggested that despite the teachers' beliefs and teaching approaches, language accuracy was a very important focus for their feedback.

Also, Bitchener, Young, and Cameron (2005) investigated whether the type of feedback (direct, explicit written feedback and student–researcher 5 minute individual conferences; direct, explicit written feedback only; no corrective feedback) given to 53 adult migrant students on three types of error (prepositions, the past simple tense, and the definite article) resulted in improved accuracy in new pieces of writing over a 12-week period. Unlike most error correction studies to date that have focused on more advanced learners in academic settings, this study comprised 53 post-intermediate ESOL (migrant) learners who had only just entered a post-intermediate ESOL program. They were predominantly mainland Chinese adult migrants, but participants from a number of other countries were also represented, including Sri Lanka, Romania, Iran, Turkey, Serbia, Russia, Korea, Indonesia, Taiwan, Japan, and

India. Ages ranged from early twenties to late fifties, but the majority were in their late twenties and early thirties. Most had arrived in New Zealand over the last two years as permanent residents and had brought with them some form of tertiary qualification. For one semester (16 weeks), they followed a competency-based curriculum, the aim of which was to improve their communicative skills in the four macro-skills (reading, writing, speaking, and listening) for the purpose of resettlement and to introduce them to aspects of New Zealand society. As part of their course, they had to achieve one out of two writing competencies which were similar to, but not the same as, the tasks set for the research. The research tasks, therefore, provided practice with feedback for these assessments. The study found a significant effect for the combination of written and conference feedback on accuracy levels in the use of the past simple tense and the definite article in new pieces of writing, but no overall effect on accuracy improvement for feedback types when the three error categories were considered as a single group. Significant variations in accuracy across the four pieces of writing support earlier SLA discoveries that L2 learners, in the process of acquiring new linguistic forms, may perform them with accuracy on one occasion, but fail to do so on other similar occasions. The study also found that the type of feedback provided had a significant effect on the accuracy with which the participants used the separate linguistic categories in new pieces of writing. The provision of full, explicit written feedback, together with individual conference feedback, resulted in significantly greater accuracy when the past simple tense and the definite article were used in new pieces of writing. However, this was not the case with the use of prepositions. Whereas the use of the past simple tense and the definite article are determined by sets of rules, those concerning the use of prepositions are more idiosyncratic,

explained the researchers. Quoting Ferris (1999), they further elaborated that the former are more readily “treatable” than the latter. It is clear from the study that the two more “treatable” categories (the past simple tense and the definite article) were amenable to the combination of written and oral (conference) feedback. This result was not particularly surprising as one would tend to expect that three opportunities (2–4 times) for discussing the errors, clarifying the rules, and illustrating them with additional examples on a one-to-one level would help learners notice the difference between their errors and the corrections they received. Noticing such differences is now widely accepted in the SLA literature as crucial to uptake and long-term acquisition (Gass, 1997; Schmidt, 1990, 1994). By comparison, participants in group two, who received only written feedback, were not given the opportunity to discuss their corrected errors and those in the control group were not given any written or oral feedback on the targeted linguistic features. The study also found that the overall accuracy of the participants varied significantly across the four writing times. In other words, there was not a linear and upward pattern of improvement from one time to another. This, too, was not surprising as earlier research has shown that L2 learners, in the process of learning new linguistic forms, may perform them with accuracy on one occasion but fail to do so on other, similar occasions (Ellis, 1994; Lightbown and Spada, 1999; Pienemann, 1989). The study also examined whether there was an effect from the interaction of time and type of feedback. A significant effect on accuracy levels for the use of prepositions, but not so with the use of the past simple tense and the definite article was found. The group that received both written and conference feedback performed differently from the other two groups in their use of prepositions across the four tasks. This was not the case in their use of the past simple tense and

the definite article, where performance patterns were similar for the three types of feedback.

The research reviewed above yields different techniques used with teacher feedback and also different results on what the essence of feedback and the effects of different feedback types should be. Clearly, the research reviewed has not yielded a definitive conclusion about feedback in L2 writing. Therefore, the present study was an attempt to provide a better understanding of the provision of teacher written feedback and its effects on student writing and also to fill a gap in the existing research on error correction. In sum, there is a growing body of research into the effects of teacher feedback on student writing in the second and foreign language classroom which has been conducted from various perspectives. The present study aimed to investigate the effects of teacher written feedback with the different degree of explicitness of error correction which might provide an evidence of how students make use of the feedback in order to improve their writing skills.

2.7 Recommended pattern of content followed by form feedback

This section aims to explore the recommended pattern of content followed by form feedback which was mainly used in the writing process approach in the present study. Also, some theoretical bases and assumptions are established here in order to provide a better understanding of the design of the writing cycle used in the present study.

As “much remains to be known about the design and implementation of response to student writing” (Reid, 1993, p. 225) and, although the result of the effects of teacher feedback of any forms is inconclusive, it is generally accepted that

student writers need and deserve responses to their writing during the process, both to the form and to the content of their writing (Smith, 1991).

Advocates of a process writing approach to second language writing pedagogy have provided various implications about the useful methods by which teachers can provide students with helpful feedback on their students' writing. One of these implications is that teachers should focus on content in preliminary drafts before switching to focus on form in later drafts. According to Ashwell (2000) by focusing on content followed by form, "...the teacher can encourage revision (making large-scale changes to content) on early drafts before helping the student with editing (making small-scale changes to form) on the final draft" (p. 227).

In focusing on the provision of content followed by form feedback, Zamel (1985) underlines that teacher feedback is in the "cycles of revision" (p. 95) and "...meaning-level issues are to be addressed first" (p. 96). Also, she suggests that content feedback should be given separately from form feedback in order to "...avoid confusing students about what they should attend to at any particular stage of the process." (p. 82.). According to Ashwell (2000) who follows Zamel's (1985) proposal, if there are to be at least two stages in the feedback process, there should be at least two drafts: first draft (Draft 1) and second draft (Draft 2) plus a final version (Draft 3) in the writing process. There can, of course, be more than two drafts in the writing process, in which case meaning-focused feedback and form-focused feedback can be given more than once, but a two-draft plus final-version scenario would seem to be the minimum envisaged in the proposal.

Thus, in order to implement the provision of teacher written feedback in a real process-based approach writing class, the writing cycle in the present study was

designed based on the recommended pattern of content followed by form feedback.

Figure 2.4 illustrates the writing cycle in the present study.

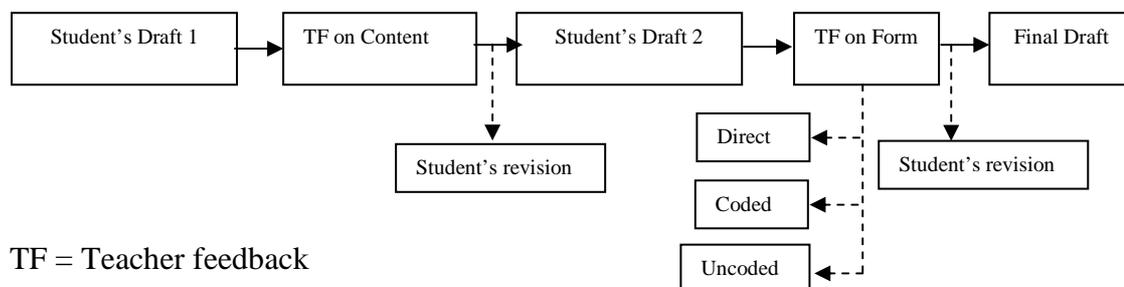


Figure 2.4 A writing cycle in the present study

With regards to Figure 2.4, in a process-based approach writing class in the present study content feedback was given to the students in their first drafts. Then form feedback was provided in their second drafts. As the present study aimed to compare the effects of each type of form feedback, three different feedback types were then given to the students at different times. These three forms of feedback on form included direct, coded, and uncoded feedback.

2.8 Students' language learning strategies in dealing with teacher feedback

As one of the research purposes was to investigate students' revision strategies, it is important to review the theoretical basis of some language learning strategies which mainly relate to writing strategies employed in a writing process approach. In order to draw a picture of how language can be learned through the writing process approach, this section aims to review the theoretical basis of language learning

strategies which includes favored language learning strategies, effective strategies for development of writing skills, and some related literature.

2.8.1 Favored language learning strategies and revision strategies for development of writing skills

Apart from treatment of errors and teacher feedback research, the literature on students' associated writing strategies in dealing with feedback are also focused on. In the present study, an investigation of the revision strategies employed by students with different levels of English proficiency was one of the research purposes.

According to O'Malley and Chamot (1990), Petric & Czarl (2003), revision strategies were defined as actions or behaviours consciously carried out by writers in the process of revision in order to make their writing more efficient after receiving teacher feedback. As revision strategy stems from language learning strategies, the theoretical basis of these strategies are addressed here in order to provide a better understanding of the characteristics of each strategy which might be related to the actual strategies the students employed in the present study. Thus, some theoretical background of second language learning strategies and revision strategies which relate to the development of writing skills are presented in this section.

According to O'Malley and Chamot (1990), second language acquisition (SLA) entails active and dynamic processes that can be broadly grouped into three categories: metacognitive strategies, cognitive strategies, and social/affective strategies. O'Malley and Chamot (1990) also note that favored strategies for writing tasks are metacognitive (organizational planning, self-monitoring, and self-evaluation) and cognitive strategies (resourcing, translation, deduction, substitution, elaboration, and summarizing). According to Ellis (1997), in developing students'

interlanguage, different kinds of learners produce different kinds of language errors which reflect different learning strategies. As correction of errors and revision can be defined as a learning task for students, some related strategies for students' correction of their errors and revision of their written texts are summarized as follows:

- 1. repetition:** to repeat a chunk of language (a word or phrase) in the course of performing a language task,
- 2. resourcing:** to use available reference sources of information about the target language, including dictionaries, textbooks, and prior work,
- 3. grouping:** to order, classify, or label material used in a language task based on common attributes; recalling information based on grouping previously done,
- 4. note-taking:** to write down key words and concepts in abbreviated verbal, graphic, or numerical form to assist in the performance of a language task,
- 5. deduction/induction:** to consciously apply learned or self-developed rules to produce or understand the target language,
- 6. substitution:** to select alternative approaches, revised plans, or different words or phrases to accomplish a language task,
- 7. elaboration:** to relate new information to prior knowledge, to relate different parts of new information to each other, to make meaningful personal associations to information presented,
- 8. summarization:** to make a mental or written summary of language and information presented in a task,
- 9. translation:** to render ideas from one language to another in a relatively verbatim manner,
- 10. transfer:** to use previously acquired linguistic knowledge to facilitate a language task,
- 11. inferencing:** to use available information to guess the meanings or usage of unfamiliar language items associated with a language task, to predict outcomes, or fill in missing information,
- 12. questioning for clarification:** to ask for explanation, verification, rephrasing, or examples about the material,
- 13. cooperation:** to work together with peers to solve a problem, pool information on oral or written performance, and
- 14. self-talk:** to reduce anxiety by using mental techniques that make one feel competent to do the learning task.

With regards to these language learning strategies, it is obvious that these strategies could be employed by the students when correcting errors and revising written texts. Also, it should be more productive if students could employ these strategies effectively in completing their written products. Thus, these theoretical bases can be established as an example of how language can be learned when completing tasks. Based on this, it should also be possible to classify students' revision strategies employed when utilizing different types of teacher written feedback. The present study, therefore, further examined the revision strategies employed by the students with different levels of English proficiency.

Based on the language learning strategies mentioned above, this section also aims to explore some categories of writing strategies that are related to the revision strategies. According to Petric and Czarl (2003), "...writing strategies are defined as actions or behaviors consciously carried out by writers in order to make their writing more efficient" (p. 189). The study examined the students' perceptions of the writing strategies they employed, which may not be the same as the actual strategies applied. The ideas for constructing a questionnaire to elicit the students' information regarding their writing strategies derived from their personal experience as non-native writers in English, teachers of writing, formal interviews with students, and the literature on writing as well as questionnaires on similar issues (Oxford, 1990). The following list illustrated revision strategies proposed by Petric and Czarl:

- I read my text aloud.
- I only read what I have written when I have finished the whole paper.
- When I have written the paper, I hand it in without reading it.
- I leave my writing for a while or for days, then I come back to edit it.

- I show my text to somebody, and ask for his or her opinion.
- I use a dictionary when revising.
- I make changes in vocabulary.
- I make changes in sentence structure.
- I make changes in the structure of the essays.
- I make changes in the content or ideas.
- I focus on one thing at a time when revising (e.g., content, structure).
- I drop my first draft and start writing again.
- I check if my essay matches the requirements.
- I leave the text aside for a couple of days and then I can see it in a new perspective.
- I show my text to somebody and ask for his/her opinion.
- I compare my writing paper with the essays written by my friends on the same topic.
- I give myself a reward for completing the assignment.
- I check my mistakes after I get back the paper with feedback from the teacher, and try to learn from them.

(p. 211)

Based on the results of this study, the researchers stated that the participants found it difficult to report on their strategies in general, without reference to particular assignments, course, situations, and other contextual factors. They also noted that their qualitative data on constructing the writing strategy questionnaire showed that although their initial aim was to compose items applicable to both secondary school and university contexts in order to achieve greater generalization of the data obtain, this decision led to a loss of information, as the responses tended to become relative and consequently uninformative. They suggested that such findings may provide insights into issues that have relevance for the L2 writers and thus may complement findings from direct observations of the writing process.

Petric and Czarl's approach is also in line with O'Malley and Chamot's (1990) conclusion that the individuals' perceptions and interpretations of their own experiences can provide explanations for behaviour. A revision strategy questionnaire for the present study was adopted from Petric and Czarl's writing strategy list and based on O'Malley and Chamot's (1990) theoretical framework related to revision strategies to investigate the actual students' revision strategies, which should reflect the actual strategies employed in a specific assignment, task, and not in the general context.

2.8.2 Effective strategies for the development of writing skills

It is obvious that apart from error feedback strategies, the literature on error correction has also addressed the significance of error treatment *beyond* teacher feedback (Ferris, 2002). It is suggested that teachers should use other techniques that can be paired with the use of teacher feedback (Ferris, 2002; Lee, 2001). Cohen (1990) underlines the importance of techniques for dealing with feedback as "...learners who have systematic approaches for handling feedback may well remember the feedback more successfully than those who did not" (p. 111). Thus, it is useful for teachers to use teacher feedback in conjunction with other techniques to help students treat their errors (Lee, 2004). Corder (1962) also contends that simply correcting students' errors could not be the most effective form of correction. To make students try to discover the corrected form of their errors could be more often instructive for both teachers and learners.

According to Ellis (1997), making errors may actually help learners to learn when they correct the errors they make. Students' corrections after receiving teacher

feedback will be beneficial for an EFL context where students guided by teachers learn from errors that they cannot define by themselves. Wood (1993) also states:

...most students agree they learn much more if they have a chance to correct their own work. Learning from our mistakes is the philosophy behind using the correction code to aid students in rewriting their compositions... (p. 38).

Also, Lalande (1982) underlines the components of effective strategies for the development of writing skills. These components include comprehensive error correction, systematic marking of compositions, guided-learning and problem-solving, and instructional feedback. Lalande also suggests that the foreign language writing abilities of students could be “favorably enhanced through strategies which promote guided-learning techniques” (p. 140). He conducted an experiment to test the efficacy of the techniques on the combined grammatical and orthographic correctness of compositions. The subjects of the study were divided into control and experimental groups. The students in the control group participated in an extensive grammar review and read numerous short stories. In this group of 30 students, the essays were corrected in the traditional manner in which the teacher corrected all errors for the students and then required them to incorporate their corrections into a rewritten version. While the students in the experimental group used the same texts and were taught by the same instructional method as the control group, the main difference was the marking strategies and the associated rewrite activities. The essays of these students were marked systematically by using an error correction code. In addition, the students were assigned to interpret the codes, to correct their mistakes, and then to rewrite the entire essays in the correct form. In order to encourage guided-learning and problem-solving activities, the students were asked to solve the problems of their

own errors. To help solve the problems, they were encouraged to use their grammar review texts and allowed to consult teachers and their peers. They were also assigned to keep a record of the frequency and reoccurrence of error types by referring to the Error Awareness Sheet. Both groups were required to write five in-class essays and to engage in three in-class rewrite or correction activities. The results of the study indicated that the combination of error-awareness and problem-solving techniques had a significantly beneficial effect on the development of writing skills within the context of the experiment. It was concluded that the techniques designed for, implemented, and tested in this investigation effectively prevented students from making more grammatical and orthographic errors.

Kubota (2001), in a study of whether the correction code system used by EFL students when revising a writing task was useful for students' self-correction strategies, provided an insight into how students employed their strategies in using indirect feedback (coded feedback). It was found that the subjects in this group agreed that the error code system was very useful. They found choosing appropriate vocabulary most difficult for self-correction. Several reasons were identified as the causes of unsuccessful corrections, such as relying on English translation, applying the wrong rules, and inappropriate use of dictionaries. The following list presents correction strategies used by this group of students.

- Guessing
- Checking in a dictionary
- Applying grammatical knowledge
- Making no attempt
- Sounds right

- English translation
- Checking in textbooks
- Restructuring sentences
- Noticing their careless mistakes straightaway
- Deleting the sentence

(p. 472)

Based on these strategies, the results of the study found that *Checking in dictionaries* and *applying grammatical knowledge* were most frequently used. It was also found that 48 % of vocabulary errors were corrected by using dictionaries, although this strategy was not necessarily successful. However, *checking textbooks* and *deletion of sentences* were not popular strategies, although they were highly successful when they were employed. It was also noted that the students employed *deletion of sentences* which was one of the compensation strategies and that students quite often “resort to reduction rather than elaboration” for solving problems of their errors. This was due to the fact that students simply deleted the sentences that contained errors, or replaced sophisticated words with simpler words. This study concluded that the students improved correctness at the expense of their creativity. At this point it is worth noting that Kubota’s study did not consider the important issue of whether error correction of this kind has an impact on subsequent student writing or whether this consciousness-raising can lead to further development or not.

Although Hyland (1990) emphasizes that teachers should find ways of correcting papers which both encourage students on what they have done and lead them to improve their writing, the mismatch of techniques can cause many problems

when students select an inappropriate technique for dealing with teacher feedback. The present study then aimed to examine the effectiveness of drawing students' attention to teacher feedback and their use of it by focusing on how students use revision strategies after receiving teacher feedback.

Ferris and Roberts (2001) studied self-editing strategies in dealing with different degrees of explicitness of teachers' error correction. In this experimental classroom study, they investigated 72 university ESL students' differing abilities to self-edit their texts across three feedback conditions: 1) errors marked with codes from five different error categories; 2) errors in the same five categories underlined but not otherwise marked or labeled; and 3) no feedback at all. The students were assigned to write an in-class, 50 minute diagnostic essay during the first week of class. Approximately two weeks after the diagnostic essays had been written, the students received their word-processed and marked papers back. They were given a cover sheet with instructions and were asked to spend exactly 20 minutes self-editing their essays. The students corrected errors by hand, and their rewrites were immediately collected by the teachers and given to the researchers. The results revealed that the greatest number of errors was observed in the verb categories, followed by sentence structure, word choice, noun endings, and articles, respectively. Regarding the effects of error types on the success of their self-editing, it was observed that all five error categories were reasonably amended to student self-editing. For all subjects, the success ratios ranged from 47% (sentence structure) to 60% (articles). This was an important finding because it suggested that indirect feedback can even help students to self-edit idiosyncratic errors, such as word choice and sentence structure. It was also found that both groups who received feedback significantly outperformed the no-

feedback group on the self-editing task, but there were no significant differences between the groups that used codes and no-codes. As a result, Ferris and Roberts concluded that less explicit feedback seemed to help these students to self-edit just as well as corrections coded by error types. In addition, they also stated that it was possible to use a consistent system of marking and coding errors throughout a writing class and that it should be paired with mini-lessons which built students' knowledge base about the error types being marked. The researchers believed this might yield more long-term growth in student accuracy than by simply underlining or highlighting errors. They stated that though the results of this study suggested that a less explicit marking technique may be equally effective in the short-run, this strategy may not give adequate input to produce the reflection and cognitive engagement that helped students to acquire linguistic structures and to reduce errors over time. To assess this issue fairly, they continued a longitudinal study would be needed to carefully examine classroom instruction and other variables and assess students' progress in accuracy over time.

In conclusion, it is clear from the literature that there are three important issues that need to be considered in any further research on the treatment of errors: 1) is fossilization unique in L2 learners' grammar? (Ellis, 1997); 2) should teachers encourage students to learn from their errors by giving error feedback?; and 3) is it possible for students to learn from their errors if they correct them? (Ellis, 1990). Taking these issues into account, one of the present study's purposes was to investigate the students' actual strategies employed while utilizing different feedback types, which might be useful for both teachers and learners in an EFL context.

2.9 Students' perspectives, practices, and problems regarding error feedback

Error correction studies have focused mostly on whether teachers should correct errors in student writing and how they should go about it. Apart from that, it has focused on student preferences about, reactions to, and coping strategies with teacher feedback (Cohen, 1987; Leki, 1991, Lee, 2003; Lee, 2004). The area of interest in L2 writing teachers' perceptions and practices and students' beliefs and attitudes towards teacher feedback has been much less addressed. Less addressed the following surveys of student opinions over the past decade show some significant issues surrounding the provision of teacher feedback.

Leki (1991) examined the preferences of second language students for error correction in college-level writing classes by using a questionnaire. In an effort to gain an insight into the attitudes of L2 student writers towards errors in their writing, 100 students of beginning freshmen writing classes were surveyed to determine how concerned these students were with errors in their writing, what these students thought were the most important features of their writing in need of attention, what students looked at when they got a paper back from a teacher, what students considered the best source of help with their written work, and what they thought were the best ways for teachers to correct errors in their written work. The findings revealed that when students were asked how important it was to them to have as few errors as possible in their written work, they answered that it was very important to them. 93 out of 100 respondents felt it was very important to them for their teachers to point out their errors in grammatical forms (verb tenses, subjects/verb agreements, article use, etc). All students also indicated that they looked over their English teachers' corrections,

with the majority doing so either usually or always. Although many students had said that perfect grammar, spelling, vocabulary choice, and punctuation were important, not as many of them reported that they always looked carefully at the corrections in those areas. On the other hand, the number of students who always looked carefully at comments on the organization and content of their writing was greater than those who claimed to look carefully at more formal features of their writing. The results from this study showed that students were very much interested in avoiding errors in their written work. Also, it was noted that ignoring their requests for error correction worked against the students' motivation. It would seem, then, that teachers of writing must either accept the students' perceived need to have every error corrected and accommodate that need, or they must address their preferences directly by discussing research evidence about the effectiveness of error correction.

Ferris (1995) studied the assessment of students' reactions to the feedback they received from their teachers. In this study, 155 students at two levels in a university ESL composition program responded to a survey. The results of the survey indicated that students paid more attention to teachers' comments and that they appreciated receiving comments of encouragement and that, overall, they found their teachers' feedback useful in helping them to improve their writing. Responses also showed that students had a variety of problems in understanding their teachers' comments, suggesting that teachers should be more careful in explaining their responses to their students' work. This study showed that ESL students of writing generally took their teachers' feedback quite seriously and paid a lot of attention to it.

A student writer survey study was also conducted by Cohen (1997) in which the respondents were asked about the relative merits of various types of feedback.

Specifically, they were asked whether they received and/or preferred to receive feedback about content, organization, grammar, vocabulary, and mechanics. The results revealed that there is a strong and consistent preference for grammar feedback on the part of L2 student writers.

Lee (2003) explored the existing error correction practices in Hong Kong secondary school writing classes. The study consisted of three sources of data: a questionnaire, follow-up telephone interview, and error correction tasks. Altogether 206 teachers completed the questionnaires, and 19 of them participated in the follow-up telephone interview. The error correction tasks were completed by 58 teachers, while the student survey questionnaires were completed by 320 students from eight high schools, and 27 students were randomly selected to have individual interviews. The results revealed that the majority of teachers agreed that the purpose of error feedback was to increase students' awareness of errors, while a very small number of teachers thought that the main purpose of error correction was to help students locate errors, to encourage them to reflect on those errors, and to promote self-learning. The teacher questionnaire data showed that the error correction strategies teachers used were mainly direct and indirect coded feedback. On the other hand, hinting at the location of errors and categorizing were rarely or never used by the teachers. The data from the student survey showed that the majority of students indicated they wanted their teachers to provide corrections for all errors, as this would make it easier for them to do their corrections. In the data on the use of error codes, although students said they could not always cope with the codes used by teachers, the majority of them expressed a preference for the use of error codes. The interview data indicated that students' preference for error codes was mainly based on the fact that the codes could

enable them to understand the types of errors they committed. When asked to evaluate the overall effectiveness of their error correction practices in the questionnaire survey, the majority of teachers thought their practices brought about some student progress in writing accuracy. Only a small number of teachers thought their students were making good progress. Also, the majority of students thought they could make some progress by using the feedback and only a few students thought they could make good progress in grammatical accuracy in writing. The effectiveness of the teachers' error corrections was also ascertained in the error correction task to find out how well the teachers fared in correcting errors. Interestingly, four types of error correction were identified: accurate feedback-location and correction; inaccurate feedback-location and/or correction; unnecessary feedback and/or meaning changes or incorrect feedback; and omission. For those marked errors, only slightly over half of the teachers' error feedback was accurate. Other feedback was either unnecessary or incorrect, and some of the unnecessary teacher feedback was found to be "misleading because it created errors as a result". When asked whether it was the teachers' job to locate errors and provide corrections for students, a rather high percentage expressed their agreement. It was noted that although they were aware of the importance of asking students to take on the responsibility of error location and correction, in reality the teachers were doing the work for the students. However, it could be observed that the limitations of the study were the use of convenience sampling, so the results could not be generalized. Besides, information about the strategies the teachers used in error correction and the accuracy of their corrections was gathered from a single task, not from the teachers' own students; hence, the way the teachers marked the essays might deviate from their normal practice. Also, information about the effectiveness of error

correction was based on teachers' reports and students' self reports rather than from a data analysis of students' writing samples.

In sum, it was apparent from the literature review that the focus on student preferences about, reactions to, and coping strategies with teacher feedback (Cohen, 1987; Leki, 1991, Lee, 2003; Lee, 2004) have been the area of interest in L2 writing, but they have been much less addressed. This became one of the purposes of the present study which aimed to investigate the students' attitudes towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback.

