

國立政治大學英國語文學系碩士在職專班碩士論文

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教師回饋對台灣高中 EFL 低成就學生段落寫作之效用：
「直接訂正法」與「語意重述法」

The Effects of Corrective Feedback on Taiwan High School EFL Low-achievers'
Paragraph Writing: "Direct Correction" vs. "Reformulation"

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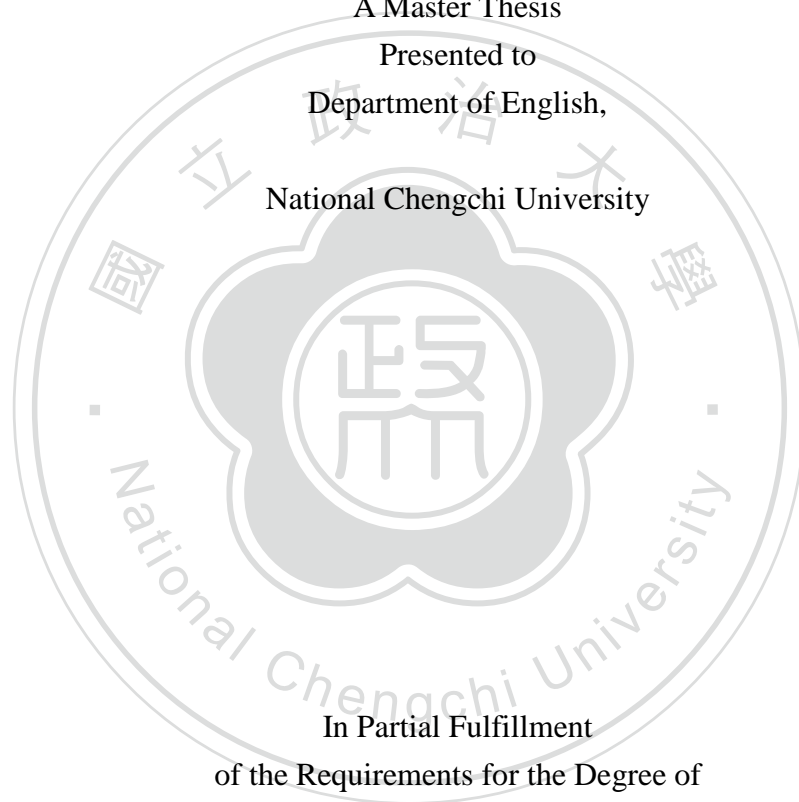
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Paragraph Writing: Direct Correction vs. Reformulation

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To My Parents
獻給我的父母



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碩士論文提要

論文名稱：教師回饋對台灣高中 EFL 低成就學生段落寫作之效用：
「直接訂正法」與「語意重述法」

指導教授：葉潔宇博士

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論文提要內容：

本研究針對台灣 EFL 低成就學生之段落寫作，比較「直接訂正法」與「語意重述法」兩種寫作回饋之成效。本研究對象為台北市某高職學生，共 56 名學生全程參與這項從 2009 年 9 月到 2010 年 1 月的研究。進行修改寫作時，教師對實驗組使用「語意重述法」，學生比較原稿與老師保留學生原意但改寫成符合英文語法的段落，並將發現的文法錯誤記錄並自行訂正；對照組則運用「直接訂正法」，學生審視老師直接在上面訂正的原稿。經過看圖英文段落寫作的前測與後測、實驗組與對照組後測結果比較、以及針對實驗組的訪談，研究結果如下：(1) 整體性評量上，「語意重述法」對學生改進寫作較為有效；(2) 兩組中程度較差之低成就學生進步程度均優於程度較好之低成就學生，尤其實驗組之程度較差者進步程度猶勝於對照組的；(3) 「直接訂正法」對減少學生文法錯誤之功效優於「語意重述法」；(4) 絕大多數參與者認為「語意重述法」有助增進寫作能力。論文最後討論此研究在教學上的意涵與提出對之後研究的建議。

Abstract

This study aimed to compare the efficacy of “direct correction” with that of “reformulation” on Taiwan EFL low-achievers’ paragraph writing. Fifty-six students in a vocational high school in Taipei City participated in this study from Sep. 2009 through Jan. 2010. When conducting revision activities, the teacher implemented the “reformulation” technique in the experimental group. The students compared the originals with the reformulated versions given by the teacher, and detected, recorded, and corrected all the grammatical errors mainly on their own. The control group received the “direct correction” treatment, examining their originals with the teacher’s corrections on them. With the pre-test and the post-test on a paragraph-length English picture description, the comparison of the post-test results between the experimental and control groups, and interviews with the experimental group, the results are as follows: First, in holistic rating, “reformulation” was more helpful than “direct correction” in improving the participants’ writing performance. Second, the low-achievers with lower proficiency benefited more from “reformulation” than those with better proficiency. Third, “direct correction” was more effective than “reformulation” in reducing the participants’ grammatical errors. Fourth, the majority in the experimental group were positive of “reformulation” as a way to improve writing. Finally, some implications for pedagogy and suggestions for future studies were made.