In conclusion, Chapter II presents the theoretical background to the writing process-based approach and revision in the writing process, feedback on students' writing, forms of teacher feedback, the different degrees of explicitness of error correction, effects of teacher feedback, the recommended pattern of content followed by form feedback, and students' language learning strategies in dealing with teacher feedback. Finally, it ends with students' perspectives, practices, and problems regarding error feedback. Chapter III reports the results of a preliminary study and a pilot study and describes the research methodology.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the framework of research methods used in the present study, which includes (1) preliminary study on the selected errors categories, (2) a pilot study of a writing cycle, (3) research design, (4) participants, (5) teacher feedback used, (6) data collection, (7) data collection procedure, (8) data analysis, and (9) inter-rater and intra-rater reliability.

3.2 A preliminary study on the selected errors categories

The purpose of the preliminary study was to explore the students' common errors found in writing different genres. Further it was ensured that the typology of writing errors was based in line with previous studies (Ferris et al, 2000; Chaney, 1999) which were conducted to examine typical errors found in ESL writing. The classification of error types proposed by these studies included noun ending, article, wrong word, verb, and sentence structure errors. Thus, the current study was conducted to apply these classification schemes to the common errors found in a group of Thai EFL students.

The subjects in this preliminary study consisted of 88 second year English majors in the second semester of the academic year 2005 at the School of Liberal Arts,

Naresuan University, Payao Campus. All of the students had completed the Foundation of English I, Foundation of English II, and Basic Writing.

3.2.1 Procedure

The participants were assigned to write paragraphs of at least 100 words on each of four different topics: My Autobiography, My Hometown, Comparison between Two Friends, and What Causes Environmental Problems? These topics were classified as different genres, namely narrative, descriptive, comparison/contrast, and cause and effects in order to see the error rates found in each genre. The students had 45 minutes for each writing and were allowed to consult a dictionary or text books and any other sources that were available in the class. The data collection took two days. The students were assigned to write on the first two topics on the first day and the last two on the second day, within 45 minutes each. A total of 352 paragraphs were collected and read by the researcher.

3.2.2 Data Analysis

All errors found in the student writing were analyzed to identify error types using descriptive statistics: frequency count, percentage, and mean.

3.2.3 Results

Tables 3.1 – 3.5 show the number of errors found in each genre and each error category.

Table 3.1 The number of errors found in **narrative** writing

Error Types	No. of errors	Percentage	Mean	S.D.
Noun ending	68	8.23	0.77	1.15
Article	77	9.32	0.87	1.46
Wrong word	270	32.69	3.06	1.63
Verb	221	26.76	2.51	2.72
Sentence structure	190	23	2.15	1.76
Total	826	100	9.38	5.11

Table 3.2 The number of errors found in **descriptive** writing

Error Types	No. of errors	Percentage	Mean	S.D.
Noun ending	71	8.52	0.80	.85
Article	79	9.48	0.89	1.1
Wrong word	281	33.73	3.19	2.01
Verb	153	18.37	1.73	1.36
Sentence structure	249	29.9	2.82	2
Total	833	100	9.38	4.32

Table 3.3 The number of errors found in **comparison/contrast** writing

Error Types	No. of errors	Percentage	Mean	S.D.
Noun ending	89	10.08	0.80	1.01
Article	82	9.29	0.89	1.04
Wrong word	255	28.88	3.19	2.22
Verb	265	30.01	1.73	1.68
Sentence structure	192	21.74	2.82	1.53
Total	883	100	9.38	3.57

Table 3.4 The number of errors found in **cause and effect** writing

Error Types	No. of errors	Percentage	Mean	S.D.
Noun ending	75	8.87	0.85	1.1
Article	78	9.23	0.88	1.23
Wrong word	272	32.19	3.09	2.11
Verb	225	26.63	2.55	1.45
Sentence structure	195	23.08	2.21	1.61
Total	845	100	9.6	4.45

Table 3.5 The students' total errors found in all four genres

Genres	Noun ending	Article	Wrong Word	Verb	Sentence structure
Narrative	68	77	270	221	190
Descriptive	71	79	281	153	249
Comparison/contrast	89	82	255	265	192
Cause & effect	75	78	272	225	195
Total	303	316	1,078	864	826

As illustrated in the Tables 3.1 – 3.4, the overall errors among different genres revealed that overall error rates were highest in comparison/contrast (total errors =

883), followed by cause and effect, descriptive, and narrative, respectively (total errors = 845, 833, and 826,). As shown in Table 3.5, wrong word errors were found the most followed by verb, sentence structure, article, and noun ending, respectively.

The results of the preliminary study showed that the occurrence of errors coincided with the five most frequent error types found in a sample of 5,707 errors analyzed in the texts by 92 second language writers (Chaney, 1999 as cited in Ferris and Roberts, 2001). Accordingly, the present investigation adopted these error categories to analyze the students' grammatical accuracy.

After analyzing written text produced by this group of the students and consulting with two experts who have several years teaching writing (the researcher's supervisor and an English lecturer at Naresuan University), the researcher was recommended that the design of the main study should focus only on three selected genres, namely narrative, descriptive, and comparison/contrast, which were considered adequate for the students in this level and for a period of 16-week semester.

3.3 A pilot study of a writing cycle

The purpose of the pilot study was to try out a pattern of a writing cycle as a research instrument for this present study. It was expected that the design would allow learners to practice writing using a process-based approach in a writing class. The participants in the pilot study were identical to those participants in the preliminary study. This pilot study was carried out over two weeks.

In the first class, the students involved in this study were informed of the purpose of the design, which was aimed at helping the students to practice writing skills. The participants were first introduced to "the recommended pattern of content

feedback followed by form feedback” (Ashwell, 2000, p.232) as a writing cycle by showing a diagram of the pattern and by explaining the significance of each stage. Also, the methods of giving different types of teacher written feedback (direct, coded, and uncoded) were introduced. In order to ensure that the students understood the cycle, the researcher discussed this pattern with the students and allowed them to ask questions. Then they were taught the narrative writing genre and its components and received a worksheet which had a writing model, grammar mini-lesson related to the genre, and exercises for practice writing. In this session, the students were taught how to write their daily routine using appropriate transitional words and grammar. They were also asked to complete the exercises and were encouraged to ask any question they had. Afterward, they were assigned to do the pre-writing activity by discussing with their classmates and the teacher-researcher about the topic “My routine”.

In the second class, the participants were assigned to write a 100-word paragraph of their daily routine within 50 minutes. Dictionaries, textbooks, and worksheets were also allowed. The students’ first drafts were collected. In the third class in the following week, the students received their first drafts with teacher feedback on content. They were then assigned to revise their first draft in class and to hand in their second draft by the end of the class. For the fourth class meeting, the students received their second draft with teacher feedback on form focused on the aforementioned five error categories. With regards to the feedback given, it was designed to provide all three types of feedback, namely direct, coded, and uncoded, in a mixed pattern. In the end, using the given feedback, the students were assigned to correct their errors, to revise their work, and to hand in their final drafts after 50 minutes. After the experiment, five students were interviewed to seek useful

information for developing an in-class writing cycle. The results of the interview with the five participants revealed the following:

1. All five students reported that the activity was very useful for their writing.
2. The students reported that the worksheet was very important and very useful for them because they could make use of the writing model and study the grammar at home.
3. They found the feedback on content very helpful because it pointed out their weaknesses and how to improve their writing.
4. The students also reported that all types of teacher feedback on form were very useful for correcting their errors because they understood the errors they made and were able to correct them accordingly. Some students suggested that the researcher should provide them with an error code handout and exercises for correcting each type of errors so that they could help themselves at home. Subsequently, the suggestion was used to design exercises and error code sheet for the main study (for the error code sheet, see Appendix A).
5. All of the students agreed that they preferred to write and revise their writing at home because they had more time to complete it. As the time was limited, they could not finish their writing in class because they were always too worried. To reduce students' anxiety, the participants in the main study were allowed to write and revise their writing as an outside class activity.

In conclusion, this pilot study provided useful information for the improvement of the writing cycle, the class schedule, writing activities, and teaching materials, especially the worksheets and the error code handout.

3.4 Research design used in the present study

The research design used in the present study was a quasi-experimental study using one intact group with a total of 81 students during a 16-week semester. The research procedure aimed to investigate three main areas. First, the present study aimed to examine the effects of different types of teacher written feedback on the improvement of EFL writing quality, grammatical accuracy focused on five error categories (noun ending, article, wrong word, verb, and sentence structure), and writing fluency. The second area was to investigate the students' actual revision strategies employed when revising their writing assignments after receiving different feedback types. The third area was to explore the students' perspectives: their attitude toward, their comprehension of, their attention to, and their problems regarding teacher feedback.

3.5 Participants

The participants of this study were 81 second year students majoring in English enrolled in Paragraph Writing (205222) course in the first semester of the academic year 2006 at Naresuan University, Payao Campus, Thailand, where the researcher is currently employed. These students were selected to participate in the study because they had completed three basic English courses (Foundation of English I, Foundation of English II, and Basic Writing) and, therefore, should be able to understand and utilize teacher feedback for their revision. Based on the students' background information elicited from a questionnaire adapted from Padgate (1999, see Appendix B) , their average grades from the three courses were used to place them into high, moderate, and low proficiency levels as shown in Table 3.6.

Table 3.6 Number of students in each level of English proficiency

Average grades	Levels of English Proficiency	No. of students (N = 81)		Gender (N = 81)	
		No.	%	Female (N=69)	Male (N=12)
0.00 – 1.99	Low	16	19.75	11	5
2.00 – 2.99	Moderate	41	50.62	37	4
3.00 – 4.00	High	24	29.63	21	3

With regards to the students' demographical information gained by using questionnaire, the students' age ranged from 17 -20 years. They had studied English for 6-15 years or 12.11 years on average in the school system in Thailand and for three semesters at the univerisyt before taking Paragraph Writing. None of them had studied in an English speaking country or had any experience in a school that used English as a medium of instruction. None attended an English course at any other language institute in addition to the courses they were taking at the university at the time this research was conducted. Based on the background information regarding their practice in English writing at a paragraph level during high school, the majority of the students (57.23%) reported that they never had experience in high school practicing writing at a paragraph level, while some of them (22.14%) stated that they rarely practiced writing, and the rest of the students (20.63%) said they sometimes practiced writing in high school. When asked how often they practiced writing in the three college English courses at a paragraph level before taking the Paragraph Writing course, the majority of the students (87.25%) reported that they sometimes practiced writing, while the rest of them (12.75) said they often did it.

3.6 Teacher feedback used in the present study

As this present study aimed to examine the improvement in students writing after utilizing different feedback types, four different methods of teacher's responses were given to the participants. These feedback methods were divided according to their function of responses: content and form.

In the process approach writing class, content feedback was given to the students in their first drafts, and form feedback was given in their second drafts. Three types of feedback on form used were direct, coded, and uncoded feedback, each given at different times as described below.

3.6.1 Content feedback used in the present study

Content feedback was one of the feedback methods used in the present study. The focus of this feedback aimed principally at multiple-sentence level issues such as organization, paragraphing, cohesion, and relevance (Ashwell, 2000). It was also used to provide comments on content relating to the effective components of writing. In order to give the students useful feedback on content, the feedback used was based on Bates, Lane, and Lange (1993) as follows:

1. Write personalized comments – maintaining a dialogue between reader and writer

2. Provide guidance where necessary – avoiding advice that is too directive or prescriptive

3. Make text - specific comments - relating to the text rather than general rules

4. Balance positive and negative comments – avoiding discouraging students with criticism

In practice, the present study was also in line with the practices of Ashwell (2000) in which the comments given in written form as content feedback were personalized to the needs of the individual. Also in the comments, students were addressed by name and the researcher signed her name at the end. In order to provide necessary guidance, the comments were focused on two or three main problems only. In addition, the content feedback in this study was limited to refer specifically to the students' text and generally mixed positive comments with guidance or criticism. In order to be certain that the researcher provided useful, effective, and consistent response on content, 8 pieces of the first draft of each topic (10% of total) were rechecked by two experienced teachers of English. However, no attempt was made to classify the comments by linguistic function (requesting, suggesting, etc.) and forms of content feedback as in Ferris et al (1997) and Ashwell (2000) because this was not a primary concern of the present study.

3.6.2 Form feedback used in the present study

After receiving content feedback on the first drafts, the students were assigned to revise their writing and to hand in their second drafts. Then they received feedback on form focused on five error categories. In this study, form feedback consisted of direct, coded, and uncoded feedback. The type of direct feedback was selected for use in the present study because when the students could see their errors corrected soon after writing, "they internalize the correct form better." (Chandler, 2003, p. 291). For indirect feedback, both coded and uncoded feedback were used because they afford opportunities for "guided learning and problem solving" (Lalande, 1982, p. 140) to take place. Figure 3.1 demonstrates the provision of different types of teacher feedback used in the present study.

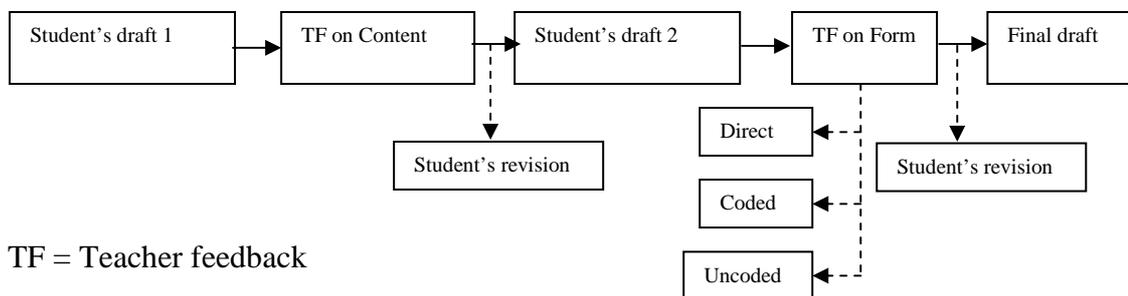


Figure 3.1 A writing cycle in the present study

3.7 Data collection

3.7.1 The data

The method of data collection of this study was focused on three main areas. Firstly, the present study aimed to investigate the effects of different types of teacher written feedback on the improvement of the students' writing quality, grammatical accuracy (noun ending, article, wrong word, verb, and sentence structure), and writing fluency. The second area was on the students' actual revision strategies employed when revising their writing assignments after receiving different types of teacher written feedback. The third area was the students' perspectives regarding their attitude toward, their comprehension of, their attention to, and their problems regarding teacher feedback.

For the first area, pre-and post-tests of paragraph writing and all nine writing assignments throughout a 16-week semester were collected and analyzed to see the effects of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency.

Regarding the grammatical accuracy, these five error categories corresponded to the information from previous literature (Ferris et al., 2000; Ferris and Roberts, 2001). Table 3.7 shows the error codes, types of errors and their description.

Table 3.7 Description of error categories used for feedback and analysis

Code	Types of errors	Description
V	Verb	- All errors in verb tense or form, including relevant subject-verb agreement
NE	Noun ending	- Plural or possessive ending incorrect, or unnecessary
Art	Article	- Article or other determiner incorrect, omitted, or unnecessary. missing or unnecessary or incorrect used
WW	Wrong word	- All specific lexical errors in word choice or word form, including preposition and pronoun errors - Spelling errors only included if the (apparent) misspelling resulted in an actual English word.
SS	Sentence structure	- Errors in sentence/clause boundaries (run-ons, fragment, comma splices), word order, omitted words or phrases, unnecessary words or phrases, other unidiomatic sentence construction.

Source: Ferris and Roberts (2001)

The data related to the students' revision strategies and their perspectives: their attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher feedback were collected using two questionnaires.

3.7.2 Instruments for data collection

There were four instruments used in collecting data of this study.

3.7.2.1 Pre-and post-tests

Both pre-and post-test assessments were used to examine the students' improvement of writing quality, grammatical accuracy, and writing fluency. The pre-and post-tests were administered before and after the experiment. The topic assigned

to the students to write was the same. To choose the topic, the researcher first, asked five English lecturers to list five topics that were suitable for writing comparison/contrast. These topics included love, activity in daily life, learning experience, future career, and college life. Then, five students from the pilot study were asked to choose the topic they liked to write about. Three out of five students preferred to write about the comparison/contrast of their learning experience which they were familiar with. Accordingly, the topic for the pre-and post test was “Learning by Yourself and Learning in Class”. Then the test question, instruction, and format were constructed based on Weir (1993). The pre-and post-tests are presented in Appendix C.

3.7.2.2 Nine writing assignments

All nine writing assignments were used to collect data on students' writing quality, grammatical accuracy, and writing fluency. The students were assigned to write nine writing assignments (at least 100 words each) as an outside class activity as one of the course requirements. These assignments accounted for 30 percent of the overall evaluation. The students were assigned to write nine topics of three different genres namely narrative, descriptive, and comparison/contrast, three drafts for each topic.

3.7.2.3 Revision strategy questionnaire

A 4-point Likert Scale questionnaire was used to collect the students' information on revision strategies in dealing with different types of teacher written feedback. The revision strategy questionnaire used in the present study was adapted from Kubota (2001) and Petrić & Czárí (2003). The questionnaire was read and commented by five English lecturers who were pursuing a PhD in English Language

Studies and had experience in teaching English for several years. Also it was piloted with the same five students who participated in the topic selection process. Then it was revised based on their comments and suggestions obtained (see Appendix D).

3.7.2.4 Attitude questionnaire

A separate attitude questionnaire was used to collect the students' data focused on their perspectives regarding their attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback. It consisted of two main parts. The first part collected the data on general information, e.g., age, sex, writing experience, etc. The second part collected the data regarding their perspectives towards teacher feedback. The questionnaire was adapted from Padgate (1999). Two native English speakers who were the researcher's supervisors at the University of Dundee, United Kingdom during a 1-year research leave were also consulted. Then the questionnaire was revised based on their comments and suggestions and was piloted with 15 second year English major students at Naresuan University, Payao Campus (see Appendix E).

3.7.2.5 Semi-structured interview

Semi-structured interview was used to collect the students' qualitative information on the students' attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher feedback. Six questions, which were read and agreed upon by three experienced teachers of English, one native speaker and two Thais were used in the interview. A total of 12 students, four from each of three levels of English proficiency (high, moderate, and low), were selected to participate in the interview sessions. Administered individually, this inquiry was focused on the students' responses to the in-class writing instruction, the writing

assignments, the usefulness of each feedback type, and the revising activity. Each interview was tape recorded and conducted in Thai.

3.8 Data collection procedure

3.8.1 The experiment

This quasi-experimental study was conducted during a regularly scheduled course called Paragraph Writing. The students studied the lessons and completed the assigned activities during the 16-week term, which could be divided into 32 class meetings, one and a half hours each, twice a week. Extra classes were arranged due to the mid-term examinations and some national holidays. According to the course schedule, the students received the course syllabus and information related to the course orientation and were assigned to do the pre-test during the first week (class meetings 1–2). Then during weeks 2–3 (class meetings 3–6), they studied basic grammar usage, components of a paragraph, and the writing process. For weeks 4–16 (class meetings 7–32), the students studied the lessons about writing different genres and completed their assigned activities in a writing cycle. The students' writing was collected during this period. Table 3.8 presents the data collection schedule.

Table 3.8 Schedule of the data collection

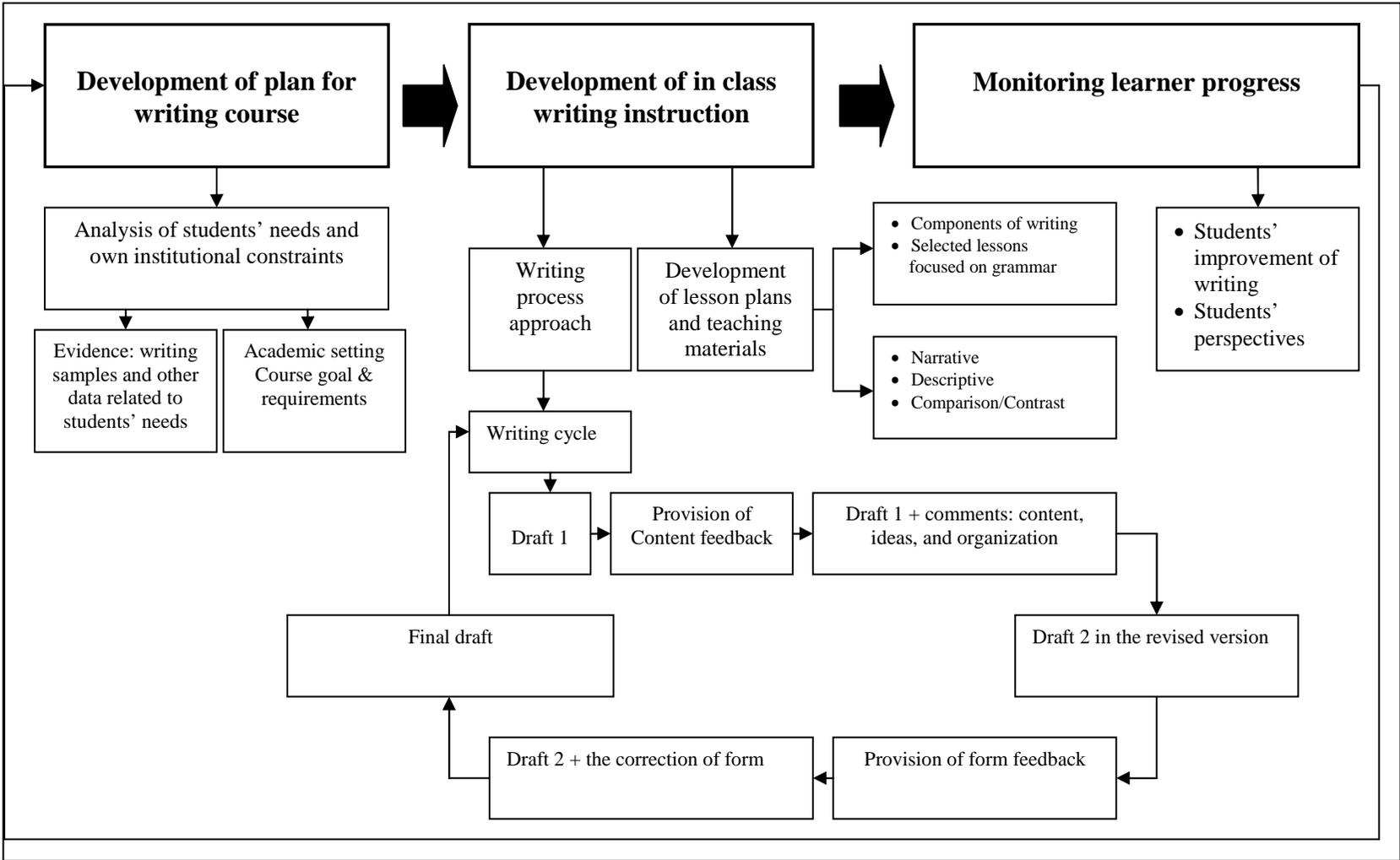
Class meeting	In-Class Activity	Out of Class Activity
8	Hand in Writing (Draft 1)	
9	Get CtF by teacher	Revise and hand in Draft 2
10	Get DF by teacher	Correct errors and hand in Draft 3
11	Hand in Writing 2 (Draft 1)	
12	Get CtF by teacher	Revise and hand in Draft 2
13	Get CF by teacher	Correct errors and hand in Draft 3
14	Hand in Writing 3 (Draft 1)	
15	Get CtF by teacher	Revise and hand in Draft 2
16	Get UF by teacher	Correct errors and hand in Draft 3
17	Hand in Writing 4 (Draft 1)	
18	Get CtF by teacher	Revise and hand in Draft 2
19	Get DF by teacher	Correct errors and hand in Draft 3
20	Hand in Writing 5 (Draft 1)	
21	Get CtF by teacher	Revise and hand in Draft 2
22	Get CF by teacher	Correct errors and hand in Draft 3
23	Hand in Writing 6 (Draft 1)	
24	Get CtF by teacher	Revise and hand in Draft 2
25	Get UF by teacher	Correct errors and hand in Draft 3
26	Hand in Writing 7 (Draft 1)	
27	Get CF by teacher	Revise and hand in draft 2
28	Get DF by teacher	Correct errors and hand in Draft 3
29	Hand in Writing 8 (Draft 1)	
30	Get CtF by teacher	Revise and hand in Draft 2
31	Get CF by teacher	Correct errors and hand in Draft 3
32	Hand in Writing 9 (Draft 1)	
		Get CF by teacher
		Revise and hand in Draft 2
		Get UF by teacher
		Correct errors and hand in Draft 3

Draft 1 = first draft, Draft 2 = second draft, Draft 3 = final draft

CtF = Content feedback, DF = Direct feedback, CF = Coded feedback, UF = Uncoded feedback

According to the experiment schedule, the students were assigned to write three genres three topics each (total 9 papers). In the writing cycle, the students were assigned to write three drafts for each topic: first draft (Draft 1), second draft (Draft 2), and final draft (Draft 3). They submitted the first draft to the teacher and received content feedback in the next class meeting. Using the content feedback to review their content and organization, they then submitted their Draft 2 to the teacher for form feedback. In composing Draft 3, the students used the feedback on form for revising and editing and finally resubmitted their writing in the next class meeting. During the revising activity, the students were allowed to consult grammar books, dictionaries, their peers, or any sources they wished for revising their papers. Figure 3.2 shows a diagram of the development of plan for the writing class using the process approach in the present study.

Figure 3.2 Development of process based approach plan for a writing class



3.8.2 Task

3.8.2.1 Consideration in writing task design

In the earlier preliminary study, the students were assigned to write in four different genres (narrative, descriptive, comparison/contrast, and cause and effect). The scope of writing tasks and lesson plans based on the students' written text, semi-structured interview, academic setting, course goals and requirements were designed. Two experts with several years of teaching writing (one is the researcher's supervisor and the other one is an English lecturer at Naresuan University) were consulted, and it was recommended that the main study should focus only on three selected genres, namely narrative, descriptive, and comparison/contrast, for they were considered adequate for the students at this level and for a period of 16 weeks.

With the scope of writing tasks designed, the topics were listed. According to Wolcotte (1998) and Wiegle (2002), there are two general topic categories; personal and general topics. Wolcotte (1998) stated that personal topics help writers become more engaged in the topic and "may thus perform better than they otherwise would" (p.92). Wolcott also noted that this topic category does not require any specialized background knowledge and are thus accessible to most, if not all writers. For general topics, Weigle further suggested that general (i.e. non-personal topic) topics may be problematic in that they require writers to write about something other than their own experience in which they may not have the appropriate background knowledge to write with confidence. Based on these and related considerations in determining the actual topics or subject matter of writing tasks, both personal and general topics were assigned. For general topics, in order to avoid "a danger" that writers "may not have the appropriate background knowledge to write" (p. 92), the general topics were

selected by the students in order to ensure they were general enough for all students to have relevant knowledge.

A list of 7-9 possible topics for each of the three genres agreed upon by the researcher and five experienced lecturers of English at Naresuan University, Payao Campus were given to the participants of the study to select their three most favorite. The first top three topics of each genre were finally chosen for the writing tasks. Table 3.9 presents the selected topics given to the students to write and the different feedback types provided in different occasions.

Table 3.9 The topics selected for students' writing

Genres	Writing topics	Feedback provided
Narrative	1. My routine	Direct
	2. An Unforgettable Childhood Experience	Coded
	3. My Autobiography	Uncoded
Descriptive	1. My Hometown	Direct
	2. My Favorite Place	Coded
	3. How to cope with stress	Uncoded
Comparison/ Contrast	1. Comparison/Contrast between Two Friends	Direct
	2. Life in Secondary School and in University	Coded
	3. Watching News from TV Program and Reading News from Newspaper	Uncoded

3.8.3 Course

The Paragraph Writing (205222) course was chosen to collect the students' writing assignments since the goal of this course was to develop students' skills in writing paragraphs of different genres using grammatically correct sentences (for course syllabus, see Appendix F). As one of the purposes of this study aimed to gain an insight into the students' improvement of writing after using different types of teacher feedback, it was necessary to collect data from a course that could allow

teachers to gain information from writing activities, e.g., in-class writing workshop on the writing process, grammar mini-lessons of the students' most frequent errors, and the associated writing activities. Consequently, it was essential to employ such activities in the writing class that, if possible, had no negative effects on the students' learning activities.

For the in-class writing instruction, the student received writing instructions related to grammar, writing different genres with worksheet (See Appendix G), which were validated by two English lecturers. The students were taught on the process of writing, e.g., prewriting, composing, revising, and other associated activities. Mini-lessons focusing on the most frequent errors found in the student writing were designed and taught in class in order to raise the students' awareness of their errors (Ferris, 2002). Additional resources for self-study, e.g., English-English dictionaries, editing handbooks, and other beneficial sources of information were introduced. This was because "teachers may find that student writing problems are fairly scattered and idiosyncratic and/or that some students may need additional information and practice on particular language structures" (p. 101). According to the class meeting schedule, the class met twice a week for 90 minutes per class meeting during a 16-week semester. Throughout the writing period, a constant routine was maintained.

3.9 Data analysis

All data were analyzed and interpreted as follows:

3.9.1 Student writing quality

The students' writing quality was measured by three raters using "TOEFL writing scoring guide" (cited in Weigle, 2002, p. 113). This holistic scoring rubric is

the well-known scale used for the TOEFL Writing Test, “formerly known as the Test of Written English (TWE)” (p. 112). As the purpose the assessment of the present study was to see both the quality of content, organization and language use, the scale was selected to assess the students’ writing quality because it contains descriptors of syntactic and rhetorical qualities of six levels of writing assessments (see Appendix H). The scoring rubric was used to measure the improvement of writing quality between pre-and post-tests and among all nine writing assignments. Then the mean values of the scores were compared and analyzed by using Paired Samples Test in SPSS Program for Windows 13.0.

3.9.2 Student writing accuracy

In order to measure the student writing accuracy, the present study used Ferris et al’s (2001) and Chaney’s (1999) errors classification to analyze error rates found in all 1,458 drafts. Writing accuracy was focused on five error categories, namely noun ending, article, wrong word, verb, and sentence structure. Then the mean values of error rates found between pre-and post-tests and among all nine writing assignments were compared and analyzed by using Paired Samples Test in SPSS Program for Windows 13.0.

3.9.3 Student writing fluency

The method of analyzing student writing fluency was word count. The word count in Drafts 2 and 3 of each piece of the students’ writing was done two times. There was an interval of two weeks between the first and the second word count. In order to see the change in the length of student writing between the beginning and the end of the course, the mean values of word count between pre-and post-tests and

between first and last writing assignments were compared and analyzed by using Paired Samples Test in SPSS Program for Windows 13.0.

3.9.4 Questionnaires

The results of two separate questionnaires, that is, 1) the students' attitudes towards, their comprehension of, their attention to, and their problems regarding different types of teacher feedback and 2) their revision strategies when utilizing different types of teacher written feedback, were analyzed by using descriptive statistics: mean and standard deviation.

3.9.5 Interview session

By the end of the course, a total of 12 students, four from each of three different levels of English proficiency (high, moderate, and low) were selected to participate in the interview session.

3.10 Inter-rater and intra-rater reliability

To obtain the inter-rater data of writing quality and error rates found in the students pre-and post-tests, three raters were assigned to rate the students writing quality and to calculate error rates found in pre-and post-tests. Rater 1 was the researcher, Rater 2 was a native speaker and a teacher of English, and Rater 3 was a Thai assistant professor of English. All of them were teaching English at Naresuan University. In order to ensure the inter-rater reliability, the scores of writing quality and the number of errors given by the three raters were compared and analyzed by using the Pearson's correlation coefficient in the SPSS Program for Windows 13.0.

3.10.1 Correlations among three raters' grading the students' pre-and post-test scores of writing quality

Table 3.10 shows the correlations among the raters' grading the students' writing quality which indicates the inter-rater reliability.

Table 3.10 Correlations among three raters' grading pre-and post-tests scores of writing quality

	Pre-test			Post-test		
	Rater1	Rater2	Rater3	Rater1	Rater2	Rater3
Rater1	1.000	0.732**	0.750**	1.000	0.835**	0.840**
Rater2	0.732**	1.000	0.625**	0.835**	1.000	0.742**
Rater3	0.750**	0.625**	1.000	0.840**	0.742**	1.000

** . Correlation is significant at the 0.01 level (2-tailed)

For the pre-test scores, it was found that, Rater 1's grading and Rater 2's were correlated with the correlation coefficient of .732 at the 0.01 level of significance. The correlation coefficient between Rater 1's grading and Rater 3's was a little higher, that is, 0.750 at the 0.01 level of significance. The correlation coefficient between Rater 2's grading and Rater 3's was a little lower with the value of 0.625 at the 0.01 level of significance. For the post-test scores, Rater 1's grading and Rater 2's were correlated, with the correlation coefficient was 0.835 at the 0.01 level of significance indicating a high level of correlation. A high level of the correlation coefficient was also found in Rater 1's grading and Rater 3's with the value being 0.840 at the same level of significance. Rater 2's grading and Rater 3's were little different from that of Raters 1 and 3, with the correlation coefficient of 0.742 at the 0.01 level of significance.

The correlation coefficient values of 0.30 to 0.70 show moderate relationship, those below 0.30 indicate a low relationship, and those larger than 0.70 mean a high

relationship (Roscoe, 1975). According to the values of correlation coefficient obtained from these three raters, it was found that the values ranged between 0.625 - 0.840 indicating that the correlation coefficient among the three raters were at a high level for the pre-and post-test scores

($r > 0.70$), except for the correlation obtained from Rater 2's grading and Rater 3's, which was at a moderate level ($r=0.625$). To quote Roscoe (1975), this level was considered acceptable in social behavior studies.

3.10.2 Correlations among the three raters' analysis of error rates found in the students pre-and post-tests

In order to ensure the reliability of the raters' analysis of error rates found in the students' pre-and post-tests, the error rates found by three raters were compared and analyzed by using the Pearson's correlation coefficient in the SPSS Program for Windows 13.0. Tables 3.11 – 3.15 show the correlations among the raters' analysis of error rates which indicates the inter-rater reliability. Following are correlations among the three raters of five error categories.

Table 3.11 Correlations among the three raters' analysis error rates of **noun ending** found in pre-and post-tests

	Pre-test			Post-test		
	Rater1	Rater2	Rater3	Rater1	Rater2	Rater3
Rater1	1.000	0.921**	0.893**	1.000	0.915**	0.866**
Rater2	0.921**	1.000	0.892**	0.915**	1.000	0.855**
Rater3	0.893**	0.892**	1.000	0.866**	0.855**	1.000

** . Correlation is significant at the 0.01 level (2-tailed)

An analysis of error rates in the pre-and post-tests found among these three raters revealed correlation coefficients of 0.855–0.921. These values indicated that the correlation coefficient among these raters in analyzing error rates in **noun ending** were at the 0.01 level of significance.

Table 3.12 Correlations among the three raters’ analysis of error rates of **article** found in pre-and post-tests

	Pre-test			Post-test		
	Rater1	Rater2	Rater3	Rater1	Rater2	Rater3
Rater1	1.000	0.943**	0.938**	1.000	0.832**	0.854**
Rater2	0.943**	1.000	0.959**	0.832**	1.000	0.818**
Rater3	0.938**	0.959**	1.000	0.854**	0.818**	1.000

** . Correlation is significant at the 0.01 level (2-tailed)

Regarding the error rates in **article** in the pre-and post-tests, it was found that the levels of correlation coefficient were 0.818 – 0.959. These values indicated that the correlation coefficient among these raters were at a high level at the 0.01 level of significance.

Table 3.13 Correlations among the three raters’ analysis of error rates of **wrong word** found in pre-and post-tests

	Pre-test			Post-test		
	Rater1	Rater2	Rater3	Rater1	Rater2	Rater3
Rater1	1.000	0.852**	0.875**	1.000	0.851**	0.834**
Rater2	0.852**	1.000	0.830**	0.851**	1.000	0.811**
Rater3	0.875**	0.830**	1.000	0.834**	0.811**	1.000

** . Correlation is significant at the 0.01 level (2-tailed)

As can be seen in Table 3.13, the values of correlation coefficients among the three raters were 0.811–0.875, which indicated that the correlation coefficients among these raters were at the 0.01 level of significance.

Table 3.14 Correlations among the three raters' analysis of error rates of **verb** found in pre-and post-tests

	Pre-test			Post-test		
	Rater1	Rater2	Rater3	Rater1	Rater2	Rater3
Rater1	1.000	0.731**	0.790**	1.000	0.835**	0.829**
Rater2	0.731**	1.000	0.838**	0.835**	1.000	0.837**
Rater3	0.790**	0.838**	1.000	0.829**	0.837**	1.000

** . Correlation is significant at the 0.01 level (2-tailed)

Regarding the correlation coefficient value among three raters' analysis of error rates of pre-and post-tests, it was found that the levels of correlation coefficient among these raters were 0.731 – 0.838. These values indicated that the correlation coefficient among these raters were at a high level at the 0.01 level of significance.

Table 3.15 Correlations among three raters' analysis of error rates of **sentence structure** found in pre-and post-tests

	Pre-test			Post-test		
	Rater1	Rater2	Rater3	Rater1	Rater2	Rater3
Rater1	1.000	0.807**	0.788**	1.000	0.816**	0.825**
Rater2	0.807**	1.000	0.800**	0.816**	1.000	0.801**
Rater3	0.788**	0.800**	1.000	0.825**	0.801**	1.000

** . Correlation is significant at the 0.01 level (2-tailed)

An analysis of error rates in pre-and post-tests found among these three raters revealed correlation coefficients of 0.788–0.825. These values indicated that the

correlation coefficients among these raters in analyzing error rates in **noun ending** were at the 0.01 level of significance.

3.10.3 Raters' consistency

To examine the grading consistency of these three raters for both writing quality scores and error rates found, the writing scores and the number of errors of the pre-and post-tests were analyzed by using Pearson's correlation coefficient in SPSS Program for Windows. Table 3.16 shows the results of the analysis of raters' grading consistency of writing quality scores.

Table 3.16 Raters' grading consistency

Rater	Correlations between Pre-and Post-test Scores
1	0.817**
2	0.515**
3	0.469**

** . Correlation is significant at the 0.01 level (2-tailed)

In terms of rating consistency, Rater 1's rating was proved to be the most consistent ($r=0.817$, $p < 0.05$), and Rater 2's grading consistency and Rater 3's were acceptable ($r=0.515$ and 0.469 $p < 0.05$).

Table 3.17 Raters' analysis of error rates consistency

	Correlations between error rates found in pre-and post-test scores				
	NE	Art	WW	V	SS
Rater1	0.938**	0.947**	0.986**	0.754**	0.848**
Rater2	0.928**	0.839**	0.987**	0.813**	0.853**
Rater3	0.888**	0.913**	0.989**	0.774**	0.842**

** . Correlation is significant at the 0.01 level (2-tailed)

In terms of analysis of error rates consistency, it was found that correlation coefficient levels were 0.754-0.987 indicating a high level of consistency in analyzing error rates found in pre-and post-tests at the 0.01 level of significance.

In conclusion, regarding the levels of inter-rater and intra-rater reliability, the results of the analysis of the correlation coefficients among three raters revealed that these raters' scores for grading writing quality and analyzing error rates found in pre-and post-tests were proved to be reliable.

3.10.4 A summary of data analysis

In addition to seeking the effects of different methods of giving feedback, the students' revision strategies, and their attitudes towards, their comprehension of, their attention to, and their problems regarding different feedback types, three measures were used in order to answer the following research questions.

Research Question 1

What were the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency?

This question was asked to investigate the effects of different types of teacher written feedback on the students' improvement of student writing quality, grammatical accuracy and writing fluency. The comparison between pre-and post-tests was used to report the students' overall improvement of writing quality, grammatical accuracy, and writing fluency. The comparison among all nine writing assignments were also used to investigate the effects of different types of teacher written feedback on revision regarding the improvement of writing quality, grammatical accuracy, and writing fluency. The students' writing quality scores were

measured against TOEFL writing scoring guide. The students' grammatical accuracy were measured by using the classification of five error categories, and the students' writing fluency were measured by word count.

Research Question 2

What were the students' revision strategies employed when utilizing different types of teacher written feedback?

This question aimed to examine the students' revision strategies in utilizing different types of teacher written feedback. To analyze these strategies, the quantitative data from the Revision Strategy Questionnaire was analyzed using descriptive statistics: mean and standard deviation.

Research Question 3

What were the students' perspectives regarding their attitude toward, their comprehension of, and their attention to, and their problems regarding different types of teacher written feedback?

This last question intended to explore the students' perspectives regarding their attitudes towards, their comprehension of, their attention to, and their problems regarding teacher feedback. To look into the students' perspectives, the quantitative data from the Attitude Questionnaire was also processed based on descriptive statistics. In addition, the interview protocols were transcribed and used to report the students' attitudes towards and preferences and comprehension of different feedback types.

In conclusion, Chapter III describes the research methodology for the present study. It begins with a preliminary study on the selected error categories and a pilot

study of a writing cycle, the first providing the existence of the students' writing problems, while the latter confirming appropriate activities in a writing cycle. Research design, participants, teacher feedback used, data collection, data collection procedure, and data analysis then followed. This chapter ends with inter-rater reliability to ensure the quality of the research instruments. Chapter IV presents the quantitative results regarding the effects of different types of teacher written feedback on the students' writing, their revision strategies and attitudes towards these feedback types.

CHAPTER 4

QUANTITATIVE RESULTS

4.1 Introduction

As mentioned in Chapter I, the present study aimed at answering three Research Questions: 1) what were the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency?; 2) what were the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency?; and 3) what were the students' perspectives, that is, their attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback? This chapter presents the quantitative results regarding the three questions. To answer Research Question 1, the effects of different types of teacher written feedback on the students' writing (writing quality, grammatical accuracy focused on five error categories, and writing fluency), the overall improvement in student writing comparing pre-and post-test results, and the improvement in student writing comparing among nine writing assignments are presented. To answer Research Question 2, students' revision strategies in utilizing different types of teacher written feedback are reported, followed by findings on the students' attitudes towards different types of teacher written feedback, the answer for Research Question 3.

4.2 Answer to Research Question 1:

What were the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency?

Two sets of data were used to describe the effects of different types of teacher written feedback on the improvement of writing quality, grammatical accuracy, and writing fluency as follows:

4.2.1 The overall improvement in student writing comparing pre-and post-test results

A comparison of the pre-and post-tests on the students' writing quality, grammatical accuracy, and writing fluency showed the overall improvement in student writing.

4.2.1.1 The students' writing quality

In measuring the overall students' improvement of writing quality, the present study compared the mean value of writing quality before and after the experiment using pre-and post-tests. The selected genre for the pre-and post-tests was comparison/contrast on the same topic mentioned in Chapter III. Table 4.1 presents the results of analysis.

Table 4.1 Analysis of Paired Samples Test for the mean score of the students' writing quality comparing pre- and post-tests

Students' Level of English Proficiency	Pre-test		Post-test		Sig. (2-tailed)
	\bar{x}	SD	\bar{x}	SD	
Overall (n = 81)	3.16	.78	3.65	.76	.000**
High (n =16)	3.87	.34	4.31	.70	.02*
Moderate (n = 41)	3.31	.64	3.68	.56	.004**
Low (n =24)	2.41	.58	3.12	0.74	.000**

*P<.05, ** P< .01

\bar{x} = Mean

Overall, the results from the analysis of the Paired Samples Test for the students in this group showed a significant difference in writing quality between pre- and post-test scores at the .000 level of significance ($p < .01$). When focusing on the students with different levels of English proficiency, namely high, moderate, and low, there was a significant difference between pre- and post-test scores in the low group, with the difference being at the .000 level and in moderate group, with the difference being at .004 ($p < .01$). In the high group the significance was found at a lower, .02 level ($p < .05$).

4.2.1.2 The students' grammatical accuracy

In measuring the overall students' improvement of grammatical accuracy, the mean values of error rates found in all five error categories of the pre- and post-tests were compared as shown in Table 4.2.

Table 4.2 Analysis of Paired Samples Test for the mean values of error rates found in the pre- and post-tests

Levels of proficiency	Error types	Pre-test		Post-test		Sig. (2 tailed)
		\bar{x}	SD	\bar{x}	SD	
Overall (N=81)	NE	1.54	1.4	1.01	1.35	.000**
	Art	2.11	1.41	1.28	1.6	.000**
	WW	3.74	2.01	3.23	2.21	.036*
	V	3.51	1.93	2.16	1.58	.000**
	SS	2.87	2	2.02	1.66	.000**
	Total	13.79	4.77	9.71	4.36	.000**
High (N=16)	NE	1.37	1.14	1.06	.77	.055
	Art	1.81	1.32	1.12	.95	.052
	WW	3	2.06	2.62	1.7	.164
	V	2.87	2.18	1.56	1.03	.05*
	SS	2.68	1.25	2.25	1.34	.069
	Total	11.56	4.81	7.62	2.77	.001**
Moderate	NE	1.65	1.38	1.34	1.54	.026*
	Art	2.39	1.18	1.78	1.87	.013*
	WW	4.17	1.3	3.51	1.66	.047*

Levels of proficiency	Error types	Pre-test		Post-test		Sig. (2 tailed)
		\bar{x}	SD	\bar{x}	SD	
(N= 41)	V	3.19	1.1	2.53	1.53	.041*
	SS	2.53	1.97	1.85	1.62	.049*
	Total	13.95	2.65	11.02	3.85	.000**
Low (N=24)	NE	1.87	1.39	.87	1.19	.002**
	Art	2.08	1.55	1.04	1.19	.000**
	WW	4.7	2.19	4.04	2.09	.130
	V	5.2	2.12	2.2	1.74	.000**
	SS	3.37	1.99	2.37	1.95	.024*
	Total	17.25	4.45	10.91	3.77	.000**

*P<.05, ** P< .01

Overall, the results from the analysis of the Paired Samples Test for comparing the students' error rates found in pre-and post-tests showed a significant improvement ($p < .01$) in all error categories, except for the wrong word category which had a significance value at .036. For high performers, overall the mean values of error rates found were significantly different at the .001 level indicating that the students had a significant improvement on grammatical accuracy. For the students in the moderate group, the overall error rates were reduced significantly at .000 level. It was also found that article errors were reduced the most, followed by noun ending, verb, wrong word and sentence structure, respectively. With the low proficiency group, the overall error rates were reduced significantly at the .000 level showing a significant improvement of grammatical accuracy. It was also found that errors in noun ending, article, verb, and sentence structure were reduced significantly at the .002, .000, .000, and .024, but there was no significant difference of the mean values of wrong word errors between the pre-and post-tests.

In conclusion, a significant difference between error rates in the pre-and post-tests was found in noun ending, article, verb, and sentence structure ($p < .01$), while only wrong word errors had a significant value at .036 level ($p < .05$). However, it was

found that overall the error rates found between the pre-and post-tests were reduced significantly in all categories, indicating that the students' grammatical accuracy improved.

4.2.1.3 The students' writing fluency

In analyzing the improvement of the students' writing fluency, word count was used as the measure. Paired Samples Test was used to analyze the increase of the students' writing fluency when comparing the pre-and post-tests. Table 4.3 presents the results of the analysis of Paired Samples Test.

Table 4.3 Analysis of Paired Samples Test of the students' writing fluency between the pre-and post-tests

Levels of proficiency	Pre-test scores		Post-test scores		Sig. (2-tailed)
	\bar{x}	SD	\bar{x}	SD	
Overall	179.83	57.61	198.80	52.15	.001**
High	226.56	47.71	236.37	40.83	.390
Moderate	186.43	55.02	204	49.33	.052
Low	137.41	36.37	164	42.86	.005**

*P<.05, ** P< .01

Table 4.3 shows a significant overall improvement in writing fluency at the .001 level ($p < .01$) and a significant improvement in the low group at the .005 level. There were no significant differences in writing fluency over the semester in the high and moderate groups. However, the mean values of word count in the post-test of the high and moderate performers ($\bar{x} = 226.56$ and 186.43) were higher than those of the pre-test ($\bar{x} = 236.37$ and 204).

4.2.1.4 A summary of the overall students writing improvement

The analysis of Paired Samples Test of the students' **writing quality** scores obtained when comparing the pre- and post-tests showed that on average, there was a significant improvement at the .000 level. In terms of **grammatical accuracy**, it was revealed that overall the error rates were reduced significantly at the .000 level ($p < .01$) indicating the improvement of grammatical accuracy over the 16-week period. However, among all five error categories, there was a significant value at the .000 level ($p < .01$) in noun ending, article, verb, and sentence structure, but at the .036 level ($p < .05$) in wrong word errors. Finally, regarding the results of the analysis of **writing fluency**, it was found that overall, the students wrote longer texts in the post-test at the end of the semester, with a significant difference at the .001 level ($p < .01$).

4.2.2 The improvement among the nine writing assignments

A comparison of students' Draft 2 and 3 showed the improvement in writing quality, grammatical accuracy, and writing fluency.

4.2.2.1 The students' writing quality

The effects of different types of teacher written feedback on **the students' improvement** of writing quality among the nine writing assignments are presented in Table 4.4.

Table 4.4: The mean score of the students' writing quality from Writing Assignments

1-9

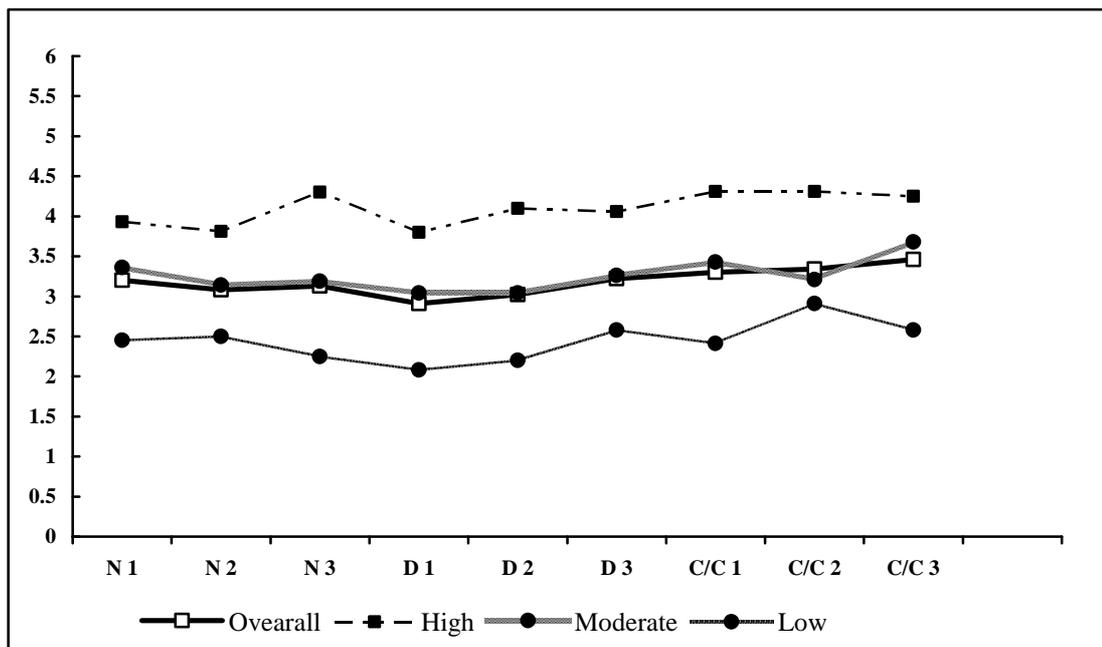
Assignment & Genre	Types of feedback	Students' levels of English proficiency							
		Overall		High		Moderate		Low	
		\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
WA1 Narration 1	CtF&DF	3.2	.78	3.93	.25	3.36	.66	2.45	.58
WA 2 Narration 2	CtF&CF	3.08	.93	3.81	.83	3.14	.82	2.5	.83
WA 3 Narration 3	CtF&UF	3.13	.98	4.3	.70	3.19	.67	2.25	.67
WA 4 Description 1	CtF&DF	2.91	.92	3.8	.75	3.04	.7	2.08	.65
WA 5 Description 2	CtF&CF	3.02	.98	4.1	.98	3.04	.66	2.2	.72
WA 6 Description 3	CtF&UF	3.22	.98	4.06	.85	3.26	.86	2.58	.82
WA 7 Comparison/ Contrast 1	CtF&DF	3.3	.95	4.31	.60	3.43	.67	2.41	.77
WA 8 Comparison/ Contrast 2	CtF&CF	3.34	.85	4.31	1.25	3.21	.52	2.91	.4
WA 9 Comparison/ Contrast 3	CtF&UF	3.46	.94	4.25	.68	3.68	.52	2.58	1.01

WA = Writing Assignment

CtF = Content feedback, DF = Direct feedback, CF = Coded feedback, UF = Uncoded feedback

According to Table 4.4, it was found that there was an increase of the mean score of writing quality of Writing Assignments 1-9. The lowest mean score was found in Description 1 (Writing Assignment 4) with the mean value of 2.91, while the highest was found in Comparison/Contrast 3 (Writing Assignment 9) with the mean score of 3.46. It could be seen that after Narration 1 (Writing Assignment 1), the mean value slightly reduced in Narration 2, Narration 3, Description 1, and Description 2. There was an increase in the mean score from Description 3 to Comparison/ Contrast

3, which were 3.22, 3.3, 3.34, and 3.46, respectively. Figure 4.1 shows a total picture of the students' writing quality scores over all nine writing assignments and different writing quality scores obtained by the students with different levels of English proficiency.