CHAPTER 1

INTRODUCTION

Motivation and Background

Writing assignments and follow-up feedback characterize any language writing course (Kroll, 2001). Students have to write in order to improve writing ability; at the same time, teachers' feedback can be referred to as directions to their improvement. Furthermore, in terms of learning English as a second or foreign language (ESL or EFL), students' written production can reveal whether they have acquired the target language, especially at the aspect of form. Based on the written texts, corrective feedback (CF) can be provided for learners to correct their misinterpretations about some aspect of the target language (Larsen-Freeman, 2001).

CF studies on English writing are found dominantly in the context where students have English proficiency at the intermediate level or above, and the written output investigated are compositions, essays, or papers (Ashwell, 2000; Fathman, & Walley, 1990; Huang, 2006; Naeini, 2008; Wu, 2003; to name but a few). Different aspects regarding CF have been investigated. In terms of student processing, Cohen (1987) surveyed 217 second language learners in a university and found that 80 % of them preferred to make a mental note when receiving written feedback. Li (2004) classified the errors and discussed possible causes in the 94 ESL college students' free writings on self introduction. In addition, more attention is given to the relationship between CF types and their effects (Ashwell, 2000; Bitchener et al., 2005; Fathman, & Walley, 1990; Ferris, & Roberts, 2001; Huang, 2006; Naeini, 2008; Wu, 2003).

Many of the researchers mentioned above are positive of CF effects on English writing, while some researchers oppose corrective feedback in language learning. Truscott (2007) indicates that corrective feedback should be abandoned because it

hinders students' freedom of producing the target language. In addition, Guénette (2007) doubts the CF effects, as he finds that many students do not read the corrected papers. When these students ignore what to notice in their EFL/ESL use, the errors tend to repeat themselves (Miao, Badger, & Zhen, 2006). Even so, Swain (1985) stresses the importance of CF and advocates it as the medium between comprehensible input and output in the target language. Actually, the EFL low-achievers, like many in Taiwan, have to depend greatly on their teachers' corrective feedback to find out what to improve in their English writing. According to Larsen Freeman (2001), CF is what students need to reject or modify their hypotheses about the target language. In fact, whether CF makes effect on writing ability relies heavily on learners themselves. Responsibility for the correction of any given piece of writing should fall mainly on the student, not on the teacher (Rosen, 1987). Learners should be trained to search for, find, and correct their own mistakes. This awareness-raising purpose may be served through reformulation (Cohen, 1982, 1983), a CF procedure through which learners make cognitive comparison between their second/foreign language (L2/FL) and the target language, and become more conscious of their L2/FL use.

Though the studies on reformulation have been conducted with L2 learners at the higher intermediate level and above (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003), few empirical studies, if any, have targeted at the EFL learners in Taiwan, who learn English as an exam subject and have little access to communicative use of English. That is, English learning in most EFL classrooms in Taiwan is synonymous with developing accurate English grammar, vocabulary, and translation skills since the goal is to pass high school and university entrance exams (Fotos, 2001). Therefore, further research needs to be conducted in such an English learning context to

determine the effect of reformulation on Taiwan EFL learners' writing. In addition, it is interesting to uncover the relationship between students' English proficiency levels and the extent of improvement when reformulation is employed in the writing process.

Purpose and Value of the Study

The present study aims to uncover whether Taiwan EFL low-achievers progress in paragraph writing through reformulation, and to explore how reformulation may influence EFL learners with different English proficiency levels. It is expected that each participating student may pay attention to his or her own errors and decrease the frequency of error making through comparison and contrast of their erroneous sentences with the reformulated version. In the meantime, the participants are expected to perceive the form of the target language through awareness-raising so that they may advance in writing performance.

To put it differently, through reformulation, or awareness-raising in the target language, the participants are expected to turn to their knowledge of grammar, and to see what can fit in with the relationship they map out between form and meaning. Therefore, in the present study, reformulation is supposed to facilitate the interaction of input and output, which leads up to language acquisition.

More importantly, the reformulation procedure is adopted to force students to become more involved in and responsible for their learning since they have to notice and compare the similarities and differences between two language systems (the target and native languages). It is hoped that reformulation would encourage more student involvement in learning how to write more correctly in English.

Definition of Terms

Reformulation: Reformulation is an alternative corrective feedback in writing. It means that a native speaker rewrites a second language learner's composition but the latter's original ideas are retained. Then the learner is asked to make cognitive comparison between his or her original sentences and the native-speaker version. He or she is expected to find how his or her ideas can be conveyed in the target language and thus to adjust his or her interlanguage to become more similar to the very language.