N = Narration, D = Description, C/C = Comparison/Contrast

Figure 4.1 The mean value of the students' writing quality from Writing Assignments 1–9

The figure summarizes the different mean values among the students with different levels of English proficiency. The mean writing quality scores tended to increase even though the later topics (comparison/contrast) for writing were considered more challenging and more difficult to write. The levels of difficulty of different genres was pointed by Weigle (2002) as stating "... discourse mode makes a difference in performance – narrative and description are often seen as cognitively easier and lend themselves to less complex than do exposition..." (p. 100).

In order to see the improvement in different genres, the mean values of writing quality scores of Writing Assignments 1 and 3 of each genre were compared to see the differences between these writings. Table 4.5 presents the analysis of Paired Samples Test of students' writing quality scores of each genre.

Table 4.5 Analysis of Paired Samples Test for students' writing quality scores of each genre

Genres	Writing assignment 1		Writing assignment 3		Sig. (2 -tailed)
	\bar{x}	SD	\bar{x}	SD	
Narration	3.2	.78	3.13	.98	.380
Description	2.91	.92	3.22	.98	.004
Comparison/ Contrast	3.3	.95	3.46	.94	.096

When looking at each genre, it can be seen that there were different results regarding the improvement of writing quality. For Narration, the mean values of Narration 1 and Narration 3 were 3.2 and 3.13, and the significant value was .380, showing no improvement of writing quality in this genre. On the other hand, the comparison of Description 1 ($\bar{x} = 2.91$) and Description 3 ($\bar{x} = 3.22$) showed a significant improvement at the .004 level. Yet, with Comparison/Contrast 1 ($\bar{x} = 3.3$) and Comparison/Contrast 3 ($\bar{x} = 3.46$) compared, there was only a slightly higher mean value for the last writing assignment, and overall there was no significant improvement of writing quality of this genre.

4.2.2.2 The students' grammatical accuracy (five error categories)

The effects of different types of teacher written feedback on **revision** and on **subsequent writing** are presented in this section. The results of the effects on revision were reported based on the comparison of Draft 2 and Draft 3 in all nine writing assignments. To further investigate the differences in the effects of each feedback type, a comparison of errors per 100 words found in the final drafts (Draft 3) was also made here. Further, the results of the effects on subsequent writing were analyzed by comparing Draft 3 and subsequent writing (Draft 1 in the next topic).

4.2.2.2.1 The effects of different types of teacher written feedback on revision

The effects of different types of teacher written feedback on the students' grammatical accuracy in revision are presented in Tables 4.6 – 4.8 . These tables present the results of the analysis of descriptive statistics for the mean values of the five errors categories i.e., noun ending (NE), article (Art), wrong word (WW), verb (V), and sentence structure (SS) errors occurred in all genres Draft 2 and 3 compared and those of the analysis of Paired Samples Test to show the comparison of the mean values of error rates found in all genres when the students received direct, coded, and uncoded feedback. The mean scores of the students' five errors categories after receiving direct feedback is presented in Table 4.6.

Table 4.6 The mean scores of the students' five errors categories after receiving
direct feedback

Assignment	Error types	Draft 2		Draft 3		Sig. (2 tailed)
		\bar{x}	SD	\bar{x}	SD	
Narration1	NE	1	1.15	0	0	.000
	Art	2.03	1.46	0	0	.000
	WW	3.06	1.63	.11	.41	.000
	V	4.41	2.72	.28	.67	.000
	SS	2.28	1.76	.07	.3	.000
	Total	12.78	5.11	.36	.88	.000
Description1	NE	.77	.85	.03	.19	.000
	Art	.91	1.1	.03	.19	.000
	WW	3.4	2	.49	.8	.000
	V	1.7	1.3	.18	.52	.000
	SS	2.98	2	.41	.7	.000
	Total	9.7	4.32	1.17	1.67	.000
Comparison/ Contrast 1	NE	.78	1.01	0	0	.000
	Art	.86	1.04	.01	.11	.000
	WW	3.23	2.22	.36	.61	.000
	V	2.6	1.68	.19	.47	.000
	SS	2.3	1.53	.19	.45	.000
	Total	9.77	3.57	.74	1.04	.000

The result from the analysis of descriptive statistics showed that in Draft 2 of Narration 1, the errors mostly occurred in verb ($\bar{x} = 4.41$), followed by wrong word and sentence structure errors ($\bar{x} = 3.06$ and 2.28). In writing Draft 2 of Description 1, the students mostly committed the errors in wrong word ($\bar{x} = 3.4$), followed by sentence structure and verb errors, respectively ($\bar{x} = 2.98$ and 1.7). Also Draft 2 of Comparison/Contrast, wrong word errors appeared most frequently ($\bar{x} = 3.23$), followed by verb, and sentence structure errors ($\bar{x} = 2.6$ and 2.3). After receiving direct feedback on writing Draft 3 of Narration 1, the students could correct all their errors in noun ending and article ($\bar{x} = 0$), but there were some verb, wrong word, and sentence structure errors found in this draft ($\bar{x} = .67$, $.41$, and $.3$, respectively). Also,

the result from the analysis of Paired Samples Test when receiving direct feedback showed that there was a significant reduction of error rates between Draft 2 and Draft 3 in all errors types and all genres at the .000 level ($p < .01$). Similar results were found in coded feedback as shown in Table 4.7.

Table 4.7: The mean score of the students' five errors categories after receiving coded feedback

Assignment	Error types	Draft 2		Draft 3		Sig. (2 tailed)
		\bar{x}	SD	\bar{x}	SD	
Narration2	NE	.54	.93	.07	.34	.000
	Art	2.02	1.9	.33	.65	.000
	WW	6.25	2.96	3.96	2.59	.000
	V	4.16	2.73	2.2	2.13	.000
	SS	4.95	3.09	3.03	2.73	.000
	Total	17.23	8.34	9.46	6.62	.000
Description2	NE	.79	1.2	.14	.42	.000
	Art	1.16	1.43	.39	.68	.000
	WW	3.07	2.52	1.79	2.01	.000
	V	2.27	1.63	1.22	1.36	.000
	SS	2.28	2.03	1.3	1.55	.000
	Total	9.43	5.97	4.76	4.43	.000
Comparison/ Contrast 2	NE	.6	.83	.05	.21	.000
	Art	.21	.49	.01	.11	.000
	WW	4.25	2.25	3.17	1.98	.000
	V	2.88	2.24	1.83	2.03	.000
	SS	3.14	2.01	2.07	1.74	.000
	Total	10.63	4.45	7.02	3.9	.000

The result from the analysis of descriptive statistics showed that in Draft 2 of Narration 2, the errors occurred most frequently in wrong word ($\bar{x} = 6.25$), followed by sentence structure and verb errors ($\bar{x} = 4.95$ and 4.16). In writing Draft 2 of Description 2, the students committed the errors in wrong word most frequently ($\bar{x} = 3.07$), followed by sentence structure and verb errors ($\bar{x} = 2.28$ and 2.27). Also in Draft 2 of Comparison/Contrast 2, wrong word errors appeared most frequently

($\bar{x} = 4.25$), followed by sentence structure and verb errors ($\bar{x} = 3.14$ and 2.88). In analyzing Draft 3 of Narration 2, errors in wrong word still appeared most frequently ($\bar{x} = 3.96$), followed by sentence structure and verb errors ($\bar{x} = 3.03$ and 2.2), while noun ending errors appeared the least. This was similar to errors occurred in Description 2 ($\bar{x} = 1.79$) and Comparison/Contrast 2 ($\bar{x} = 3.17$) in which wrong word errors were found most frequently, followed by sentence structure and verb errors, respectively. Noun ending errors appeared the least in Description 2 ($\bar{x} = .14$), and article errors in Comparison/Contrast 2 ($\bar{x} = .01$). The results of the analysis of Paired Samples Test when receiving uncoded feedback showed that overall there was a significant reduction in all error types and all genres between Draft 2 and 3 at the .000 level ($p < .01$).

Finally, Table 4.8 presents the mean scores of the students' five errors categories after receiving uncoded feedback, which gave a similar picture to the first two feedback types.

Table 4.8 The mean score of the students' five errors categories after receiving
uncoded feedback

Assignment	Error types	Draft 2		Draft 3		Sig. (2 tailed)
		\bar{x}	SD	\bar{x}	SD	
Narration3	NE	1.06	1.08	.29	.84	.000
	Art	1.33	1.27	.34	.88	.000
	WW	3.39	2.27	2.25	2.01	.000
	V	2.95	2.22	1.69	1.91	.000
	SS	2.95	2.81	2.02	2.59	.000
	Total	11.53	6.41	5.96	4.9	.000

Assignment	Error types	Draft 2		Draft 3		Sig. (2 tailed)
		\bar{x}	SD	\bar{x}	SD	
Description3	NE	1.25	1.24	.28	.57	.000
	Art	1.32	1.31	.58	.89	.000
	WW	5.38	2.66	3.91	2.37	.000
	V	2.9	2.22	1.62	1.74	.000
	SS	3.6	2.23	2.33	2.16	.000
	Total	14.19	6.34	8.67	5.61	.000
Comparison/ Contrast 3	NE	.33	.57	.04	.19	.000
	Art	.20	.45	.01	.11	.000
	WW	3.68	1.75	2.26	1.49	.000
	V	2.19	1.53	1.09	1.16	.000
	SS	2.77	2.16	1.63	1.67	.000
	Total	8.89	3.5	7.25	2.29	.000

According to Table 4.8, an analysis of descriptive statistics showed that in Draft 2 of Narration 3, the errors occurred most frequently in wrong word ($\bar{x} = 3.39$) followed by verb and sentence structure errors, respectively which, had an equal mean value (2.95). In Draft 2 of Description 2, the errors in wrong word appeared most frequently ($\bar{x} = 5.38$), followed by sentence structure and verb errors ($\bar{x} = 3.6$ and 2.9). In Draft 2 of Comparison/Contrast 2, wrong word errors occurred most frequently ($\bar{x} = 3.68$), followed by sentence structure and verb errors ($\bar{x} = 2.77$ and 2.19). It was also revealed that, noun ending errors appeared the least in Narration 3 and Description 3 ($\bar{x} = 1.06$ and 1.25). After receiving uncoded feedback, that is in Draft 3, the students committed the errors in wrong word most frequently ($\bar{x} = 2.25$), followed by sentence structure (2.33) and verb (1.62), respectively in Narration 3. Similar to errors found in Description 3, wrong word errors were made most frequently ($\bar{x} = 3.91$), followed by sentence structure and verb errors, respectively ($\bar{x} = 2.33$ and 1.62), while noun ending errors appeared the least in Narration 3 and Description 3. In Comparison/Contrast 3, wrong word errors were found most often ($\bar{x} = 2.26$), followed by sentence structure and verb errors, respectively ($\bar{x} = 1.63$ and

1.09), while article errors appeared the least ($\bar{x} = .01$). According to the analysis of Paired Samples Test for uncoded feedback, there was a significant reduction of error rates between Draft 2 and Draft 3 in all errors types and all genres ($p < .01$).

4.2.2.2.2 The effects of different types of teacher written

feedback on revision: a comparison of errors per 100

words found in the final draft (Draft 3) of three genres

This section reports the results of the comparison of the students' writing error rates found in Draft 3 of Narration, Description, and Comparison/Contrast after the three feedback types. In order to see the difference of the effects of each feedback type on grammatical accuracy, three mean values of the students' writing errors per 100 words found among Draft 3 of all genres were compared and then analyzed by using **Univariate Analysis of Variance** (for the output report from SPSS 13.0, see Appendices I, J, and K).

1. The students' writing errors found in Draft 3 of Narration

Tables 4.9 – 4.11 present the result of the comparison of errors per 100 words found in Draft 3 of Narration after each feedback type.

Table 4.9: The results of **Univariate Analysis of Variance** comparing errors rates found in **Narration** after direct, coded, and uncoded feedback

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1221.473	2	610.737	75.679	.000
Intercept	2104.268	1	2104.268	260.749	.000
Trt	1221.473	2	610.737	75.679	.000

According to Table 4.9, it was found in Narration that there was a significant difference among three mean values of errors per 100 words found in the students' Draft 3 after direct, coded, and uncoded feedback at the .000 level. This indicated that there was a significant difference among the effects of different feedback types on the students' revision. An analysis of **Post Hoc Tests** comparing the mean values of errors per 100 words found after each feedback type showed the differences in each effect of each feedback type in Table 4.10.

Table 4.10: The results of the analysis of **Post Hoc Tests** comparing error rates per 100 words found in revision after three feedback types in **Narration**

<i>Scheffe</i>				
Feedback		Mean Difference (feedback 1-3)	Std. Error	Sig.
F1	F2	-5.4888(*)	.44639	.000
	F3	-2.5876(*)	.44639	.000
F2	F1	5.4888(*)	.44639	.000
	F3	2.9012(*)	.44639	.000
F3	F1	2.5876(*)	.44639	.000
	F2	-2.9012(*)	.44639	.000

* The mean difference is significant at the .05 level.

As shown above, the levels of significance of the mean values of errors found in Draft 3 among three feedback types were .000. This indicated that each feedback had a different effect on the number of errors on the students' Draft 3. Table 4.11 shows the differences in the mean values of errors per 100 words after each feedback type.

Table 4.11: The results of **Post Hoc Tests** analyzing the different effects of three feedback types on revision in **Narration**

Homogeneous Subsets

Feedback	N	Total errors per 100 words
Direct	81	.25
Coded	81	2.83
Uncoded	81	5.73

From Table 4.11, the remaining errors after direct feedback were the lowest ($\bar{x} = .25$), followed by coded feedback ($\bar{x} = 2.83$), and uncoded feedback ($\bar{x} = 5.73$).

**2. The students' writing errors found in Draft 3 of
Description**

Tables 4.12 – 4.14 present the result of the comparison of errors per 100 words found in Draft 3 of Description after each feedback type.

Table 4.12: The results of **Univariate Analysis of Variance** comparing errors rates found in **Description** after direct, coded, and uncoded feedback

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	288.603	2	144.302	36.322	.000
Intercept	1117.990	1	1117.990	281.407	.000
Trt	288.603	2	144.302	36.322	.000

According to Table 4.12, it was found in **Description** that there was a significant difference among three mean values of errors per 100 words found in the students' Draft 3 after direct, coded, and uncoded feedback at the .000 level. This indicated that there was a significant difference among the effects of different feedback types on the students' revision. An analysis of Post Hoc Tests comparing the

mean values of errors per 100 words found after each feedback type showed the differences in the errors of each feedback type in Table 4.13.

Table 4.13: The results of the analysis of **Post Hoc Tests** comparing error rates per 100 words found in revision after three feedback types in **Description**

Scheffe

Feedback		Mean Difference (feedback 1-3)	Std. Error	Sig.
F1	F2	-1.8764(*)	.31320	.000
	F3	-2.5825(*)	.31320	.000
F2	F1	1.8764(*)	.31320	.000
	F3	-.7061	.31320	.081
F3	F1	2.5825(*)	.31320	.000
	F2	.7061	.31320	.081

* The mean difference is significant at the .05 level.

As shown above, the levels of significance of the mean values of errors between direct feedback and coded feedback and between direct feedback and uncoded feedback were at the .000 level. This indicated that direct feedback had a significantly different effect from coded and uncoded feedback on the number of error rates in the students' Draft 3. However, it was found that there was no significant difference of the mean values of errors between coded and uncoded feedback with the difference being at .081 level. Table 4.14 shows the differences in the mean values of errors per 100 words after each feedback type.

Table 4.14: The results of the analysis of **Post Hoc Tests** comparing the scores of three feedback types on revision in **Description**

Homogeneous Subsets

Feedback	N	Total errors per100 words
Direct	81	.65
Coded	81	2.53
Uncoded	81	3.24

From Table 4.14, the remaining errors after direct feedback were the lowest ($\bar{x} = .65$), followed by coded feedback ($\bar{x} = 2.53$), and uncoded feedback ($\bar{x} = 3.24$).

3. The students' writing errors found in Draft 3 of Comparison/Contrast

Tables 4.15–4.17 present the results of the comparison of errors per 100 words found in Draft 3 of Comparison/Contrast after each feedback type.

Table 4.15 The results of **Univariate Analysis of Variance** comparing errors rates found in **Comparison/Contrast** after direct, coded, and uncoded feedback

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	469.044	2	234.522	84.066	.000
Intercept	1267.465	1	1267.465	454.328	.000
Trt	469.044	2	234.522	84.066	.000

According to Table 4.15, there was a significant difference among three mean values of errors per 100 words found in the students' Draft 3 of Comparison/Contrast

after direct, coded, and uncoded feedback at the .000 level. This indicated that there was a significant difference among the effects of different feedback types on the students' revision. An analysis of Post Hoc Tests comparing the mean values of errors per 100 words found after each feedback type showed the differences in the errors of each feedback type in Table 4.13.

Table 4.16 The results of the analysis of **Post Hoc Tests** comparing error rates per 100 words found in revision after three feedback types in **Comparison/Contrast**

Scheffe

Feedback		Mean Difference (feedback 1-3)	Std. Error	Sig.
F1	F2	-3.3443(*)	.26246	.000
	F3	-2.2179(*)	.26246	.000
F2	F1	3.3443(*)	.26246	.000
	F3	1.1264(*)	.26246	.000
F3	F1	2.2179(*)	.26246	.000
	F2	-1.1264(*)	.26246	.000

* The mean difference is significant at the .05 level.

As shown above, the levels of significance of the mean values of errors found in Draft 3 among three feedback types were at the .000 level. This indicated that each feedback had a different effect on the number of errors on the students' Draft 3. Table 4.17 shows the differences in the mean values of errors per 100 words after each feedback type.

Table 4.17 The results of the analysis of **Post Hoc Tests** comparing the scores of three feedback types on revision in **Comparison/Contrast**

Homogeneous Subsets

Feedback	N	Total errors per 100 words
Direct	81	.42
Coded	81	2.64
Uncoded	81	3.77

From Table 4.14, the remaining errors after direct feedback were the lowest ($\bar{x} = .42$), followed by coded feedback ($\bar{x} = 2.64$), and uncoded feedback ($\bar{x} = 3.77$).

4. A summary of the comparison of errors per 100 words found among Draft 3 of three genres

The comparison of the students' writing error rates in Draft 3 after the three feedback types revealed similar results in **Narration, Description, and Comparison/Contrast**. There was a significant difference among three mean values of errors per 100 words found in Draft 3 after direct, coded, and uncoded feedback, except for the mean values between coded and uncoded in **Description** which was nonsignificant. The analysis of **Post Hoc Tests** comparing different effects of three feedback types on the number of errors per 100 words in revision showed the least remaining errors after direct feedback, followed by coded, and uncoded feedback.

4.2.2.2.3 The effects of different types of teacher written feedback on subsequent writing

One of the purposes of the present study was to present the error rates found in the students' subsequent writing as the best measure of what students learned from various teacher responses. This can be seen in their ability to

write different texts more correctly (Chandler, 2003). This analysis was done by comparing the students' error rate of Draft 1 and the same students' error rates occurred in Draft 1 of subsequent writing assignments after each feedback type. An analysis of descriptive statistics was used to show the mean value of error rates in each draft among nine writing assignments. Table 4.18 presents the mean values of error rates found in subsequent writing after each feedback type.

Table 4.18 The overall mean errors in subsequent writing

Writing assignments	Subsequent writing after each feedback type	Error rates	
		\bar{x}	SD
Draft 1 of Narration 1	-	12.77	5.11
Draft 1 of Narration 2	after direct feedback	17.23	8.34
Draft 1 of Narration 3	after coded feedback	11.53	6.41
Draft 1 of Description 1	after uncoded feedback	12.70	4.32
Draft 1 of Description 2	after direct feedback	11.43	5.97
Draft 1 of Description 3	after coded feedback	10.19	6.34
Draft 1 of Comparison/ Contrast 1	after uncoded feedback	9.77	3.57
Draft 1 of Comparison/ Contrast 2	after direct feedback	10.63	4.45
Draft 1 of Comparison/ Contrast 3	after coded feedback	8.89	3.50

As can be seen in Table 4.18, overall after the students received direct feedback in Narration 1, their error rates in subsequent writing were 17.23 which were higher than error rates found in Draft 1 of Narration 1. In subsequent writing after receiving coded feedback, the students' error rates tended to drop to 11.53. and then was a little increase at 12.70 in the subsequent writing after uncoded feedback. Then

the students' error rates gradually dropped to 8.89 in the last subsequent writing after receiving coded feedback in Comparison/Contrast 3. In examining a total picture of change in error rates found in subsequent writing, Figure 4.2 illustrates the reduction of error rates in subsequent writing during the experiment.

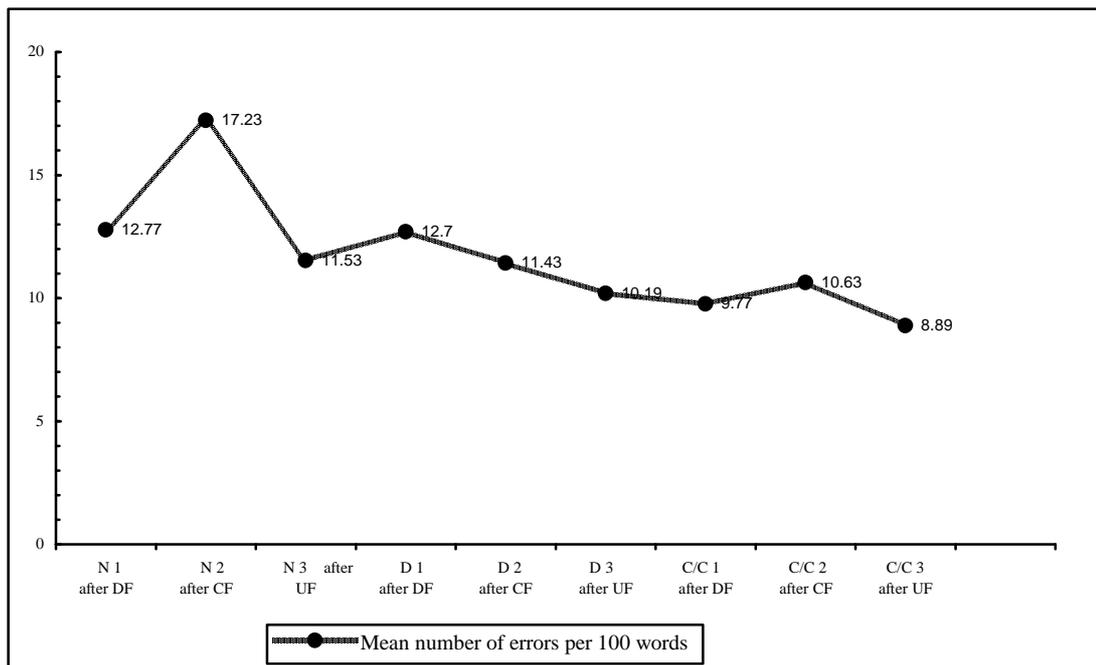


Figure 4.2 The mean number of errors in subsequent writing

Regarding Figure 4.2, the mean values of errors changed from one subsequent writing to the next. Overall, it was found the reduction of error rates from the beginning, with the mean value at 12.77 to the last at 8.89.

4.2.2.3 The results of the comparison between the students' writing fluency of Draft 2 and Draft 3 of all nine writing assignments

In comparing the students' writing fluency between Draft 2 and 3, word count was used to show the length of their writing. Table 4.16 reports the analysis of Paired Samples Test showing the increase of the students' writing fluency.

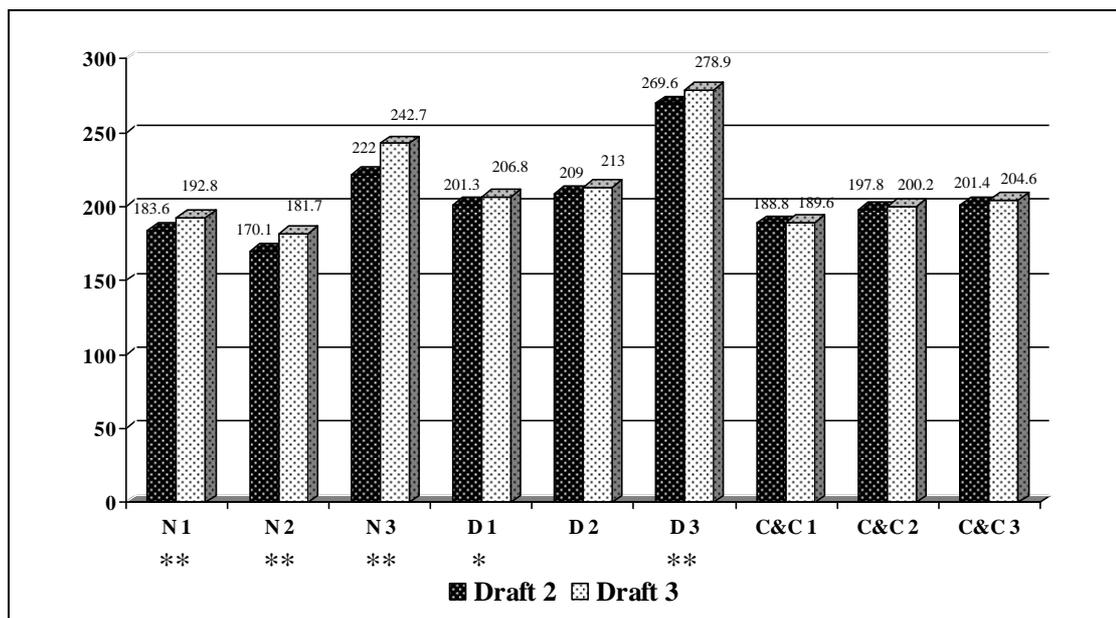
Table 4.19 Analysis of Paired sample test of the students' writing fluency between Draft 2 and Draft 3

Students' Writing Assignment (N = 81)		Types of Feedback	\bar{x}	SD	Sig. (2-tailed)
Narration1	Draft2	DF	183.66	58.73	.003
	Draft3		192.87	60.38	
Narration2	Draft2	CF	170.12	81.56	.002
	Draft3		181.72	75.96	
Narration3	Draft2	UF	222	76	.000
	Draft3		242.74	77.23	
Description1	Draft2	DF	201.34	66.48	.021
	Draft3		206.83	65.41	
Description2	Draft2	CF	209	70.22	.222
	Draft3		213	66.68	
Description3	Draft2	UF	269.6	67.01	.002
	Draft3		278.93	65.3	
Comparison/ Contrast1	Draft2	DF	188.8	65.66	.751
	Draft3		189.69	63.4	
Comparison/ Contrast2	Draft2	CF	197.81	55.23	.282
	Draft3		200.28	54.16	
Comparison/ Contrast3	Draft2	UF	201.41	62.67	.379
	Draft3		204.6	71.01	

A comparison of word count between Draft 2 and Draft 3 in Narration 1 shows that there was a significant difference at .003 level. This also occurred in Narration 2, Narration 3, Description 1, and Description 3. However, there was no statistically

significant difference in the students' writing fluency in Description 2, Comparison/Contrast 1, Comparison/Contrast 2, and Comparison/Contrast 3.

Figure 4.3 demonstrates the comparison between writing fluency between Draft 2 and Draft 3 among the nine writing assignments



* $P < .05$, ** $P < .01$

Figure 4.3 The comparison between writing fluency of draft 2 and draft 3 among the nine writing assignments

According to Figure 4.3, the numbers of words in Draft 3 were always higher than those of Draft 2 in all writing assignments. In other words, the students wrote longer texts in Draft 3 throughout the semester though the increased length was not statistically significant in some assignments.

4.2.3 A summary of the overall students writing improvement comparing Draft 2 and Draft 3 among the nine writing assignments

According to the results of the analysis of Paired Samples Test of the students' **writing quality** scores obtained from nine writing assignments, overall there was an increase in the scores in the last writing assignment. **Grammatical accuracy** in Draft 2 and Draft 3 of all writing assignments compared revealed that overall the error rates were reduced significantly on revision. When comparing the number of errors per 100 words among Draft 3 of all genres after direct, coded, and uncoded feedback, it was found that errors reduced the most on revision when the students received direct feedback followed by coded and uncoded feedback, respectively. In terms of **writing fluency**, Draft 2 and Draft 3 compared in all writing assignments, it was found that overall the students tended to write more on their revision of all nine writing assignments.

4.3 Answers to Research Question 2:

What were the students' revision strategies in utilizing different types of teacher written feedback?

To obtain the quantitative data of revision strategies employed, 81 students were asked to reflect on their experience of how often they employed revision strategies when responding to different types of teacher written feedback. a 4-point Likert Scale Questionnaire asked the respondents to indicate their frequency of each revision strategy employed. The descriptors were assigned values as follows:

3.26 – 4.00 Usually

2.51 – 3.25 Often

1.76 – 2.50 Sometimes

1.00 – 1.75 Rarely

The data gathered was analyzed in terms of descriptive statistics. The results of the analysis were presented. The use of revision strategies when utilizing direct, coded and uncoded feedback was reported in Tables 4.20 – 4.22.

4.3.1 Revision strategies employed when utilizing direct feedback

Table 4.20 shows how the students employed revision strategies when utilizing direct feedback.

Table 4.20 Analysis of descriptive statistics for the students' revision strategy when utilizing **direct** feedback

Item	Revision Strategies	\bar{x}	SD
1.	When I get back the paper with teacher feedback... I leave my writing for a while or for days, then I come back to edit it.	2.45	.742
2.	I only read what I have written when I have finished the whole paper.	2.43	.821
3.	I check my mistakes and try to learn from them.	2.38	.703
4.	I read my text aloud	2.35	.812
5.	I show my text to somebody and ask for his or her opinion.	2.22	.671
6.	I compare my writing with the paper written by my friends in the same topic.	2.14	.976
7.	I ask someone for help.	1.73	.635
8.	I check in my notebook.	1.67	.610
9.	When I have written the paper, I hand it in without reading it.	1.64	.830
10.	I restructure sentences.	1.61	.775

Item	Revision Strategies	\bar{x}	SD
11.	I delete the sentence.	1.56	2.36
12.	I check in textbooks.	1.56	.806
13.	I make changes in verbs by myself.	1.48	.754
14.	I make changes in articles by myself.	1.45	.775
15.	I make changes in noun endings by myself.	1.44	.869
16.	When my teacher did not mark any error, I make changes in word uses by myself.	1.42	.825
17.	When my teacher did not mark any error, I make changes in sentence structures by myself.	1.42	.732
18.	I use Thai translation.	1.38	.789
19.	I can remember my mistakes and avoid doing it in my subsequent writing.	1.34	.758
20.	I use Thai-English dictionary when correcting.	1.33	.766
21.	I make no attempt.	1.31	.734
22.	I use English-English dictionary when correcting.	1.29	.758
23.	I ask my teacher.	1.26	.912
24.	I ask someone for help.	1.23	.672
25.	I guess that it sounds right.	1.15	.691
26.	I apply my grammatical knowledge.	1.12	.654

From the above table, two levels of use of the revision strategies when utilizing direct feedback “**sometimes**” (1.76 – 2.50) and “**rarely**” (1.00 – 1.50) were found. For Statements 1-6, it was found that the mean scores were 2.14 – 2.45, indicating that the students **sometimes** employed these strategies when utilizing **direct** feedback. The mean scores of Statements 7 – 26 were between 1.12 – 1.73,

further indicating that the students **rarely** employed these strategies when utilizing **direct** feedback.

4.3.2 Revision strategies employed when utilizing coded feedback

Table 4.21 presented the mean value of the extent to which the students employed each strategy when utilizing **coded feedback**.

Table 4.21 Analysis of descriptive statistics for the students' revision strategies in utilizing **coded feedback**

Item	Error Correction Strategies	\bar{x}	SD
1	I leave my writing for a while or for days, then I come back to edit it.	3.55	.775
2	I use English-Thai dictionary when correcting.	3.52	.741
3	I apply my grammatical knowledge	3.50	.749
4	I guess that it sounds right.	3.42	.939
5	I check in textbooks.	3.23	.633
6	I check in my notebook.	3.16	.742
7	I restructure sentences.	3.11	.709
8	I use Thai-English dictionary when correcting.	3.11	.633
9	I compare my writing with the paper written by my friends in the same topic.	3.07	.705
10	I make changes in sentence structures by myself.	3.04	.832
11	I show my text to somebody and ask for his or her opinion.	3.01	.940
12	I use English-English dictionary when correcting.	2.9	.810
13	I delete the sentence.	2.71	.847
14	I use Thai translation.	2.63	.797
15	I can remember my mistakes and avoid doing it in my subsequent writing.	2.59	.823

Item	Error Correction Strategies	\bar{x}	SD
16	I check my mistakes and try to learn from them.	2.57	.615
17	I ask someone for help.	2.53	.703
18	When my teacher did not mark any error, I make changes in word uses by myself.	2.43	.797
19	I only read what I have written when I have finished the whole paper.	2.23	.780
20	I make changes in articles by myself.	2.11	.850
21	I ask my teacher.	2.05	.836
22	I read my text aloud.	1.98	.836
23	I make changes in noun endings by myself.	1.72	.755
24	I make changes in verbs by myself.	1.65	.699
25	When I have written paper, I hand it in without reading it.	1.41	.644
26	I make no attempt.	1.32	.701

According to Table 4.21, overall, the students reported they “**usually**” employed four strategies, which were **Item 1**, “I leave my writing for a while or for days, then I come back to edit it” with a mean rating of 3.55, followed by **Item 2** (\bar{x} = 3.52), “I use English - Thai dictionary when correcting”, **Item 3** (\bar{x} = 3.50), “I apply my grammatical knowledge”, and statement 4 (\bar{x} = 3.42), “I guess that it sounds right”. In utilizing coded feedback, the students “**often**” employed 13 strategies which were items 5 – 17. Items 18 – 22 indicated the mean rating between 1.98 – 2.43 showing that the students “**sometimes**” used these strategies. For Statements 23 and 26, the mean answers were 1.32 – 1.72, further indicating that the students “**rarely**” employed these strategies.

4.3.3 Revision strategies employed when utilizing uncoded feedback

Table 4.22 presented the mean valued of the extent to which the students employed each strategy when utilizing **uncoded feedback**.

Table 4.22 Analysis of descriptive statistics for the students' revision strategy in utilizing **uncoded feedback**

Item	Revision Strategies	\bar{x}	SD
1.	I use English-Thai dictionary when correcting.	3.62	.758
2.	I leave my writing for a while or for days, then I come back to edit it.	3.58	.773
3.	I use Thai English dictionary when correcting.	3.54	.838
4.	I apply my grammatical knowledge.	3.51	.739
5.	I use Thai translation.	3.51	.757
6.	I guess that it sounds right.	3.50	.851
7.	I only read what I have written when I have finished the whole paper.	3.43	.614
8.	I check in textbooks.	3.33	.791
9.	I compare my writing with the paper written by my friends in the same topic.	3.11	.878
10.	I check my mistakes and try to learn from them.	3.07	.687
11.	I can remember my mistakes and avoid doing it in my subsequent writing.	3.02	.630
12.	I use English-English dictionary when correcting.	2.96	.933
13.	I show my text to somebody and ask for his or her opinion.	2.73	.697
14.	I ask some one for help.	2.64	.905
15.	I check in my notebook.	2.58	.803
16.	I ask someone for help	2.53	.877

Item	Revision Strategies	\bar{x}	SD
17.	I ask my teacher.	2.34	.749
18.	I delete the sentence.	2.16	.766
19.	When my teacher did not mark any error, I make changes in noun endings by myself.	2.11	.806
20.	When my teacher did not mark any error, I make changes in articles by myself.	2.10	.752
21.	When my teacher did not mark any error, I make changes in verbs by myself.	2.04	.732
22.	When I get back the paper with teacher feedback, I read my text aloud.	1.99	.873
23.	When my teacher did not mark any error, I make changes in sentence structures by myself.	1.93	.755
24.	When my teacher did not mark any error, I make changes in word uses by myself.	1.86	.771
25.	When I have written paper, I hand it in without reading it.	1.43	.771
26.	I make no attempt.	1.32	.713

As can be seen in Table 4.22, with regard to specific revision strategies, overall it was found that the students **usually** employed 8 strategies which were statements 1 – 8 with the mean ratings between 3.33 – 3.62. From the table shown, the students mostly employed **Item 1**, “I use English-Thai dictionary when correcting” with a mean rating of 3.62. For the Statements 9 – 16 with the ratings between 2.53 – 3.11 indicated that the students **often** employed these strategies. The Statements 17 – 24 with the mean ratings between 1.86 – 2.34 showed that they **sometimes** used these strategies. Statements 25 and 26 with the mean ratings of 1.43 and 1.32 indicated that the students “**rarely**” employed these strategies when utilizing uncoded feedback.

4.3.4 A summary of the revision strategies employed when utilizing direct, coded, and uncoded feedback

This section reveals the results of descriptive statistics of the students' revision strategies when utilizing direct, coded, and uncoded feedback. These strategies were categorized based on the levels of the frequency of use of each revision strategy ranged from *usually*, *often*, *sometimes*, and *rarely*. Tables 4.23 – 4.26 summarize the results of revision strategies.

Table 4.23 The revision strategies the students *usually* employed

Direct feedback	Coded feedback	Uncoded feedback
Not found	<ol style="list-style-type: none"> 1. I leave my writing for a while or for days, then I come back to edit it. 2. I use English-Thai dictionary when correcting. 3. I apply my grammatical knowledge. 4. I guess that it sounds right. 	<ol style="list-style-type: none"> 1. I use English-Thai dictionary when correcting. 2. I leave my writing for a while or for days, then I come back to edit it. 3. I use Thai-English dictionary when correcting. 4. I apply my grammatical knowledge. 5. I use Thai translation. 6. I guess that it sounds right. 7. I only read what I have written when I have finished the whole paper. 8. I check in textbooks.

Table 4.24 The revision strategies the students *often* employed

Direct feedback	Coded feedback	Uncoded feedback
	<ol style="list-style-type: none"> 1. I check in textbooks. 2. I check in my notebook. 3. I restructure sentences. 4. I use Thai-English dictionary when correcting. 	<ol style="list-style-type: none"> 1. I compare my writing with the paper written by my friends in the same topic. 2. I check my mistakes and try to learn from them.

Direct feedback	Coded feedback	Uncoded feedback
Not found	5. I compare my writing with the paper written by my friends in the same topic. 6. I make changes in sentence structures by myself. 7. I show my text to somebody, and ask for his or her opinion. 8. I use English-English dictionary when correcting. 9. I delete the sentence. 10. I use Thai translation. 11. I can remember my mistakes and avoid doing it in my subsequent writing. 12. I check my mistakes and try to learn from them. 13. I ask someone for help.	3. I can remember my mistakes and avoid doing it in my subsequent writing. 4. I use English-English dictionary when correcting. 5. I show my text to somebody and ask for his or her opinion. 6. I ask someone for help. 7. I check in my note book. 8. I ask someone for help

Table 4.25 The revision strategies the students *sometimes* employed.

Direct feedback	Coded feedback	Uncoded feedback
1. I leave my writing for a while or for days, then I come back to edit it. 2. I only read what I have written when I have finished the whole paper. 3. I check my mistakes and try to learn from them. 4. I read my text aloud. 5. I show my text to somebody and ask for his or her opinion. 6. I compare my writing with the paper written by my friends in the same topic.	1. When my teacher did not mark any error, I make changes in word uses by myself. 2. I only read what I have written when I have finished the whole paper. 3. I make changes in articles by myself. 4. I ask my teacher. 5. I read my text aloud.	1. I ask my teacher. 2. I delete the sentence. 3. When my teacher did not mark any error, I make changes in noun endings by myself. 4. When my teacher did not mark any error, I make changes in articles by myself. 5. When my teacher did not mark any error, I make changes in verbs by myself. 6. I read my text aloud. 7. When my teacher did not mark any error, I make changes in sentence structures by myself.

Direct feedback	Coded feedback	Uncoded feedback
		8. When my teacher did not mark any error, I make changes in word uses by myself.

Table 4.26 The revision strategies the students *rarely* employed

Direct feedback	Coded feedback	Uncoded feedback
1. I ask someone for help.	1. I make changes in noun endings by myself.	1. When I have written paper, I hand it in without reading it
2. I check in my notebook.	2. I make changes in verbs by myself.	2. I make no attempt.
3. When I have written the paper, I hand it in without reading it.	3. When I have written paper, I hand it in without reading it.	
4. I restructure sentences.	4. I make no attempt.	
5. I delete the sentence.		
6. I check in textbooks.		
7. When my teacher did not mark any error, I make changes in verbs by myself.		
8. When my teacher did not mark any error, I make changes in articles by myself.		
9. When my teacher did not mark any error, I make changes in noun endings by myself.		
10. When my teacher did not mark any error, I make changes in word uses by myself.		
11. When my teacher did not mark any error, I make changes in sentence structures by myself.		
12. I use Thai translation.		
13. I can remember my mistakes and avoid doing it in my subsequent writing.		
14. I use Thai-English dictionary when correcting.		

Direct feedback	Coded feedback	Uncoded feedback
15. I make no attempt.		
16. I use English-English dictionary when correcting.		
17. I ask my teacher.		
18. I ask some one for help.		
19. I guess that it sounds right.		
20. I apply my grammatical knowledge.		

As can be seen in Tables 4.23 - 4.26, it was apparent that the students employed fewer revision strategies when utilizing direct feedback. On a contrary, they employed many more revision strategies when responding to coded and uncoded feedback for their revision.

4.4 Answers to Research Question 3:

What were the students' perspectives: their attitude towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback?

To investigate the students' attitudes towards different types of teacher written feedback, a 13 – item questionnaire was used. This questionnaire was focused on two main areas: 1) the students' attitudes towards their writing assignments and 2) their attitudes towards, comprehension of, attention to, and problems regarding teacher feedback. Responses from three groups of students with different English proficiency levels namely, high, moderate, and low, were collected. With regards to specific types of teacher written feedback, their attitudes towards feedback were described using descriptive statistics. Tables 4.27 – 4.36 present the findings.

Question 1 (Items 1.1–1.4) When you read each feedback, to what extent did you **understand** it?

The descriptors were assigned values as follows.

3.26 – 4.00 = Mostly

2.51 – 3.25 = Much

1.76 – 2.50 = Moderately

1.00 – 1.75 = Barely

Table 4.27 The students' understanding of different types of teacher feedback

Types of feedback	Overall		High		Moderate		Low	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Content	3.52	.65	3.61	.58	3.52	.54	3.43	.61
Direct	3.43	.54	3.78	.42	3.34	.48	3.17	.63
Coded	3.25	.66	3.52	.66	3.17	.66	3.11	.60
Uncoded	2.56	.68	2.82	.65	2.56	.67	2.23	.66

With regards to the extent that the students understood each feedback type, overall it was found that they **mostly** understood content feedback with the mean rating of 3.52. The students in high, moderate, and low groups **mostly** understood the feedback ($\bar{x} = 3.61, 3.52,$ and $3.43,$ respectively). For direct feedback, overall it was found that the students **mostly** understood it ($\bar{x} = 3.43$). For coded feedback, overall it was found that the students **mostly** understood it ($\bar{x} = 3.25$). The students in high group **mostly** understood with the mean rating of 3.52, while those in the moderate and low groups **much** understood this feedback type with the mean ratings of 3.17 and 3.11, respectively. For uncoded feedback, overall the student **much** understood it ($\bar{x} = 2.56$). Those in the high and moderate groups **much** understood with the mean ratings of 2.82 and 2.56, respectively, whereas the low group **moderately** understood this feedback ($\bar{x} = 2.23$).

Question 2 (Items 2.1-2.4) When you read each of the following feedback, to what extent were you **satisfied** with how the feedback was given?

The descriptors were assigned values as follows.

3.26 – 4.00 = Very satisfied

2.51 – 3.25 = Satisfied

1.76 – 2.50 = Rather satisfied

1.00 – 1.75 = Not very satisfied

Table 4.28 The students' satisfaction of teacher feedback

Types of feedback	Overall		High		Moderate		Low	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Content	3.57	.57	3.63	.52	3.51	.62	3.57	.54
Direct	3.74	.49	3.78	.42	3.73	.54	3.7	.46
Coded	3.27	.61	3.6	.58	3.14	.52	3.11	.69
Uncoded	2.93	.78	3.08	.84	2.92	.78	2.76	.66

From Table 4.28, with regards to the levels of the students' satisfaction of each feedback type, it was found in content feedback that overall the students were **very satisfied** with this feedback type, with the mean rating of 3.57. The high, moderate, and low proficiency groups all agreed that they were **very satisfied** with this feedback, with the mean ratings of 3.63, 3.51, and 3.57, respectively. For direct feedback, it was found that overall the students were **very satisfied** with it, with the mean rating of 3.74. The students in the high, moderate, and low groups were **very satisfied** with it, with the mean ratings of 3.78, 3.73, and 3.7, respectively. For coded feedback, overall the students felt **very satisfied** with the mean rating of 3.27. Only those in the high group felt **very satisfied** with this feedback ($\bar{x} = 3.6$), while the students in the moderate and low groups were **satisfied** with it, with the mean ratings

of 3.14 and 3.11, respectively. Finally, in utilizing uncoded feedback, overall the students were **satisfied** with it, with the mean rating of 2.93. Similarly, the students in all proficiency levels were **satisfied** with this feedback type.

Question 3 (Item 3) After completing writing assignment for a period of time, how did you **feel** about writing in English?

3.26 – 4.00 = Very much better

2.51 – 3.49 = Much better

1.76 – 2.50 = Moderately better

1.00 – 1.75 = A little better

Table 4.29 The students' perception of writing in English

Levels of Students' English Proficiency	\bar{x}	SD
Overall	2.85	.63
High	3.08	.59
Moderate	2.85	.52
Low	2.52	.79

According to Table 4.29, after completing all of their writing assignments during the 16-week period, overall the students reported that their writing was **much better** ($\bar{x} = 2.85$). The students in all groups felt that their writing was **much better** with the mean ratings of 3.08, 2.85, and 2.52, respectively.

Question 4 (Item 4) When you received your homework assignments back, how often did you **think** about the feedback **carefully**?

3.26 – 4.00 = Usually

2.51 – 3.25 = Often

1.76 – 2.50 = Sometimes

1.00 – 1.75 = Rarely

Table 4.30 The students' careful thought about teacher feedback

Levels of Students' English Proficiency	\bar{x}	SD
Overall	2.85	.63
High	3.08	.59
Moderate	2.85	.52
Low	2.52	.79

From Table 4.30, overall it was found that the students **often** thought about the feedback carefully when their assignments were returned ($\bar{x} = 2.85$). The students in all proficiency levels indicated that they **often** thought about the feedback carefully, with the mean ratings of 3.08, 2.85, and 2.52, respectively.

Question 5 (Items 5.1 - 5.4) When you read each of the following feedback, how often did you have **problems** understanding it?

3.26 – 4.00 = Usually

2.51 – 3.25 = Often

1.76 – 2.50 = Sometimes

1.00 – 1.75 = Rarely

Table 4.31 The students' problems regarding teacher feedback

Types of feedback	Overall		High		Moderate		Low	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Content	2.05	.64	1.97	.68	2.03	.75	2.15	.73
Direct	2.33	.72	2.17	.77	2.46	.74	2.23	.56
Coded	2.14	.59	2.17	.57	2.12	.67	2.17	.39
Uncoded	2.49	.74	2.43	.58	2.53	.77	2.50	.87

As can be seen in Table 4.31, overall the students **sometimes** had problems understanding content feedback with the mean rating of 2.05. This was agreed by all students with mean ratings of 1.97, 2.03, and 2.15 for high, moderate, and low groups, respectively. For direct feedback, overall the students **sometimes** had problems understanding it with the mean rating of 2.33. Among the high, moderate, and low proficiency groups, the mean ratings of 2.17, 2.46, and 2.23, respectively, were reported. Finally, for uncoded feedback, overall the students indicated that they **sometimes** had problems understanding it, with the mean rating of 2.49.

Question 6 (Items 6.1 - 6.4) To what extent did you think that the feedback on each homework assignment is **helpful** for you to write better in subsequent assignments?

3.26 – 4.00 = Very helpful

2.51 – 3.25 = helpful

1.76 – 2.50 = Rather helpful

1.00 – 1.75 = Not very helpful

Table 4.32 The students' perception regarding the helpfulness of teacher feedback

Types of feedback	Overall		High		Moderate		Low	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Content	3.68	.73	3.72	.67	3.68	.74	3.64	.68
Direct	3.58	.63	3.54	.65	3.5	.56	3.7	.70
Coded	3.61	.63	3.68	.49	3.62	.61	3.54	.72
Uncoded	3.6	.74	3.73	.63	3.6	.77	3.51	.79

With regards to the helpfulness of each type of feedback for subsequent assignments, overall the students found content feedback **very helpful** for them to write better ($\bar{x} = 3.68$), with the mean ratings of 3.72, 3.68, and 3.64 among the three groups. Overall they thought that direct feedback was **very helpful** with the mean

rating of 3.58. This was similar among all groups with the mean ratings of 3.54, 3.5, and 3.7, respectively. For coded feedback, overall the students thought that this feedback was **very helpful** for them with the mean rating of 3.61. This was also similar in all levels of English proficiency. The mean ratings of the students in high, moderate, and low proficiency groups were 3.68, 3.63, and 3.54, respectively. A similar result was found in uncoded feedback in which overall the students thought that uncoded feedback was **very helpful** ($\bar{x} = 3.6$). The agreement among the students in high, moderate, and low groups was found with the mean ratings of 3.73, 3.6, and 3.51, respectively.

Question 7 (Item 7) After completing writing assignments for a long period of time, to what extent did you feel more **encouraged** to write in English?

3.26 – 4.00 = Very much

2.51 – 3.25 = Much

1.76 – 2.50 = Moderately

1.00 – 1.75 = Not very much

Table 4.33 The students' perception regarding the encouragement to write in English

Levels of Students' English Proficiency	\bar{x}	SD
Overall	2.96	.55
High	3.00	.67
Moderate	2.97	.47
Low	2.88	.60

Overall it was found that the students felt **much** encouraged to write with the mean rating of 2.96. The students in each proficiency level felt **much** encouraged to write in English with the mean ratings of 3.00, 2.97, and 2.88, respectively.

Question 8 (Item 8). When you received writing assignments back, to what extent did you pay **attention** to the feedback?

3.26 – 4.00 = Very much

2.51 – 3.25 = Much

1.76 – 2.50 = Moderately

1.00 – 1.75 = Not very much

Table 4.34 The students' attention to teacher feedback

Levels of Students' English Proficiency	\bar{x}	SD
Overall	3.39	.58
High	3.43	.66
Moderate	3.43	.50
Low	3.23	.66

Overall the students paid **very much** attention to the feedback with the mean rating of 3.39. This was similar in each level.

Question 9 (Items 9.1 - 9.4) When you read each type of the following feedback, to what extent do you think that the feedback that you received was **clear**?

3.26 – 4.00 = Very clear

2.51 – 3.25 = Clear

1.76 – 2.50 = Rather clear

1.00 – 1.75 = Not very clear

Table 4.35 The students' perceptions regarding the clarity of teacher feedback

Types of feedback	Overall		High		Moderate		Low	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
Content	3.62	.64	3.67	.67	3.65	.73	3.54	.68
Direct	3.7	.55	3.73	.68	3.78	.41	3.52	.62
Coded	3.03	.57	3.13	.54	3	.59	3	.61
Uncoded	2.54	.74	2.65	.57	2.53	.83	2.41	.71

According to Table 4.35, overall the students found content feedback **very clear** ($\bar{x} = 3.62$), with the mean ratings of 3.67, 3.65, and 3.54, respectively. For direct feedback, it was found that overall the students found it **very clear** ($\bar{x} = 3.7$), with the mean ratings of 3.73, 3.78, and 3.52 for each group. For coded feedback, overall the students thought it was **clear** with the mean rating of 3.03 and 3.13, 3, and 3, among the three groups. For uncoded feedback, overall the students thought that the feedback was **clear** ($\bar{x} = 2.54$) for them. The students in the high and moderate groups agreed that it was **clear**, with the mean ratings of 2.65 and 2.53. Different from these two groups, the low proficiency group found uncoded feedback **rather clear** for them ($\bar{x} = 2.41$).

Question 10 (Items 10.1 – 10.4) To what extent did you **like** how the teacher responded to your homework assignments?

3.26 – 4.00 = Very much

2.51 – 3.25 = Much

1.76 – 2.50 = Moderately

1.00 – 1.75 = Not very much

Table 4.36 The students' perceptions regarding the homework assignments

Levels of Students' English Proficiency	\bar{x}	SD
Overall	3.67	.54
High	3.78	.42
Moderate	3.7	.46
Low	3.52	.79

It was found that overall, the students liked the feedback **very much** with the overall mean rating of 3.67 and each group reported similar positive perceptions.

Question 11 (Item 11) When you found a point in the feedback that you did not understand, how often did you **try to understand** it?

3.26 – 4.00 = Usually

2.51 – 3.25 = Often

1.76 – 2.50 = Sometimes

1.00 – 1.75 = Rarely

Table 4.37 The students' attempts to understand teacher feedback

Levels of Students' English Proficiency	\bar{x}	SD
Overall	2.97	.68
High	3.17	.88
Moderate	2.95	.58
Low	2.76	.56

From Table 4.37, overall when the students found a point that they did not understand, they **often** tried to understand it with the mean rating of 2.97. The highest mean rating was found in the high proficiency group ($\bar{x} = 3.17$), followed by the moderate and low groups with the mean ratings of 2.95 and 2.76, respectively.