This procedure has been adopted in several L2 writing studies (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003). The researchers found, compared to traditional reconstruction or correction in writing, that reformulation appeared to be more stimulating and meaningful feedback for the L2/FL learners to attend to their misuses of the target language, and hence to pursue more native-like language use. In other words, reformulation is a procedure where students' output turns out to be more digestible input, or intake, which may better raise the target students' attention to their L2/FL use in writing and speed up language acquisition.

In the present study, the part of the reformulator, or the rewriter is altered to better fit the real English classroom situation in Taiwan. This is due to the fact that an English native speaker is seldom available in English writing classes in Taiwan's senior high schools. Therefore, the rewriter in the present study is the teacher-researcher, a senior high school English teacher with 7-year teaching experience in English writing.

CHAPTER 2

LITERATURE REVIEW

This chapter will present two aspects of literature relevant to this research. First, Noticing Hypothesis is mentioned to help the readers understand the role of noticing in second language acquisition, which concerns language processing and input-intake-output hypothesis. The second aspect is about corrective feedback (CF) in writing. It is considered essential to lead student-writers to become more conscious of their use of the target language. More significantly, reformulation, a CF technique, is reviewed about its application.

Noticing in Second Language Acquisition (SLA)

The relationship between the knowledge of grammatical forms and rules and the ability to use them accurately in communication remains unclear. However, “noticing” (Schmidt, 1990) has been suggested as an interface by the growing body of empirical evidence in favor of positive effects of formal instruction in SLA. That is, although universal grammar (Chomsky, 1957) appears to guide the first language acquisition in small children, after the critical period, or puberty, learners may need explicit feedback to direct their attention to relevant input toward structures so that they can notice and integrate new forms in the target language.

Schmidt (1990), based on the theory of consciousness (Baars, 1988), stresses the importance of conscious experiences in interlanguage development. His Noticing Hypothesis states that it is possible for implicit learning to happen incidentally during meaningful interaction but learners may require tasks that force them to notice certain aspects of the input. Actually, many ESL/EFL learners, especially those at lower levels of proficiency, cannot process the target language input for both meaning and form at the same time (Skehan, 1998; Tomasello, 1998). This is true especially when

they are focusing attention to the message being conveyed in the target language. Therefore, even while input and interaction are emphasized in communicative language learning, it is crucial to realize that learners may need certain kind of direct intervention (Ellis, 1995). It is also suggested that particular kinds of noticing may be necessary for SLA. That is, not only must learners pay attention to linguistic features of input in order for it to become intake, but they must notice the gap between their interlanguage output and the target language input.

Noticing in SLA has been addressed in different terms. First, “consciousness-raising,” used by Rutherford and Sharwood Smith (1985), refers to increased learner awareness of particular linguistic features. Then Klein (1986) claims that language learners should be able to use “matching” to check their output against an external measure, whereas O’Malley and Chamot (1990) propose two strategies of noticing: “selective attention” and “self-evaluation.” The former means paying attention to particular linguistic items in input, and the latter refers to making sure that output answers to internal accuracy measures. In addition, related studies on corrective feedback (CF) have employed the term “input enhancement” to describe CF as one specific form of consciousness-raising (Lightbown and Spade, 1990; Sharwood Smith, 1991; White et al., 1991). Finally, Ellis (1995) terms noticing as “grammar/cognitive comparison,” which spotlights the fact that the learner must notice both similarities and differences between the interlanguage and the target language. That is, one can confirm and disconfirm hypotheses that exist in his or her implicit knowledge by comparing what one has noticed in input to what one is able to produce in output. Among the noticing-related strategies above, the awareness of grammatical form is viewed as crucial in helping learners to restructure their interlanguage systems.

Language Processing

Concerning the role ascribed to noticing as a trigger in language processing, Table 2.1, cited from Skehan (2002, p. 88-89), briefs the interaction between input and output in language acquisition and highlights the comparison and interaction between the interlanguage and the target language. In the process, only some portion of new information of the target language may be perceived by the learner. At the same time, explicit knowledge (learned linguistic structures) usually does not turn directly into implicit knowledge (acquired linguistic competence) because of learnability constraints. That is, when learners' interlanguage is not sufficiently advanced, they may not be able to integrate certain kinds of new information. However, according to Ellis (1995), explicit knowledge might help learners' notice forms, to think about what they mean, and to compare those form-function mappings with their interlanguage systems.

Table 2.1

SLA processing (cited from Skehan, 2002, p. 88-89)

SLA processing stage	Nature of stage
Noticing	The learner directs attention to some aspects of the language system, or is led to direct attention in this way.
Pattern identification	On the basis of the focal attention, the learner makes a hypothesis or generalization, implicitly or explicitly, about the target language, based on a perceived pattern or regularity.
Extending	The learner extends the domain of the hypothesis, without changing it fundamentally in kind.
Complexifying	The learner apprehends the limitations of the identified pattern and restructures it, as new aspects of the target language are noticed.