Question 12 (Item 12) In case that the teacher **does not ask you to revise** your writing, to what extent do you think you **will pay attention** to the teacher feedback?

3.26 – 4.00 = Very much

2.51 – 3.25 = Much

1.76 – 2.50 = Moderately

1.00 – 1.75 = Not very much

Table 4.38 The students' attention to teacher feedback if not being assigned to revise

Levels of Students' English Proficiency	\bar{x}	SD
Overall	2.46	.89
High	2.6	1.03
Moderate	2.39	.73
Low	2.47	1.06

According to Table 4.38, overall the students reported that they would **moderately** pay attention to the teacher feedback when not being asked to revise their writing ($\bar{x} = 2.46$). Those in the high group said they would pay **much** attention to it ($\bar{x} = 2.60$), while those in the moderate and low groups reported they would **moderately** pay attention to it ($\bar{x} = 2.39$ and 2.47).

Question 13 (Item 13). To what extent do you think how the teacher provided feedback was **suitable**?

3.26 – 4.00 = Very suitable

2.51 – 3.25 = Suitable

1.76 – 2.50 = Rather suitable

1.00 – 1.75 = Not very suitable

Table 4.39 The students' perceptions on the suitability of teacher feedback

Levels of Students' English Proficiency	\bar{x}	SD
Overall	3.65	.47
High	3.52	.51
Moderate	3.73	.44
Low	3.64	.49

As shown in Table 4.39, the students found the feedback **very suitable** ($\bar{x} = 3.65$). The similar results were in all groups with the mean ratings of 3.52, 3.73, and 3.64, respectively.

In conclusion, the students had positive attitudes towards different types of teacher written feedback. Firstly, the students' attitudes towards their writing assignments throughout the 16-week semester (Items 3 and 7) were positive; they felt their writing was much better and that these assignments much encouraged them to write in English. Secondly, as for the students' attitudes towards, comprehension of, attention to, and problems regarding teacher feedback used in the present study, it was found that overall they had positive attitudes toward all feedback types. They thought that teacher feedback was comprehensible and that teacher feedback followed by the revising activity encouraged them to rewrite. However, with regards to their problems when utilizing feedback, they all agreed that they sometimes had problems understanding all feedback types.

Chapter IV presents the results of the three research questions regarding the effects of different types of teacher written feedback on the students' writing, and their revision strategies employed when utilizing these feedback. It ends with the results of the students' attitudes towards different types of teacher written feedback. Chapter V describes the qualitative data regarding their responses to different types of teacher written feedback.

CHAPTER 5

QUALITATIVE RESULTS

5.1 Introduction

This chapter presents the qualitative results of semi-structure interviews with 12 students who had different levels of English proficiency (high, moderate, and low), four students from each level. It also gives examples of the students' five error categories found in Draft 2 and Draft 3 of their writing assignments, which illustrate revision changes after three different teacher written feedback types (direct, coded, and uncoded feedback).

5.2 The qualitative results obtained from the semi-structure interview

This section reports the students' views and opinions after the experiment. To obtain more details regarding how students perceived different types of teacher written feedback in conjunction with revising activity and writing practices in a process-based approach writing class, twelve students with different levels of English proficiency were selected to participate in this interview session. Students 1 – 4 were drawn from the high proficiency group, Students 5 – 8 from the moderate group, and Students 9 – 12 from the low group. In order to collect this qualitative data, the following seven questions were asked.

1. What do you think about **the content of the in-class writing instruction** given by the teacher?
2. Do you think **the nine writing assignments** are useful for your writing class and why?
3. Do you think **content feedback** is useful for your writing and why?
4. Do you think **direct feedback** is useful for your writing and why?
5. Do you think **coded feedback** is useful for your writing and why?
6. Do you think **uncoded feedback** is useful for your writing and why?
7. Do you think **revising activity** is useful for your writing and why?

5.2.1 The qualitative results obtained from the interview scripts

In the interview session, the students answered the questions in Thai and their answers were translated into English. Table 5.1 presents the interview scripts of the students' views and opinions from the semi-structured interview.

Table 5.1 Students' views and opinions from the semi-structure interviews

Question	Students' View and Opinion
<p>Interview Q1: What do you think about the content of the in-class writing instruction given by the teacher?</p>	<p>S1: The content of the course is suitable and useful. It can be adapted to use in other subjects.</p> <p>S2: I am satisfied with the in-class writing instruction. The content of the course is very good and very useful. The details in each lesson are very clear.</p> <p>S3: The content is good enough to let me know the components of writing and different genres so that I can use this as a guideline to write better.</p>

Question	Students' View and Opinion
<p>Interview Q2: Do you think the nine writing assignments are useful for your writing class and why?</p>	<p>S4: I can learn to write different genres from this course. The content is suitable and not too much for the students. I also like the way that the teacher gives lectures on some grammatical errors that the students often make so that I can avoid them in the next writing assignments.</p> <p>S5: I rarely had this kind of learning experience like this course before. I had never got to practice writing so much (9 pieces, 3 drafts each!). The content is useful and suitable for me. I have found comparison/contrast the most difficult.</p> <p>S6: The content is good and suitable.</p> <p>S7: The content is very good. It teaches me to write different genres. The last genre (comparison/contrast) is rather difficult to write.</p> <p>S8: The content is very clear. I have learned and practiced how to write different genres.</p> <p>S9: The course is useful and more academic as compared to the last writing course. The content is useful and not too difficult.</p> <p>S10: The content is comprehensible and very useful.</p> <p>S11: The content is good and suitable.</p> <p>S12: The content at the beginning is appropriate, but comparison/contrast writing is rather difficult for me.</p> <p>S1: They are very useful. I found I enjoyed writing. The more I wrote, the more I learn.</p>

Question	Students' View and Opinion
	<p>S2: I think that they are suitable for the students and for the course; I have no problems with them.</p> <p>S3: The assignments were enough for me to learn to write and practice writing.</p> <p>S4: I am happy to write. I could practice writing more. And I felt very good to write outside class as I had plenty of time to think.</p> <p>S5: I think they are useful and suitable for my writing. I wrote approximately once a week, which was just right for me.</p> <p>S6: Yes, they are very useful, but too demanding for me.</p> <p>S7: The assignments are very useful and suitable for a writing class. I could practice writing many pieces.</p> <p>S8: They are very good and very useful. If I had more time, I think I could write better.</p> <p>S9: They are useful. I could practice writing with different topics and different styles.</p> <p>S10: Yes, these assignments were very useful and good enough for a writing class. The students had more opportunities to practice writing.</p> <p>S11: They are useful. They help me to write more accurately and fluently.</p> <p>S12: I think they are suitable and useful. I sometimes wished I could choose my own topics.</p>

Question	Students' View and Opinion
<p>Interview Q3: Do you think content feedback is useful for your writing and why?</p>	<p>S1: Yes, and I am satisfied with the feedback on content. I like this feedback because I learn how to revise my paper and improve the content of my writing.</p> <p>S2: I think it is very useful. Based on the teacher's comments, I then learned how to improve my writing. I knew my weaknesses in each piece of writing.</p> <p>S3: Yes, it is useful for me. It is good to have different ideas from the teacher.</p> <p>S4: It is very useful and I like the content feedback because I have a guideline and it is easier to revise. If no one gave me content feedback, I would not know how to improve my writing.</p> <p>S5: Yes. It is very useful for my writing. I can go back to revise by using the feedback and improve it.</p> <p>S6: Yes, I think it is useful for improving my writing. I know from the feedback what I should add to or delete from my writing.</p> <p>S7: The feedback is very useful for my writing. I understand more from the content feedback and my writing can be improved because I know the problems of my writing.</p> <p>S8: I think it is very useful because I knew the weak points of my paper. I think it really helps improve my writing and I think my writing is getting better.</p> <p>S9: Yes, it is very useful because I think it helps improve my writing and from it I know how to improve my writing. I like a lot of comments from teacher.</p>

Question	Students' View and Opinion
<p>Interview Q4: Do you think direct feedback is useful for your writing and why?</p>	<p>S10: Yes, it is very good and useful because I know from the feedback where my mistakes are. I like the details of the feedback. More details help me to improve my writing.</p> <p>S11: The feedback is useful for my writing because the comments tell me how to improve my writing. The content feedback helps change my writing in a better way.</p> <p>S12: I think it is useful for my writing. I like this feedback because I understand how to improve my writing and it is easier for me to revise the content by using the teacher's guideline.</p> <p>S1: Yes, because it makes correcting the errors easy. However, it seems that I did not get to use my knowledge. I just copy the teacher's correction. It is very convenient.</p> <p>S2: Yes and I like this feedback the most, but it is too much work for the teacher to correct all students' errors. I think I learned almost nothing from it. When I received direct feedback, I always followed what the teacher wrote.</p> <p>S3: To me, it's quite useful. I think direct feedback is spoon feeding. When I saw the teacher's correction, I know the correct forms because the teacher wrote them for me. It is the easiest among three feedback types.</p> <p>S4: It is good that the teacher correct errors for me, but I will soon forget them because I do not have to think, just copy the teacher's correction.</p>

Question	Students' View and Opinion
<p>Interview Q5: Do you think coded feedback is useful for your writing and why?</p>	<p>S5: Yes, it is useful and I like it. But I think I learned a little. I learned only what the teacher wrote down. It made me know my errors immediately. It was easy. I thought about the error first, then I copied what the teacher wrote.</p> <p>S6: It is useful and I like this the most. It is very easy to understand.</p> <p>S7: It is very useful because I knew what the error was and I knew how to correct it. Actually I like this feedback the most because I just copied the correct answers from the teacher and sometimes added something more.</p> <p>S8: It is very useful. I knew the errors and copied what the teacher wrote. I was sure that it must be correct.</p> <p>S9: I think it is useful because I could learn how to write correctly. However, I did not think about the error anymore, just to follow the teacher.</p> <p>S10: It is very useful. When the teacher corrected errors for me, I spotted these errors and knew how to correct them, but I did not have to do anything else, just copied the teacher's correction. I like this feedback, but it did not help me to remember the errors I made. I think most students liked this kind of feedback.</p> <p>S11: It is very useful because unless the teacher corrected errors for me, I would not know how to write or to correct them.</p> <p>S12: It is useful because I know the correct form of my errors. If no one had told me, I would not know how to correct them.</p> <p>S1: I think this feedback is the most useful for me. It located my errors and I knew what types of errors I made. Then I went back and tried to correct them.</p>

Question	Students' View and Opinion
	<p>S2: Yes, it is very useful. I could use this feedback with no problems. When I did not know how to correct my errors, I consulted dictionaries and textbooks. Sometimes when I saw the code “WW” (wrong word), I consulted with both English-Thai dictionary and English-English dictionary. When I saw “SS” (sentence structure), I checked with a grammar book.</p> <p>S3: Coded feedback is the most useful feedback for me. The given code helps me to learn a lot from my errors. I had to find the best answers to correct my errors. I learned from them and did not forget them. When I remember them, I will not make the same errors again.</p> <p>S4: Yes. For coded feedback, I went back and thought about the errors and their types. When I tried to correct the errors following the codes, I learned and remembered. Later when I wrote, I avoided those mistakes.</p> <p>S5: Yes, it is very useful because when I saw a code, I wanted to know what my error was, why it was incorrect, and how to correct it. The code tells me the error type, and then I consulted with textbooks and other sources.</p> <p>S6: Any code helps me to know what types of errors I made. Then I studied more to correct them.</p> <p>S7: Yes, I think this feedback is the most useful for my writing because it is better to know the error type and self correct it.</p> <p>S8: Yes, it is useful. Sometimes I knew the error type, but I did not know how to correct it. I sometimes asked my friend, who did not know the answer either.</p>

Question	Students' View and Opinion
<p>Interview Q6: Do you think uncoded feedback is useful for your writing and why?</p>	<p>S9: Yes, it is very useful because I learned from the error code, tried to correct the error, and studied more about it by myself.</p> <p>S10: I think it is useful for my writing. When I saw a code, I went back to read my textbooks or notebooks and remembered the correct form.</p> <p>S11: I think it's quite useful and important for my writing. However, when I saw the teacher's code, I was sometimes confused. Then I would open an English-English dictionary to see how to write some sentence patterns.</p> <p>S12: Yes, I think it is the most useful because it lets me practice correcting my errors. Finally I remember not to make the same mistakes.</p> <p>S1: Yes, it is very useful for me. In fact, I found both coded and uncoded feedback the most useful for my writing. By using uncoded feedback, I enjoyed revising my paper. It was challenging to solve my own problems by using this kind of feedback.</p> <p>S2: This feedback is very useful. Although, it was difficult to figure out the types of errors and how to correct them, the feedback gave me a hint. I sometimes still needed help or consulted textbooks or dictionaries.</p> <p>S3: This feedback is the most useful because the teacher just underlined my errors. Then I went back and thought about them. I always liked to revise my paper using the feedback. I also tried to correct them using other sources. When I self-corrected the errors, I remembered them.</p>

Question	Students' View and Opinion
	<p>S4: I found this feedback the most useful. The teacher just underlined my errors. Then, I had to solve the problems by myself. When using the feedback, I tried to correct the errors by using other sources of information like textbooks or dictionaries. Finally, when I self-corrected the errors, I remembered them. To me all types of feedback were very useful for students because without the feedback or the comments from the teacher, we would not know how to improve our writing.</p> <p>S5: Yes, I think it is the most useful for my writing because it is challenging to correct my own errors. I learned more from using the feedback. When I could not correct the errors, I consulted with friends and the teacher or found the correct answers from dictionaries and textbooks.</p> <p>S6: Yes, it is useful. From the feedback, I knew there were errors in my writing. I did not like this kind of feedback whenever I could not find ways to correct them.</p> <p>S7: I think it is useful for my writing because it located the errors in my paper. Then I corrected them and would not make such errors again.</p> <p>S8: Yes, this feedback is useful because it locates my errors. The most difficult thing is that I do not know how to correct them. I often guess the answers.</p> <p>S9: I accepted that this feedback was useful, but I found it the most difficult to revise my paper. When I did not really know how to correct my errors, I just guessed what the correct answers should be.</p>

Question	Students' View and Opinion
<p>Interview Q7: Do you think the revising activity is useful for your writing and why?</p>	<p>S10: Yes, it is useful because I knew that there were errors in my writing. I learned more about these. If I really did not know the answers, I would ask my friends and the teacher.</p> <p>S11: Yes, it is useful. I knew that the teacher was willing to help me to improve my writing. Although underlining errors was difficult for me to correct them, I could ask my friends or study more from dictionaries or textbooks.</p> <p>S12: I think it is useful for my writing because it located my errors. The difficult thing was that I did not know how to correct them. Then, I often asked my friends about these errors.</p> <p>S1: It is very useful for me. My papers are getting better because I have a chance to revise them. When I revise my paper and correct errors, I learn more from them. I am sure that if I keep doing it, my writing skills will be improved.</p> <p>S2: Yes, it is very useful. The activity helps me to write better. When I revise my writing, I try to make my paper better by adding more ideas and correcting errors. I write more accurately and fluently.</p> <p>S3: Yes. I think revising is an important activity in the writing process. If my first draft was not good enough, it could be improved by revising. I had plenty of time to produce a better writing.</p> <p>S4: Revising helps me to write much better. I had more chances to review and correct my papers. I can say that most of my papers were always better after revising. I have learned to improve my writing from this activity.</p>

Question	Students' View and Opinion
	<p>S5: Yes, it is very useful. The more I revised, the better my papers were. I felt more confident to write.</p> <p>S6: I think it is useful for me because it helps me to write better. When revising my paper, I read the first and second drafts carefully and tried to improve my writing. If I was not assigned to revise, I would only read the teacher feedback and do nothing.</p> <p>S7: I think it is very useful for my writing because I could correct errors and add more details in the revised draft. And I always pay more attention to my writing.</p> <p>S8: It is very useful and very important because I could make my paper better. If there was no revising activity, I would not pay much attention to the paper.</p> <p>S9: It is very good and very useful. I sometimes added more details and corrected errors. Revising really helps improve my writing.</p> <p>S10: Yes, it is very good. It motivated me to learn more about my errors so that I can improve my writing</p> <p>S11: Yes, it is very useful. When I revised my paper, I remembered my errors and this helped me write more accurately.</p> <p>S12: I think it is very useful for my writing. When I revised my paper, I learned to write better.</p>

5.2.2 A summary of the qualitative results of the interview scripts

The students' views and opinions from Table 5.1 can be summarized as follows.

Firstly, all students viewed **the content of the writing instruction** given by the teacher as suitable and useful lessons for them. One of the students in the moderate group acknowledged, "The content is very clear. I have learned and practiced how to write different genres". One in the high proficiency group noted a positive view regarding the writing instruction as stating, "I also like the way that the teacher gives lectures on some grammatical errors that the students often make so that I can avoid them in the next writing assignment".

Secondly, the students also reported having positive attitudes towards the nine **writing assignments** throughout the 16-week period. To quote a student in the moderate group, "I think they are useful and suitable for my writing. I wrote approximately once a week, which was just right for me". Overall, the students accepted that they had more opportunities to practice writing. As a result, their writing skills improved.

Thirdly, with regards to the methods of giving teacher written feedback, all students viewed **all types of feedback** as useful sources of information for them to write better and to self-edit their errors because they learned from both feedback on content and on form. For example, a high performer said, "... all types of feedback were very useful for me because without the feedback or the comments from the teacher, I would not know how to improve my writing".

With regards to their attitudes towards **direct feedback**, the students had different views. For example, one student in the moderate group showed a positive attitude towards this feedback type, saying

“It is very useful because I knew what the error was and I knew how to correct it. Actually I like this feedback the most because I just copied the correct answers from the teacher, and sometimes added something more”.

On a contrary, a student in the high proficiency group admitted, “... it seems that I did not get to use my knowledge. I just copy the teacher’s correction”.

For **coded feedback**, almost everyone agreed that this feedback was a very useful method for their writing. For example, a student in the moderate group said, “... it is very useful because I learned from the error code, tried to correct the error, and studied more about it by myself”. Similarly, one from of the low proficiency group said, “Yes, I think it is the most useful because it lets me practice correcting my errors. Finally I remember not to make the same mistakes.”

With **uncoded feedback**, although all students agreed that it was useful for their writing, two interesting issues were apparent. The first was a difficulty in utilizing the feedback. One student in the moderate group stated, “... this feedback is useful because it locates my errors. The most difficult thing is that I do not know how to correct them”. The other issue was that this feedback encouraged the students to employ problem-solving strategies when self-correcting their errors. A high performer supported this issue as stating,

“I found this feedback the most useful. The teacher just underlined my errors. Then, I had to solve the problems by myself. When using the feedback, I tried to correct the errors by using other sources of information like textbooks, dictionaries. Finally, when I self-corrected the errors, I remembered them”.

Finally, all of the students valued **the revising activity** in their writing process.

One student in the high proficiency group stated,

“My papers are getting better because I have a chance to revise them. When I revise my paper and correct errors, I learn more from them. I am sure that if I keep doing it, my writing skills will be improved”.

Similar to the first student, one in the moderate group said, “When revising my paper, I read the first and second drafts carefully and tried to improve them. If I was not assigned to revise, I would only read the teacher feedback and do nothing.”

It can be seen that the students with different levels of English proficiency were satisfied with the content of the in-class writing instructions given by the teacher. They also valued all four feedback types, content, direct, coded, and uncoded feedback, as useful sources of information for revision of their writing. In addition, they felt that the revising activity helped them to write better, improved their writing skills, and gained more confidence in writing.

5.3 An analysis of revision changes of common writing errors found in multiple draft paragraph writing

This section presents examples of the student’s five error categories (noun ending, article, verb, wrong word, and sentence structure) found in Draft 2 and the changes of these errors found in their revision (Draft 3) after direct, coded, and uncoded feedback.

5.3.1 Revision change after direct feedback

5.3.1.1 Error type: **Noun ending**

- Second draft

My hometown is Nakhon Srithammarat, but I cannot speak a local language. It is because my father_ hometown is Nakhonsrithannarat, but my mother_ ~~hometown~~ is Phrae...

- Final draft

My hometown is Nakhonsrithammarat, but I cannot speak a local language. It is because my father's hometown is Nakhonsrithannarat, but my mother's is Phrae.

With regard to this example, there were two error points of noun ending error missing possessive marker ('s). After receiving direct feedback, the students corrected the error according to the teacher's correction by adding the possessive marker.

5.3.1.2 Error type: **Article** and Sentence Structure

- Second draft

In the cold season, when you come to ~~the this~~ *the/this* place, you can see the sea of fog which is very beautiful and ~~can you a breathe the~~ fresh air.
you can get a breath of fresh air.

- Final draft

In the cold season, when you come to this place, you can see the sea of fog which is very beautiful and you can get a breath of fresh air.

According to Example 5.3.1.2, the student committed the article and sentence structure errors in which he/she added the unnecessary article “the” and a sentence structure error in the second independent clause, both of which were corrected after direct feedback.

5.3.1.3 Error type: **Wrong word**

- Second draft

Yeewa is a good friend and she is an English major student at Naresuan University, Phayao Campus. Yeewa lives in a small dormitory on the *ground floor* ~~one~~ floor, but I live with my family.

- Final draft

Yeewa is a good friend and she is an English major student at Naresuan University, Phayao Campus. Yeewa lives in a small dormitory on the ground floor, but I live with my family.

As can be seen in this example, the student made a word choice error using incorrect word “one” to mean the ground level of the dormitory. To provide direct feedback, the teacher corrected the error by writing the word “ground” for correction. In Draft 3, the student followed the teacher’s correction and replaced the word “one” with “ground,” which was correct in this context.

5.3.1.4 Error type: **Verb**, misspelling, and noun ending

- Second draft

I think Naresuan ~~have~~ beautiful nature because ~~it surround~~ of the
has *is surrounded by*
 mountains. There ~~is~~ a lot of ~~threes~~.
are

- Final draft

At the university, it has good nature because there are a lot of trees and
 it is surrounded by the mountains.

As shown above, the student committed two types of errors: verb and noun ending errors. First the student made a subject-verb agreement error. The second error also was found in verb error in which the correct voice for this sentence should be passive voice meaning that the mountains are all around the university. In addition, the student made a noun ending error for the word “mountain” missing plural form “s”. Again, he/she made another subject-verb agreement error using the verb “is” instead of using the verb “are” to agree with the noun “trees”. To revise, the students corrected the errors and restructured the sentences without changing the meaning.

5.3.1.5 Error type: **Sentence structure** and verb

- Second draft

After dinner, she always does the dishes. Then she takes a shower., ~~And~~
 reviews her lessons, does her homework and finishes English exercises.

- Final draft

After dinner, she always does the dishes. Then she takes a shower, reviews her lessons, does her homework, and finishes English exercises.

In Narrative writing, the sentence structure error was found in the last sentence which could be considered as sentence fragment in which there was an independent clause (without a subject) standing alone. The second type of error was found in the verb “finish” in which the student did not add “-s” to indicate third person singular in the present simple tense. After utilizing direct feedback, the result of the student’s correction was successful for both sentence structure and verb errors.

5.3.2 Revision change after coded feedback

5.3.2.1 Error type: **Noun ending**

- Second draft

I am studying at Naresuan University, Phayao Campus. The university offers
NE
many field of studies such as English, Thai, and Chinese.

- Final draft

I am studying at Naresuan University, Phayao Campus. The university offers many fields of studies such as English, Thai, and Chinese.

The student made a noun ending error missing plural form “-s” for the word “field” which was preceded by the quantifier “many”. He/She then was given coded feedback “NE” stating the type of noun ending error. For Draft 3, it was found that the student corrected the error successfully by adding the plural form “-s” to the word “field.”

5.3.2.2 Error type: **Article**, sentence structure, and wrong word

- Second draft

Everyday, I don't have breakfast because I get up late. Every morning I go
Art *Art* *SS* *WW*
 to university by university's bus. When I arrive ~~for~~ there. Firstly I go to
 my class.

- Final draft

Everyday, I don't have breakfast because I get up late. Every morning I go
 to the university by the university's bus. When I arrive to there, firstly I
 go to my class.

With regards to Example 5.3.2.2, the first article error was found because there was no article “the” preceding the words “university” and “university’s bus”. Next, a sentence fragment error was found with a subordinate clause beginning with “when” and ending with a period. Moreover, the student made a wrong word error by adding the unnecessary word “for” preceding the word “there.” This was considered incorrect use of word choice. For the revision, the student utilized coded feedback to correct article and sentence structure errors successfully. To correct the wrong word error, still the student incorrectly used the word “to,” which did not collocate with the word “there” in this contenxt.

5.3.2.3 Error type: **Wrong word** and Noun ending

- Second draft

My routine is not interesting, but I am happy because I have a good friends.
Art/NE
WW
 They sincerely for me. I think I have good experience about this university.

- Final draft

My routine is not interesting, but I am happy because I have good friends.
 They have sincere for me. I think I have good experience about this
 university

As shown above, the first error was found in the first sentence in which it was questionable for the phrase “a good friends”. This was because it has the article “a” indicating a singular form and the noun ending “-s” indicating a plural form of the phrase “good friend.” To give coded feedback, the teacher provided the codes both “Art” and “NE” in order to provide the alternatives for the student to choose only one choice to correct the error. In the second sentence, the word “sincerely” was found incorrect in this sentence because this was considered the incorrect use of word form, using the adverb “sincerely” without a verb. For the revision, the students successfully corrected the first error by deleting the article “a.” To correct the wrong word error, he/she replaced the word “sincerely” with the phrase “have sincere,” which was still incorrect. This reoccurrence of the error might be due to the fact that the student did not know the part of speech of the word “sincere.”

5.3.2.4 Error type: **Verb** and Wrong word

- Second draft

When I studied in secondary school, I went to classes everyday during the
 week days and I studied from 8:00 a.m. to 16:00 a.m. I am in school all
 day and about 16.00 a.m., I can cam back to my home. Today, when I
 study in university, I study for 2-3 hours in one day. When I study finished,
 I cam back to my dormitory.

- Final draft

When I studied in secondary school, I went to classes everyday during the week days and I studied from 8:00 a.m. to 4:00 p.m. I was in school all day and about 4.00 p.m., I could **came** back to my home. Today, when I study in university, I study for 2-3 hours in one day. When I **finish study**, I **came** back to my dormitory.

With regards to Example 5.3.2.4, the student made wrong word and verb errors. For the wrong word error, he/she misused 16:00 for 4 in the military format and the abbreviation “a.m.” in 16:00 a.m., instead of “4:00 p.m.” to indicate time after noon, which was considered incorrect in this context. Also, the student made four points of verb error. The student started off narrating his/her routine using past simple tense showing the action in the past “studied” and “went,” then switched to use the present simple tense verbs “am” and “can,” which were considered incorrect use of verb tense. Then, the verb form error “cam” was spotted. Later other incorrect use of verbs was found in the verbs “study” and “finish,” which appeared together. This might be due to his/her negative transference, a direct translation from Thai to English. Again, there was the verb form error “cam” (for come) found in the last sentence. In the revised draft the first error, the incorrect use of verb form, could + infinitive “come,” was still incorrect, could + “came.” In addition the verb “finish” in “finish study” should be followed by “studying.” Finally, the student used the incorrect verb tense “came” instead of “come,” a present simple verb tense in this context which describes the present time activity.

5.3.3 Revision change after uncoded feedback

5.3.3.1 Error type: **Noun ending**

- Second draft

... in the university, students can study by themselves⁽¹⁾, meet new friend_,⁽²⁾
and read new book_,⁽³⁾ in the library.

- Final draft

... in the university, students can study by themselves, meet new friends,
and read new books in the library.

There were three noun ending errors found in this sentence, “themselves”, “friend”, and “book”. After utilizing uncoded feedback, the student corrected all the errors successfully.

5.3.3.2 Error type: **Article**

- Second draft

My hometown is Uttaradit. It is _,⁽¹⁾ beautiful town. Uttaradit is in _,⁽²⁾ north
of Thailand.

- Final draft

My hometown is Uttaradit. It is a beautiful town. Uttaradit is in the north
of Thailand.

In this example, the article errors were found in the second and last sentences (1, 2) because there were no articles for the nouns “town” and “north.” In the revised draft, the students corrected these errors successfully by adding “a” (1) and “the” (2).

5.3.3.3 Error type: **Wrong word** and article

- Second draft

Ann is a girl from provincial town⁽¹⁾. She is _⁽²⁾student at Naresuan University. She stays with her friend in a dormitory near a⁽³⁾ university.

- Final draft

Ann is a girl from the countryside. She is a student at Naresuan University. She stays with her friend in a dormitory near the university.

Two error types, wrong word (1) and article (2 & 3) were identified. In revision, the student corrected all errors.

5.3.3.4 Error type: **Verb**

- Second draft

In the evening, Nid and I going⁽¹⁾ to jogging⁽²⁾ at Ang-Luang lake together. Then we have dinner. She watching⁽³⁾ TV while I doing⁽⁴⁾ homework.

- Final draft

In the evening, Nid and I go to jog at Ang-Luang lake together. Then we have dinner. She **like** to watch TV while I am doing homework.

There were three verb errors, “going to jogging” instead of “go jogging”, “watching” instead of “watches”, and “doing” instead of “do.” In final draft the student corrected all errors but made two new verb errors, a subject-verb agreement error “like” instead of “likes” and a verb tense error “I am doing” instead of “do.”

5.3.3.5 Error type: **Sentence structure**, article, and wrong word

- Second draft

<p><u>In secondary school, you want to learn to get a ⁽¹⁾ knowledge and use it in daily life similarity ⁽²⁾ to life in university is you want to learn to get the knowledge and bring it to use for a job in the future.</u></p>	<div style="border-left: 1px solid black; border-right: 1px solid black; border-bottom: 1px solid black; width: 20px; height: 40px; margin-left: 5px;"></div> <p>(3)</p>
--	--

- Final draft

<p>The similarity between life in secondary school and life in university is knowledge. In secondary school, you want to learn to get knowledge to use in daily life similarity to life in university. You want to learn to get the knowledge and use for a job in the future.</p>	<div style="border-left: 1px solid black; border-right: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div> ←
	<div style="border-left: 1px solid black; border-right: 1px solid black; width: 20px; height: 20px; margin-left: 5px;"></div> ←

From one student's comparison/contrast paragraph, there were three types of errors: article (1), wrong word (2), and sentence structure (3). In the revised draft, a topic sentence was added. However, the wrong word error of "similarity" was still made instead of using "similar," in an attempt to make a comparison. Also, in the last sentence "and use" should be omitted to avoid wordiness.

5.3.4 A summary of an analysis of the common writing errors found in multiple draft paragraph writing

A comparison of Drafts 2 and 3 illustrates the impact of each feedback type on the students' errors, that is, changes that occurred after each feedback type as follows.

The students could correct both treatable and untreatable errors after **direct feedback**. This was due to the fact that they only copied the teacher's correction; as a result, they corrected the errors successfully. It was also revealed that some students corrected their errors and revised their writing by adding more information or deleting

some sentences in the final drafts. After **coded feedback**, the students sometimes corrected their errors unsuccessfully though they knew the error types. This may result from not knowing how to correct the errors despite knowing the error types. It was also found that they could correct all article and noun ending errors in their final drafts. For wrong word, verb, and sentence structure errors, even though they know the error types, they could not correct all of them successfully. In addition, the students tended to produce a better text by adding more information, restructuring sentences, and deleting some errors. The most difficult errors to correct were wrong word. Similar to coded feedback, **uncoded feedback** sometimes did not help students correct errors unsuccessfully. This might be due to the fact that although the errors were identified for them, they did not know either the error types, or how to correct them. A similar impact of both coded and uncoded feedback on the students' errors was observed. In addition, it can be concluded that treatable errors (i.e. wrong word) should be treated with care, for mere effective feedback even in a long period of time will never be enough; the student writers themselves need to acquire as much knowledge of the target language as they can to become effective writers.

In conclusion, Chapter V presents the results of qualitative analyses of students' perceptions on different teacher feedback types and of revision changes made between drafts. Chapter VI concludes the research findings and discussion.

CHAPTER 6

CONCLUSION AND DISCUSSION

6.1 Introduction

This chapter summarizes the research findings and discusses the quantitative and qualitative results regarding the effects of different types of teacher written feedback on students' writing (quality, grammatical accuracy, and fluency), the students' revision strategies in utilizing all feedback types, and their attitudes towards them. In addition, it presents limitations of the study, theoretical implications, pedagogical implications, and recommendations for further studies.

6.2 Summary of the research findings

This section briefly reviews the research finding which includes both of qualitative and quantitative findings.

6.2.1 Summary of quantitative results

This section reports quantitative results which are divided into four parts. The first part summarizes the results of the students' improvement of writing (quality, grammatical accuracy, and fluency) as measured by comparing the pre-and post-tests. The second part presents the results of the students' improvement of writing as measured by a comparison among the nine writing assignments. The third part reports the results of the students' revision strategies in utilizing different types of teacher written feedback. The last part shows the results of the students' attitude towards,

their comprehension of, their attention to, and their problems regarding all feedback types.

**6.2.1.1 The results of the students' improvement of writing
(quality, grammatical accuracy, and fluency) as measured
by the pre-and post-tests.**

Overall, the results from the analysis of the Paired Samples Test showed a significant difference in the mean values of **writing quality** scores comparing the pre- and post-test at .000 level of significance ($p < .01$). This indicated a significant improvement of writing quality. For the results of **grammatical accuracy** focused on five error categories (noun ending, article, wrong word, verb, and sentence structure), it was revealed that overall the error rates found between the pre-and post-tests were reduced significantly in all categories, indicating that the students' grammatical accuracy improved. Finally, regarding the results of the analysis of **writing fluency**, as a whole, the students wrote longer texts in the post-test with a significant difference at the .001 level ($p < .01$) indicating a significant improvement of writing fluency.

**6.2.1.2 The results of the students' improvement of writing
(writing quality, grammatical accuracy, and writing
fluency) as measured by the nine writing assignments.**

The results of the students' improvement of **writing quality** comparing the nine writing assignments revealed that overall the mean scores of the first writing assignment (Narrative writing) was 3.2 and the last was 3.46. This indicated that the mean scores of writing quality tended to increase even though the later topics of the writing assignment were more difficult to write

(Comparison/Contrast writing). With regards to the results of the students' improvement of **grammatical accuracy** on revision among the nine writing assignments, it was found that after direct, coded, and uncoded feedback, there was a significant difference in error rate reduction found (Draft 2 and 3 compared) in all five error categories of all genres. A further analysis was done by analyzing the **number of errors per 100 words** in Draft 3 after direct, coded, and uncoded feedback. It was reported that in all these genres, the errors were found most frequently after uncoded feedback, followed by coded, and direct feedback, respectively. Regarding **writing fluency**, with Drafts 2 and 3 compared, it was found that there was a significant difference in five writing assignments and there was no significant difference in four writing assignments. However, the writing fluency mean of Draft 3 was slightly higher than that of Draft 2 in all nine writing assignments.

6.2.1.3 The results of the students' revision strategies in utilizing different types of teacher written feedback

Evidence from the student's revision strategy questionnaire showed that there was a difference of the extent that the students employed revision strategies in utilizing each feedback. The results also revealed that the revision strategies were employed most frequently when the students utilizing uncoded feedback, followed by coded, and direct feedback, respectively.

6.2.1.4 The results of the students' attitudes towards, their comprehension of, their attention to, and their problems regarding different types of teacher written feedback

Based on the evidence from the student's attitudes questionnaire, it was found that the students' attitudes towards their writing assignments throughout a

16-week semester was rather positive; they felt that their writing was moderately better and that these assignments moderately encouraged them to write in English. Also, they had rather positive attitudes towards all feedback types. Regarding preference of these feedback, the students mostly preferred direct feedback, followed by coded, and uncoded feedback, respectively. As for their comprehension of all feedback types, they found the feedback comprehensible and that teacher feedback followed by the revising activity encouraged them to rewrite. The students paid very much attention to feedback when being asked to revise and hand in the revised paper, but they would moderately pay attention to the teacher feedback when not being asked to do the revision. With regards to their problems when utilizing feedback, they all agreed that they sometimes had problems understanding all feedback types. Based on this evidence, it can be concluded that the students had a positive response to teacher feedback and that they considered teacher feedback used in this study as a helpful source of information for their writing.

6.3 Discussion

6.3.1 Effects of different types of teacher written feedback on student writing

This study focused on the effects of both teacher feedback on content and form on the students' writing quality, grammatical accuracy, and writing fluency.

6.3.1.1 The students' improvement of writing quality

Clearly, positive results can be seen in the students' writing quality after the teacher provided feedback on content followed by form (direct, coded, and uncoded feedback). In the improvement of writing quality, initial teacher feedback on

content followed by error correction seemed to have positive effects on quality of the student writing. This result supported Fathman and Walley's (1990) conclusion that teacher feedback results in improvement on both content and accuracy. Ferris (1997) also valued teacher feedback followed by students' revision stating, "when changes (whether minimal or substantial) were made, they overwhelmingly tended to improve the students' paper" (p. 330).

However, based on the research design focused on writing process-based approach of the present study, it might be stated that the improvement of the students' writing quality could also reflect the effects of other intervening variables: extensive writing practice on nine writing topics, in-class writing instruction given by the teacher, a constant routine of the writing cycle, and the associated revising activity, which probably allowed the students to practice writing and acquire knowledge of writing in English throughout a 16-week period. It might be stated that teacher feedback on content in the present study was one of the significant factors that could affect the improvement of writing quality of these EFL student writers. This can be supported by the qualitative evidence found in the present study. Based on the students' interview scripts, all of them agreed that content feedback helped improve their writing. To quote a student in the moderate proficiency group, "I think it is very useful because I knew the weak points of my paper. I think it really helps improve my writing and I think my writing is getting better." Similarly, one from the high proficiency group accepted, "I have a guideline and it is easier to revise. If no one gave me content feedback. I would not know how to improve my writing". It was clear that teacher feedback used in the present study did not have a harmful effect on the students' writing quality and might yield a positive effect on it (Chandler, 2003).

This was supported by Hyland and Hyland's (2006) view regarding the effect of teacher feedback stating, "although it is unlikely that feedback alone is responsible for long-term improvement, it is almost certainly a highly significant factor" (p. 4).

6.3.1.2 The students' improvement of grammatical accuracy focused on five error categories

Similar to the results of writing quality, the positive effects of different types of teacher written feedback on grammatical accuracy focused on five error categories (noun ending, article, wrong word, verb, and sentence structure) was found. Regarding the results of the improvement of grammatical accuracy, there was a significant reduction of error rates between the pre-and post-tests and between Drafts 2 and 3 of all nine writing assignments of all genres. These errors reduced significantly when the teacher provided any type of feedback and assigned students to correct their errors. This seemed to be that teacher feedback on form was found to be beneficial for writing accuracy (Fathman and Whalley, 1990; Chandler, 2003).

Positive results were found in student writing when the students were required to revise after direct, coded, or uncoded feedback. They were supported by the conclusion of some previously conducted research which valued the pattern of teacher's error correction followed by students' revision stating that writing accuracy could improve, especially when students are required to revise or rewrite their papers after receiving teacher feedback (Krashen, 1984; Zamel, 1985; Ferris, 1995; James, 1998; Ferris, 2002). A number of empirical evidence also support that when the students revise their paper after receiving error feedback, their accuracy improves "either in a short or long term" (Lalande, 1982; Frantzen and Rissel, 1987; Fathman and Whalley, 1990; Ferris, 1997; Chandler, 2000; Ferris et al, 2000; Ferris and

Roberts, 2001). Thus, it might be concluded from this study that the grammatical accuracy improved significantly because these students were given teacher written feedback and required to correct their own errors over the 16-week period.

The findings also showed that on revision, errors were reduced the most when the students received **direct feedback**, followed by coded, and uncoded feedback, respectively. This aligned with Chandler's (2003) conclusion that direct feedback or correction by the teacher was the best of the four methods (correction, underlining and description, description, and underlining) used, as measured by changes in accuracy of the student writing. The superiority of direct feedback that the students can correct significantly more of their errors on revisions with this method than either coded or uncoded feedback might be due to the fact that it is "the fastest and the easiest way for them to revise" (p. 291).

The results of the analysis of the students' writing errors illustrated that the students made the errors in wrong word most frequently followed by sentence structure, verb, noun endings, and articles, respectively. It was also observed that they were more successful in correcting errors in the "treatable" category (verbs, noun endings, and articles) than the "untreatable" one (wrong word and sentence structure), which supported Ferris and Roberts' (2001) claim that the students can correct their treatable errors more successfully as compared with the treatable errors.

6.3.1.3 The students' improvement of writing fluency

With regards to the students' writing fluency, Walfe-Quintero, Inagaki, and Kim, 1998 (as cited in Chandler, 2003) defined fluency as "rapid production of language" (p. 17). In a number of previously conducted research, the measurement of fluency used has been number of words produced in a written product. Since fluency

of writing (as stipulated by word count) was part of the pre-and post-tests and the nine writing assignments, the measurement of fluency in the present study was word count. Based on the results of the measurement of writing fluency by three methods in the present study: the comparison between the pre-and post-tests and the comparison between Drafts 2 and 3 among the nine writing assignments, a positive effect on fluency across these two measurements was found. The pre-and post-test results revealed that overall there was a significant improvement of writing fluency at the end of the semester.

A similar result was also found in the comparison between Drafts 2 and 3 among the nine writing assignments, which showed a positive result on writing fluency. Although there was no statistically significant improvement found in the comparison of writing fluency between Writing Assignments 1 and 9, it can be observed that the mean word count of the last writing assignment was slightly higher than that of the first, even though the difficulty level of the assignments increased because the topics for the later assignments were considered increasingly difficult (from Narrative to Comparison/Contrast writing). The levels of difficulty of different genres was pointed by Weigle (2002) as stating "... discourse mode makes a difference in performance – narrative and description are often seen as cognitively easier and lend themselves to less complex than do exposition..." (p. 100). Also, a comparison between Draft 1 of Topic 1 and Draft 3 of Topic 3 of each genre revealed that there was an increase in the word count means in all three genres (as shown in Table 4.19). It is clear that when the students received any types of feedback, they wrote longer texts. The findings contradicted Truscott's (1996) well known article, which states that one of the putative harmful effects of error correction is its negative

effect on fluency. This might be possible that when the students learned more from their errors, teacher correction, the revising activity, as well as practices of writing in a long period of time (16 weeks), they felt more confident to write even more challenging genres. The results corresponded to the positive effects of teacher written feedback on fluency reported in Robb et al's (1986) research on Japanese EFL students and Chandler's (2003) investigation of Hispanic, Asian, and South East Asian students.

In conclusion, teacher written feedback of any type has a demonstrably positive effect on students' writing quality, grammatical accuracy, and writing fluency. For writing quality, without changing students' original communicative intent, teacher feedback seemed to have a positive effect. Also, on grammatical accuracy (as measured by five error categories) and writing fluency (as measured by word count), it was found to be significant as a benefit. In addition, the present study reflected a positive view of the provision of teacher feedback in which it seems likely that assigning students to rewrite and revise their written work after receiving teacher written feedback "not only will improve the quality of writing under immediate consideration but will also cause writers to become more aware of and attentive to patterns of errors" (Ferris 2002, p. 26). In this study, teacher written feedback played a crucial role in the improvement of Thai EFL student writing. The method of using teacher written feedback followed by students' revision is a way to draw students' attention to their writing and learn from their errors.

6.3.2 The students' revision strategies when utilizing different types of teacher written feedback

Based on the results of the students' revision strategies when utilizing

different types of teacher written feedback, it was found that the students employed fewer strategies when utilizing **direct feedback**. This might be due to the fact that when being asked to revise the paper, the students just copied the teacher's correction. To quote a high performer who participated in the interview session, "it makes correcting the errors easy. However, it seems that I did not get to use my knowledge. I just copied the teacher's correction." Similarly, a student from the low proficiency group stated, "When the teacher corrected errors for me, I spotted these errors and knew how to correct them, but I did not have to do anything else, just copied the teacher's correction". In utilizing **coded feedback**, the students employed more strategies as compared with when utilizing direct feedback. The following list presents the revision strategies the students **usually** employed.

- using an English-Thai dictionary when correcting
- leaving the writing for a while or for days, then coming back to edit it
- applying grammatical knowledge
- guessing that it sounds right

This result supported Lalande's (1982) conclusion that coded feedback seems to encourage the student to employ problem-solving strategies. For **uncoded feedback**, the students employed many more revision strategies compared with the first two feedback types. Below is a list of revision strategies which were **usually** employed by the students.

- Using an English-Thai dictionary
- leaving the writing for a while or for days, then coming back to edit it
- using Thai-English dictionary
- applying grammatical knowledge

- using Thai translation
- guessing that it sounds right
- reading what I have written when finishing the whole paper
- checking in textbooks

It can be seen that when utilizing this feedback type, the students needed to employ many more strategies to correct their errors as it placed maximum responsibility on them to figure out both the nature of error problems and their solution (Ferris, 2002). Thus, this might yield a beneficial aspect of this feedback method since it indirectly encouraged the students to employ many more problem-solving strategies, and consequently, they were exposed to more target language input. To quote Ferris (2000), there is growing evidence that in many cases, L2 students, just like native speakers, rely on their own acquired knowledge of language to correct errors, only rarely relying on formally learned terminology and rules to solve problems.

6.3.3 The students' views and perceptions of error treatment in their writing

In addition to examining empirical research evidence about the nature and effects of teacher feedback and other types of instructional intervention, it is important to consider student preferences and expectations. This section discusses the students' views and perceptions of error treatment in their writing, which includes direct, coded, and uncoded feedback.

6.3.3.1 Direct feedback

It was obvious in the present study that this feedback was the easiest way for the students to understand and make corrections, and, therefore, they tended to favor it best. The present study revealed that overall the students had positive attitudes towards direct feedback. They greatly valued it as a very comprehensible input for them. However, the students with different levels of English proficiency viewed this feedback differently. For example, a student in the high proficiency group admitted though he liked it, “it seems that I did not get to use my knowledge. I just copy the teacher’s correction....”. On a contrary, a student in the low proficiency group reported a positive attitude towards this feedback type, saying, “It is useful because I knew the correct form of my errors. If no one had told me, I would not have known how to correct them”. This result supported Lee’s (1997) conclusion that the students with low language proficiency have rendered direct cues more helpful than indirect cues.

6.3.3.2 Coded feedback

Overall the students reported that coded feedback was a second preference to direct feedback. When looking at the students in different levels of English proficiency, the moderate performers reported that coded feedback was the most useful feedback type for them. This might be due to the fact that the students in this level needed some cues or suggestions to solve problems of how to correct their errors, so they could utilize these and consult with other sources of information to correct their errors and learn from doing so. It was suggested that using a consistent system of coding errors throughout a writing class, paired with mini-lessons which build students’ knowledge base about the error types being identified, might yield

more long term growth in student accuracy than simply underlining or highlighting errors (Lalande, 1982; James, 1998; Reid, 1998). Based on the qualitative results regarding the usefulness of coded feedback in the present study, all students with different levels of English proficiency who participated in the interview session agreed that this feedback type was very useful for their writing. To quote a student in the high proficiency group,

“...coded feedback is the most useful feedback for me. The given code helps me to learn a lot from my errors. I had to find the best answers to correct my errors. I learned from them and did not forget them. When I remember them, I will not make the same errors”.

Besides, many researchers suggested that indirect error feedback is generally preferable because it forces students to engage in “*guided learning and problem solving*” (Lalande, 1982, p. 1) and helps them improve writing skills as “*independent self-editors*” (Bates et al., 1993). However, it has also been observed that low English proficiency students may not have sufficient linguistic knowledge to self-correct errors even when they are pointed out (Brown, 1994; Ferris & Hedgcock, 1998, 2004; Ferris, 2006). The following illustrates an example of a student’s unsuccessful self-correction of wrong word error after coded feedback.

Draft 2

Art/NE

My routine is not interesting but I am happy because I have a good friends.

WW

They sincerely for me. I think I have good experience about this university.

Draft 3

My routine is not interesting but I am happy because I have good friends.

*They **have sincere** for me. I think I have good experience about this university.*

It can be seen from this example that the first error was found in the first sentence in which it was questionable for the phrase, “a good friends”. This was because it has the article “a” indicating a singular form and the noun ending “-s” indicating a plural form of the phrase, “good friend. To give coded feedback, the teacher provided the codes both “Art” and “NE” in order to provide the alternatives for the student to choose only one choice to correct the error. In the second sentence, the word, “sincerely” was found incorrect in this sentence because this was considered the incorrect use of word form using an adverb “sincerely” without a verb. In Draft 3, the students successfully corrected the first error by deleting the article, “a”. To correct the wrong word error, he/she replaced the word “sincerely” with the phrase, “have sincere,” which was still incorrect. This reoccurrence of the error might be due to the fact that the student did not know the part of speech of the word “sincere”. This illustrated the effects of correcting the untreatable error category. The untreatable error was not always corrected successfully due to the student’s low linguistic proficiency. This confirmed that a judicious combination of direct and indirect feedback, varying according to error type, may be most helpful to students (Hendrickson, 1980; Ferris, 1999; Channey, 1999; Ferris, 2006).

6.3.3.3 Uncoded feedback

With regard to the mean number of errors found in revision, uncoded feedback was nearly as effective as coded feedback for improving accuracy on revision and subsequent writing. Although overall the students did not value uncoded

feedback as their preference, some students felt they learned more when they were involved in self-correction. According to the questionnaire asking the students about the helpfulness of each type of feedback, surprisingly the high performers in this study reported that they valued uncoded feedback as the most useful feedback type for them. Several studies (Gass, 1983; Sakamoto and Koyama, 1997) suggest that as learners' proficiency increases, their ability to make the appropriate grammatical judgments improves. Therefore, learners at an advanced level may need to be given only the location of errors. This method is not only a viable alternative, at least for students who are advanced enough to do self-correction, but also a beneficial method for all the students to learn and acquire the target language. This was because when the students saw their errors underlined, they had to utilize their acquired knowledge of the target language to solve the problem and to do self-correction. It can be suggested that although this type of feedback can encourage the students to be more independent self-editors, it should be given with high consideration. The teacher should provide this feedback when the students commit treatable errors i.e. noun ending, verb, and article in which they can go back and correct them by utilizing other sources of information. Also, this feedback type would be most useful when teachers were certain that the students who received it were advanced or well-trained to do their self-correction. It is therefore recommended that if teachers choose to give students less explicit feedback on their errors, they may need to be prepared to explain and defend this strategy, and perhaps even demonstrate its effectiveness to students by means of self-editing exercises. It could be said that uncoded feedback could provide beneficial support in a process approach writing class for both teachers taking less

time in correcting the students' errors and students learning to be independent self-editors.

In sum, it has been assumed in the literature that L2 student writers expect and value error feedback from their teachers, and it has been claimed that the absence of such feedback could raise student anxiety, frustrate students, and cause them to lose confidence in their teachers (Leki, 1999; Ferris, 2002;). Therefore, the decision of which of these three methods to utilize should be made in the context of the other goals of the course (e.g., whether writing or language is the primary focus) and the amount of time one wants the students to devote to grammatical and lexical error correction. Besides, teachers can use a combination of uncoded feedback for errors the students can self-correct and direct feedback for those they cannot. What seems to be a crucial factor shown in the study is having the students do something with the error correction besides simply receiving it (Chandler, 2003; Raimes, 1983; Silva, 1993; Sengupta, 2000). It was also noted that revision has the potential of a new assignment and thus may be worth the L2 teachers' and learners' time and effort, in contrast to Truscott (1996, 2004, 2007). When students utilized the feedback in revision, even when receiving direct feedback from the teacher, error feedback on writing is a way to draw the students' attention to form without distracting them from their original communicative intent. Moreover, helping them notice a mismatch between their interlanguage and the target language might well facilitate second language acquisition. After the teacher corrected the errors, underlined them or provided code for student self-correction, subsequent student writing was both significantly more correct, in just 16 weeks, and done significantly, with a significant increase in the quality of the content.

6.4 Limitations of the study present study

With its objectives achieved, the present study still had some limitations.

1. It only focused on utilizing four types of teacher written feedback, namely content, direct, coded, and uncoded feedback in an EFL writing class using a process approach.

2. The study was conducted over a period of one semester (16 weeks).

3. This study used non-probability sampling which did not involve random selection, so the specific group selected due to geographical area was investigated. As it is often difficult to conduct educational studies with human participants (i.e. real students and real teachers) that are pure experimental studies, the present study was conducted using a quasi-experimental design in which the researcher was unable to obtain randomly selected a group of participants and had to deal in the experiment with already existing intact groups (Brown and Rodgers, 2002). Then the intact group of 81 Thai EFL university students studying in Paragraph Writing course was selected to participate in the study. Thus, the findings of the present study cannot be generalized to other learners in a different context in other regions of Thailand.

4. Since the present study mainly aimed to examine the effects of different types of teacher written feedback on the student writing focusing on writing quality, five error categories, and writing fluency, the measurements for these were focused on the writing quality using TOEFL writing scoring guide, frequency of errors using the framework of Ferris et al's (2000) error classification, and writing fluency using a number of words shown in each writing assignment, while many other measures and tools may also be employed.

5. The students' revision strategy questionnaire was limited to elicit the strategies employed when utilizing direct, coded, and uncoded feedback for feedback on form only.

6.5 Theoretical Implications of the Study

The theoretical framework of the present study was based on second language acquisition (SLA) and its implications for error correction theory (Ferris, 2002). Ferris stated that though SLA research is inconclusive as to specific orders and stages of acquisition, several practical implications for teachers of L2 writers have emerged:

First, it is unrealistic to expect that L2 writers' production will be error free or that, even when it is, it will sound like that of native English speakers. Second, since SLA takes time, we should not expect students' accuracy to improve overnight. Third, and most important, L2 student writers need (a) a focus on different linguistic issues on error patterns than native speakers do; (b) feedback or error correction that is tailored to their linguistic knowledge and experience; and (c) instruction that is sensitive to their unique linguistic deficits and needs for strategy training (p. 5).

It can be generally accepted that in an EFL context, feedback is central to learning to write in the target language. According to Hyland (2003), feedback can provide student writers with a sense of audience and "sentimize them to the needs of readers, but it offers an additional layer of scaffolding to extend writing skills, promote accuracy and clear ideas, and develop an understanding of written genres. Each has its advantages and possible drawbacks, and teachers might use them in tandem to offer students the best of all worlds. It is obvious that in order to improve writing skills, EFL student writers need more language training because they do not

have enough linguistic competence to correct grammatical errors (Sengupta, 1998) and other components of writing different genres. In the context of the present study, the students definitely need a lot more training and more exposure to the target language. The following recommendations could be made to use teacher written feedback effectively to enhance the teaching and learning EFL writing.

1. Teachers should ask students for their feedback preferences at the beginning of the course and address these in their responses to student writing.
 2. The response practices the teacher intends to use in the course should be explained at the outset. These should include the focus of the feedback that will be given on particular drafts, any codes that will be used, and any useful sources of information to help the students self-edit their writing.
 3. Expectations concerning student responses to feedback need to be clearly explained at the beginning so that they understand what is required from them.
 4. Teachers should provide both margin and end comments in their written feedback if time allows. It is also suggested that students may find comments vague and difficult to act on. Therefore, teachers should seek a balance of praise and doable suggestions for revision. However, criticism should be mitigated as far as possible while bearing in mind the potential of indirectness for misunderstanding (Hyland, 2003).
4. It was apparent that the students with different levels of English proficiency benefited from teacher written feedback in conjunction with other associated writing activities, namely the revising activity and the implementing of lesson plans and guidelines for teaching writing Narration, Description, and

Comparison/Contrast. Therefore, a similar method should also be developed for teaching other rhetorical modes of writing, i.e. cause and effect, problem-solution, and argumentative writing.

5. Different types of teacher written feedback in conjunction with other writing practice activities should be included as a class activity so that the students learn to become independent self-editors. This is because the students can learn from teacher feedback. This activity could raise students' awareness of their errors. In so doing, they will learn to avoid making the same errors in their future writing.

6. As the results of the study showed, the students' writing improvement stems from many reasonable factors in the writing class using the process-based approach. These factors may include lesson plans, guidelines for teaching writing, as well as other writing practice activities, which coincide with Meeampol's (2008) process-based approach research in a Thai university stating,

...university EFL students need to practice writing and their writing needs to be taught by the teacher, either implicitly or explicitly. However, an explicit teaching of writing obviously enhances the students' writing ability more. The process-based teaching is one explicit teaching method that can help students increase their writing ability (p. 7).

Although the process-based teaching method may be time consuming, its elements or components can help improve the students' writing, which, as a result, makes them have a better attitude towards writing. Therefore, the writing process-based approach should be one of effective factors which can improve the students' writing and should be maintained in a writing class, especially in an EFL context.

7. Beyond focusing attention to providing feedback, it is suggested that writing teachers can also devote more attention to developing the students' ability to

become independent foreign language writers. Thus, teaching techniques for self-correction (Ferris, 1995) and self-revision may be more instructive (Ashwell, 2000).

6.6 Recommendations for further studies

At present, more research on teacher written feedback should be conducted.

The following are some recommendations for further investigations.

1. Replication of the present study in other universities both in the same and different regions in Thailand
2. Replication of the present study with different genres
3. Investigation of other types of teacher feedback or other techniques that could help EFL student improve their writing skills
4. Investigation of the methods of teacher feedback in conjunction with effective revising strategy training

In conclusion, Chapter VI summarizes the results of the study and discusses them in relation to the literature review. It begins with introduction followed by a summary of the research findings, discussion, the limitations of the present study, and theoretical implications. Finally, it ends with recommendations for further research.

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APPENDIX A

Error code sheet

Code	Types of errors	Description
V	Verb	All error in verb tense or form, including relevant subject-verb agreement
NE	Noun ending	Plural or possessive ending incorrect, or unnecessary; includes relevant subject-verb agreement errors.
Art	Article	Article or other determiner incorrect, omitted, or unnecessary. Missing or unnecessary or incorrect used
WW	Wrong word	All specific lexical errors in word choice or word form, including preposition and pronoun errors. Spelling errors only included if the (apparent) misspelling resulted in an actual English word.
SS	Sentence structure	Errors in sentence/clause boundaries (run-ons, fragment, comma splices), word order, omitted words or phrases, unnecessary words or phrases, other unidiomatic sentence construction.

Source: Ferris and Roberts (2001)

Reference

Ferris, D. R. and Roberts, B. (2001). Error feedback in L2 writing classes How explicit does it need to be?. **Journal of Second Language Writing**. 10: 161-184

APPENDIX B

Questionnaire

Survey of the Students' Background Information

Instructions Please answer the following questions **honestly** because your answer will be used for a research study to improve the teaching and learning of English in Thailand. Your answers will not have any effect on your grade for the course 205222 Paragraph Writing

1. Name _____

2. Sex (Circle one) a. Male b. Female

3. Age _____ years

4. Grades for 011111 Foundations of English I _____

011112 Foundations of English II _____

205121 Basic Writing _____

5. How long have you learned English? ____ years.

6. Have you ever been to a country where you had to use English for communication?

(Circle one) a. Yes b. No If no, please skip to question

7.

If yes, please specify the country or countries, the period of time you stayed there, and the reason

Country or countries	Period of time (days, months, or years)	Reason
----------------------	---	--------

(s)

_____	_____	_____
_____	_____	_____

7. Have you ever attended a school where English is used as a media for all learning and teaching, either in Thailand (e.g., an international school) or abroad? (Circle one) a. Yes b. No If no, please skip to question 11.

If yes, how long did you study there? _____
years

8. When you learn English in high school, how often did you practice writing in English at a paragraph level? (Circle one)

1. Never 2. Rarely 3. Sometimes 4. Often

9. When you learned English in a university, how often did you practice writing in English at a paragraph level? (Circle one)

1. Never 2. Rarely 3. Sometimes 4. Often

10. Since this semester started, have you learned English at another institute (e.g., a language school or a tutoring school) or with a tutor in addition to studying at the university? (Circle one)

- a. Yes b. No

If yes, how many hours each week? (Circle one)

- A. Not more than two hours B. More than 2 but not more than 4 hours
C. More than 4 but not more than 6 hours D. More than 6 hours
-

APPENDIX D

Revision strategy questionnaire

Instructions Please answer the following questions by marking X in the space provided only. Please answer each question honestly because your answer will be used for a research study to improve the teaching and learning of English in Thailand. Your answers will not have any effect on your grade for the course 205222 Paragraph Writing.

Part One: Revision strategies when utilizing direct feedback

In this part, you will find statements of revision strategies when utilizing direct feedback, please read these statements and mark X indicating how often you employed these strategies.

Example

Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)
A	I eat snacks while watching TV. (If you eat snack all the time when watching TV, mark 4)				X

When I got back the paper with direct teacher feedback....

Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)
1.	I read my text aloud.				
2.	I only read what I have written when I have finished the whole paper.				
3.	When I have written paper, I hand it in without reading it.				
4.	I leave my writing for a while or for days, then I come back to edit it.				
5.	I show my text to somebody, and ask for his or her opinion.				
6.	I compare my writing with the paper written by my friends in the same topic.				
7.	I check my mistakes after I get back the paper with feedback from the teacher and try to learn from them.				
8.	I can remember my mistakes and avoid doing it in my subsequent writing.				
9.	I apply my grammatical knowledge				
10.	I make no attempt.				

Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)
11.	I guess that it sounds right.				
12.	I use Thai translation.				
13.	I check in textbooks.				
14.	I restructure sentences.				
15.	I check in my note book.				
16.	I delete the sentence.				
17.	I ask my teacher.				
18.	I ask some one for help.				
19.	I use Thai English dictionary when revising.				
20.	I use English - English dictionary when revising.				
21.	I use English - Thai dictionary when revising.				
22.	from item 19 – 23 when my teacher did not mark any error,... ...I make changes in word use by myself.				
23.	...I make changes in verb by myself.				
24.	...I make changes in article by myself.				
25.	...I make changes in noun ending by myself.				
26.	...I make changes in sentence structure by myself.				

Part Two: Revision strategies when utilizing coded feedback

In this part, you will find statements of revision strategies when utilizing coded feedback, please read these statements and mark X indicating how often you employed these strategies.

When I got back the paper with coded feedback....

Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)
1.	I read my text aloud.				
2.	I only read what I have written when I have finished the whole paper.				
3.	When I have written paper, I hand it in without reading it.				
4.	I leave my writing for a while or for days, then I come back to edit it.				
5.	I show my text to somebody, and ask for his or her opinion.				
6.	I compare my writing with the paper written by my friends in the same topic.				
7.	I check my mistakes after I get back the paper with feedback from the teacher and try to learn from them.				
8.	I can remember my mistakes and avoid doing it in my subsequent writing.				
9.	I apply my grammatical knowledge				
Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)

10.	I make no attempt.				
11.	I guess that it sounds right.				
12.	I use Thai translation.				
13.	I check in textbooks.				
14.	I restructure sentences.				
15.	I check in my note book.				
16.	I delete the sentence.				
17.	I ask my teacher.				
18.	I ask some one for help.				
19.	I use Thai English dictionary when revising.				
20.	I use English - English dictionary when revising.				
21.	I use English - Thai dictionary when revising.				
22.	from item 19 - 23when my teacher did not mark any error,... ...I make changes in word use by myself.				
23.	...I make changes in verb by myself.				
24.	...I make changes in article by myself.				
25.	...I make changes in noun ending by myself.				
26.	...I make changes in sentence structure by myself.				

Part Three: Revision strategies when utilizing uncoded feedback

In this part, you will find statements of revision strategies when utilizing uncoded feedback, please read these statements and mark X indicating how often you employed these strategies.

When I got back the paper with coded feedback....

Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)
1.	I read my text aloud.				
2.	I only read what I have written when I have finished the whole paper.				
3.	When I have written paper, I hand it in without reading it.				
4.	I leave my writing for a while or for days, then I come back to edit it.				
5.	I show my text to somebody, and ask for his or her opinion.				
6.	I compare my writing with the paper written by my friends in the same topic.				
7.	I check my mistakes after I get back the paper with feedback from the teacher and try to learn from them.				
Item	Statement	Never (1)	Sometimes (2)	Often (3)	Always (4)

8.	I can remember my mistakes and avoid doing it in my subsequent writing.				
9.	I apply my grammatical knowledge				
10.	I make no attempt.				
11.	I guess that it sounds right.				
12.	I use Thai translation.				
13.	I check in textbooks.				
14.	I restructure sentences.				
15.	I check in my note book.				
16.	I delete the sentence.				
17.	I ask my teacher.				
18.	I ask some one for help.				
19.	I use Thai English dictionary when revising.				
20.	I use English - English dictionary when revising.				
21.	I use English - Thai dictionary when revising.				
22.	from item 19 - 23when my teacher did not mark any error,... ...I make changes in word use by myself.				
23.	...I make changes in verb by myself.				
24.	...I make changes in article by myself.				
25.	...I make changes in noun ending by myself.				
26.	...I make changes in sentence structure by myself.				

APPENDIX E

Questionnaire

The Students' Opinion about the Feedback

on the Nine Writing Assignments Provided by the Teacher

Name _____

Instructions: Please answer the following questions by circling only one choice. Please answer each question honestly because your information will be used for a research study to improve the teaching and learning of English in Thailand. Your information will not have any effect on your grade for the course 205222 Paragraph Writing.

1. When you read each of the following feedback, to what extent did you **understand** it?

1.1 Content feedback

1. Not understood at all

3. Moderately understood

2. Barely understood

4. Mostly understood

1.2 Direct feedback

1. Not understood at all

3. Moderately understood

2. Barely understood

4. Mostly understood

1.3 Coded feedback

1. Not understood at all

3. Moderately understood

2. Barely understood

4. Mostly understood

1.4 Uncoded feedback

1. Not understood at all

3. Moderately understood

2. Barely understood

4. Mostly understood

2. When you read each of the following feedback, to what extent were you **satisfied** with how the feedback was given?

2.1 Content feedback

1. Not satisfied at all

3. Rather satisfied

2. Not very satisfied

4. Very satisfied

2.2 Direct feedback

1. Not satisfied at all

3. Rather satisfied

2. Not very satisfied

4. Very satisfied

2.3 Coded feedback

- | | |
|-------------------------|-----------------------|
| 1. Not satisfied at all | 2. Not very satisfied |
| 3. Rather satisfied | 4. Very satisfied |

2.4 Uncoded feedback

- | | |
|-------------------------|-----------------------|
| 1. Not satisfied at all | 2. Not very satisfied |
| 3. Rather satisfied | 4. Very satisfied |

3. After completing homework assignment for a period of time, how did you **feel** about writing in English?

- | | |
|----------------------|--------------------|
| 1. Not better at all | 2. A little better |
| 3. Moderately better | 4. Much better |

4. When you received your homework assignments back, how often did you **think** about the feedback **carefully**?

- | | |
|----------|--------------|
| 1. Never | 2. Sometimes |
| 3. Often | 4. Always |

5. When you read each of the following feedback, how often did you have **problems** understanding it?

5.1 Content feedback

- | | |
|----------|--------------|
| 1. Never | 2. Sometimes |
| 3. Often | 4. Always |

5.2 Direct feedback

- | | |
|----------|--------------|
| 1. Never | 2. Sometimes |
| 3. Often | 4. Always |

5.3 Coded feedback

- | | |
|----------|--------------|
| 1. Never | 2. Sometimes |
| 3. Often | 4. Always |

5.4 Uncoded feedback

- | | |
|----------|--------------|
| 1. Never | 2. Sometimes |
| 3. Often | 4. Always |

6. To what extent did you think that the feedback on each homework assignment was **helpful** for you to write better in subsequent assignments?

6.1 Content feedback

- | | |
|-----------------------|--------------------------|
| 1. Not helpful at all | 2. Just a little helpful |
| 3. Rather helpful | 4. Very helpful |

6.2 Direct feedback

- | | |
|-----------------------|--------------------------|
| 1. Not helpful at all | 2. Just a little helpful |
| 3. Rather helpful | 4. Very helpful |

6.3 Coded feedback

- | | |
|-----------------------|--------------------------|
| 1. Not helpful at all | 2. Just a little helpful |
| 3. Rather helpful | 4. Very helpful |

6.4 Uncoded feedback

- | | |
|-----------------------|--------------------------|
| 1. Not helpful at all | 2. Just a little helpful |
| 3. Rather helpful | 4. Very helpful |

7. After completing homework assignment for a long period of time, to what extent did you feel more **encouraged** to write in English?

- | | |
|---------------|------------------|
| 1. Not at all | 2. Just a little |
| 3. Moderately | 4. A lot |

8. When you received homework assignments back, to what extent did you pay **attention** of the feedback?

- | | |
|---------------|------------------|
| 1. Not at all | 2. Just a little |
| 3. Moderately | 4. A lot |

9. When you read each type of the following feedback, to what extent did you think that the feedback that you received was **clear**?

9.1 Content feedback

- | | |
|---------------------|-------------------|
| 1. Not clear at all | 2. Not very clear |
| 3. Fairly clear | 4. Very clear |

9.2 Direct feedback

- | | |
|---------------------|-------------------|
| 1. Not clear at all | 2. Not very clear |
| 3. Fairly clear | 4. Very clear |

9.3 Coded feedback

- | | |
|---------------------|-------------------|
| 1. Not clear at all | 2. Not very clear |
| 3. Fairly clear | 4. Very clear |

9.4 Uncoded feedback

- | | |
|---------------------|-------------------|
| 1. Not clear at all | 2. Not very clear |
| 3. Fairly clear | 4. Very clear |

10. To what extent did you **like** how the teacher responded to your homework assignments?

- | | |
|---------------|--------------|
| 1. Not at all | 2. Not much |
| 3. Moderately | 4. Very much |

11. When you found a point in the feedback that you did not understand, how often did you **try to understand** it?

- | | |
|----------|--------------|
| 1. Never | 2. Sometimes |
| 3. Often | 4. Always |

12. In case that the teacher **did not ask you to edit** your writing, to what extent did you think you **pay attention** of the teacher feedback.

- | | |
|---------------|------------------|
| 1. Not at all | 2. Just a little |
| 3. Moderately | 4. A lot |

13. To what extent did you think how the teacher provided feedback was **suitable**?

- | | |
|------------------------|----------------------|
| 1. Not suitable at all | 2. Not very suitable |
| 3. Rather suitable | 4. Very suitable |

APPENDIX F

Course Syllabus

1/2549

Subject Code	205222
Credit	3(3-0)
Course Title	Paragraph Writing
Course Condition	-
Course Status	Elective course
Curriculum	English major
Degree	Bachelor
Lecturer	Chittima Kaweera

Course Description

Students practice writing different types of paragraphs for a meaningful communication and writing sentences containing main clauses with proper discourse connectors.

Objectives

By the end of the course, students should be able to do the following:

1. Identify the components of a sentence.
2. Build up a simple, compound and complex sentence.
3. Identify component and types of paragraphs.
4. Write different types of paragraphs effectively.

Subject Detail

Lecture: Group 171	Wednesday	13.00-14.30
	Thursday	8.00- 9.30
Group 172	Monday	8.00- 9.30
	Thursday	9.30- 11.00

Date/Time	Class Meeting	Contents	Activities	Materials	อาจารย์ผู้สอน
Week 1 12-16 June	1 – 2	- Introduction to the course outline - Classification of sentences	- Question and Answer - Write bio data	- Computer presentation	Chittima
Week 2-3 19-30 June	3 – 6	- Classification of sentences - Sentence correction: subject and verb agreement - Sentence correction: Fragment and Run-on sentence - components of paragraph - process in writing	- In class writing workshop	- Computer presentation - Paper	Chittima
		- In class editing and correcting workshop	- Computer presentation	Chittima	
		- Lecture - In class writing workshop	- Computer Presentation	Chittima	
		- Lecture	- Computer presentation	Chittima	
Week 4-5 3-10 July	7 – 9	- Introduction to narrative paragraph - Writing Daily routine	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 5-6 14 – 21 July	10 – 12	- Writing Storytelling paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 7-8 24-31 July	13-15	- Writing autobiography paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 8-9 4-11 August	16-18	- Introduction to Descriptive paragraph - Writing descriptive paragraph	- Lecture - Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 10-11 14-21 August	19-21	- Writing descriptive paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima

Date/Time	Class Meeting	Contents	Activities	Materials	อาจารย์ผู้สอน
Week 11-12 25 August – 1 September	22-24	-Writing Descriptive Paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 13-14 4-11 September	25-27	- Introduction to comparison & contrast paragraph - Writing comparison & contrast paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 14-15 15-22 September	28-30	- Writing comparison & contrast paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima
Week 16-17 5 September - 2 October	31-33	- Writing comparison & contrast paragraph	- Study model paragraph and its components - Practice Prewriting, Brainstorming and revising	- Computer presentation - Handout - Paper	Chittima

Evaluation criteria

Evaluation

1. Attendance & Participation	10%
2. Assignments	30%
3. Midterm test	20%
4. Final exam	40%
Total	100%

Criteria for Grading

Grade	Score
A	80-100
B+	75-79
B	70-74
C+	65-69
C	60-64
D+	55-59
D	50-54
F	0-49

Teaching Materials/References

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Epes, M. (1993). **Writing and editing**. 2nd ed. New Jersey: Prentice Hall.

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APPENDIX H

TOEFL Writing Scoring Guide

Score of 6

An essay at this level:

- effectively addresses the writing task
- is well organized and well developed
- uses clearly appropriate details to support a thesis or illustrate ideas displays consistent facility in the use of language
- demonstrates syntactic variety and appropriate word choice

Score of 5

An essay at this level:

- may address some parts of the task more effectively than others
- is generally well organized and developed
- uses details to support a thesis or illustrate an idea
- displays facility in the use of the language
- demonstrates some syntactic variety and range of vocabulary

Score of 4

An essay at this level:

- addresses the writing topic adequately but may slight parts of the task
- is adequately organized and developed
- uses some details to support a thesis or illustrate an idea
- demonstrates adequate but possibly inconsistent facility with syntax and usage
- may contain some errors that occasionally obscure meaning

Score of 3

An essay at this level may reveal 1 or more of the following weaknesses:

- inadequate organization or development
- inappropriate or insufficient details to support or illustrate generalizations
- a noticeably inappropriate choice of words or word forms
- an accumulation of errors in sentence structure and/or usage

Score of 2

An essay at this level is seriously flawed by 1 or more of the following weaknesses:

- serious disorganization or underdevelopment
- little or no detail, or irrelevant specifics
- serious and frequent errors in sentence structure or usage
- serious problems with focus

Score of 1

An essay at this level:

- may be incoherent may be undeveloped
- may contain severe and persistent writing errors

Score of 0

An essay will be rated 0 if it:

- contains no response
 - merely copies the topic
 - is off-topic, is written in a foreign language or consists only of keystroke characters
-

APPENDIX I

The Results of Analysis of Errors per 100 words in Narrative Writing

Univariate Analysis of Variance

Between-Subjects Factors

		N
Trt	F1	81
	F2	81
	F3	81

Tests of Between-Subjects Effects

Dependent Variable: Hund_words

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1221.473 ^a	2	610.737	75.679	.000
Intercept	2104.268	1	2104.268	260.749	.000
Trt	1221.473	2	610.737	75.679	.000
Error	1936.821	240	8.070		
Total	5262.563	243			
Corrected Total	3158.295	242			

a. R Squared = .387 (Adjusted R Squared = .382)

Post Hoc Tests

Trt

Multiple Comparisons

Dependent Variable: Hund_words

Scheffe

(I) Trt	(J) Trt	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
F1	F2	-5.4888*	.44639	.000	-6.5883	-4.3893
	F3	-2.5876*	.44639	.000	-3.6871	-1.4881
F2	F1	5.4888*	.44639	.000	4.3893	6.5883
	F3	2.9012*	.44639	.000	1.8017	4.0007
F3	F1	2.5876*	.44639	.000	1.4881	3.6871
	F2	-2.9012*	.44639	.000	-4.0007	-1.8017

Based on observed means.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Hund_words

Scheffe^{a,b}

Trt	N	Subset		
		1	2	3
F1	81	.2506		
F3	81		2.8382	
F2	81			5.7394
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 8.070.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

APPENDIX J

The Results of Analysis of Errors per 100 Words in Descriptive Writing

Univariate Analysis of Variance

Between-Subjects Factors

	N
Trt F1	81
F2	81
F3	81

Tests of Between-Subjects Effects

Dependent Variable: Hund_W

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	288.603 ^a	2	144.302	36.322	.000
Intercept	1117.990	1	1117.990	281.407	.000
Trt	288.603	2	144.302	36.322	.000
Error	953.485	240	3.973		
Total	2360.078	243			
Corrected Total	1242.088	242			

a. R Squared = .232 (Adjusted R Squared = .226)

Post Hoc Tests

Trt

Multiple Comparisons

Dependent Variable: Hund_W

Scheffe

(I) Trt	(J) Trt	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
F1	F2	-1.8764*	.31320	.000	-2.6479	-1.1050
	F3	-2.5825*	.31320	.000	-3.3540	-1.8111
F2	F1	1.8764*	.31320	.000	1.1050	2.6479
	F3	-.7061	.31320	.081	-1.4775	.0654
F3	F1	2.5825*	.31320	.000	1.8111	3.3540
	F2	.7061	.31320	.081	-.0654	1.4775

Based on observed means.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Hund_W

Scheffe^{a,b}

Trt	N	Subset	
		1	2
F1	81	.6586	
F2	81		2.5351
F3	81		3.2411
Sig.		1.000	.081

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 3.973.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

APPENDIX K

The Results of Analysis of Errors per 100 Words in Comparison/Contrast Writing

Univariate Analysis of Variance

Between-Subjects Factors

		N
Trt	F1	81
	F2	81
	F3	81

Tests of Between-Subjects Effects

Dependent Variable: Hund_word

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	469.044 ^a	2	234.522	84.066	.000
Intercept	1267.465	1	1267.465	454.328	.000
Trt	469.044	2	234.522	84.066	.000
Error	669.541	240	2.790		
Total	2406.051	243			
Corrected Total	1138.586	242			

a. R Squared = .412 (Adjusted R Squared = .407)

Post Hoc Tests

Trt

Multiple Comparisons

Dependent Variable: Hund_word

Scheffe

(I) Trt	(J) Trt	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
F1	F2	-3.3443*	.26246	.000	-3.9907	-2.6978
	F3	-2.2179*	.26246	.000	-2.8643	-1.5714
F2	F1	3.3443*	.26246	.000	2.6978	3.9907
	F3	1.1264*	.26246	.000	.4800	1.7729
F3	F1	2.2179*	.26246	.000	1.5714	2.8643
	F2	-1.1264*	.26246	.000	-1.7729	-.4800

Based on observed means.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Hund_word

Scheffe^{a,b}

Trt	N	Subset		
		1	2	3
F1	81	.4298		
F3	81		2.6476	
F2	81			3.7741
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on Type III Sum of Squares

The error term is Mean Square(Error) = 2.790.

a. Uses Harmonic Mean Sample Size = 81.000.

b. Alpha = .05.

CURRICULUM VITAE

Ms. Chittima Kaweera was born in Tak on January 10, 1977. She received a Bachelor's and Master's of Arts in English from Naresuan University. Since 2003, she has joined the doctoral program in English language studies offered by Suranaree University of Technology (SUT). She also had a one-year research leave at the University of Dundee, United Kingdom developing her research skills under the supervision of Dr. Glen Fulcher and Dr. David Caterlick. Her research interests include teacher written feedback and teaching EFL writing.