Integrating	The learner makes an attempt at the output by integrating the new subarea of interlanguage into a learning structure.
Becoming accurate, avoiding error	The learner becomes able to use the interlanguage area without making errors, although this use may be slow and effortful.
Creating a repertoire, achieving salience	Not only can errors be avoided, but the interlanguage form can be accessed at appropriate places--it becomes part of salient (not latent) language repertoire.
Automatizing rule-based language, achieving fluency	The domain is now used correctly with reasonable speed, and the role has become, to some degree, proceduralized (implicit).
Lexicalizing	The learner, at this stage, is also able to produce the interlanguage form in question as a lexicalized element. Namely, language which may be analyzable (and has been produced on the basis of analysis) is now also available as a lexical element. In addition, the learner is able to choose freely, and appropriately, between lexicalized representation of an interlanguage form and its rule-based creative version.

One thing to notice here is that noticing does not guarantee that input will become intake, and its usefulness may depend on a learner's developmental readiness. However, if noticing truly is a prerequisite to acquisition as Schmidt maintains, instruction that promotes noticing should make language acquisition more likely. Moreover, several researchers (Ellis, 2001; Gass, 1988; Robinson, 1995; Schmidt, 1990) have discussed a variety of factors which may influence whether learners notice forms and achieve intake. Considering the external factors, one's quality of noticing and acquisition can be affected by the materials for instruction, the task demands, the learning environment, as well as the frequency, perceptual salience (defined as availability of data), and complexity of the forms. The internal factors may include a

learner's developmental stage, learnability constraints, prior knowledge, skill level, memory, and attentional capacities, social distance, status, motivation, and attitude. All the above points will be useful when the results of this empirical study are discussed later.

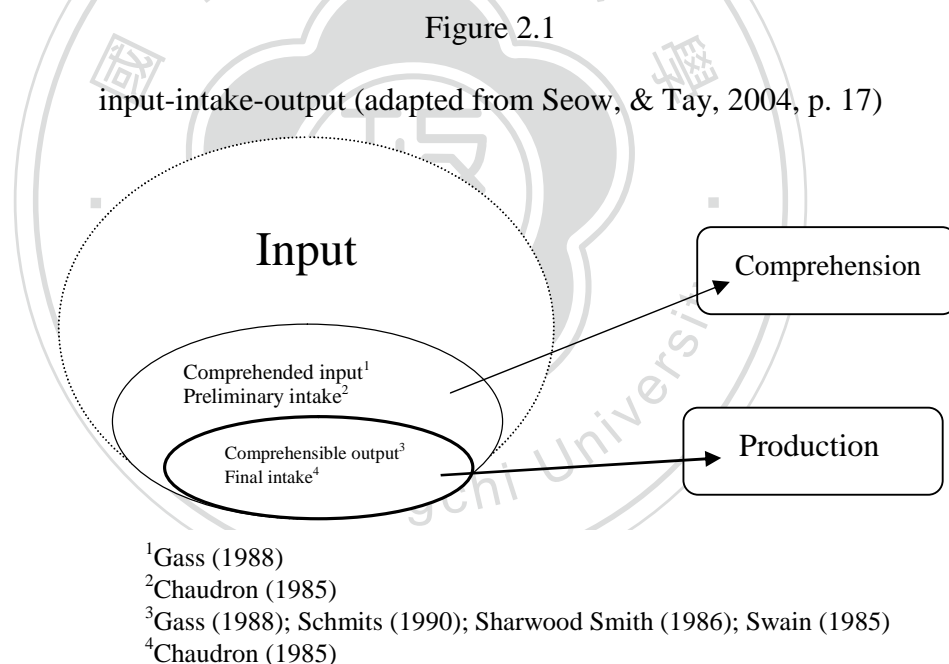
Input-intake-output Hypothesis

According to Krashen (1984), input is either comprehensible or not; comprehensible input will automatically trigger language acquisition. In contrast to comprehensible input, which is controlled by the person providing the linguistic data, Gass (1988) proposes "comprehended input," which is devised to stress that it is the learner who is doing the "comprehension" work. In other words, a learner, when exposed to input, should be able to pay selective attention to certain part of the new linguistic information.

Comprehended input is usually multi-staged. One may first realize the semantic meaning of the input, then perform linguistic analysis, and finally understand its phonological and syntactic patterns. However, not all that is comprehended becomes intake; only certain portion is perceived for processing, which is "preliminary intake" (Chaudron, 1985). Intake is not simply a subset of input, but the process of attempted integration of linguistic information, which mediates between target language input and the learner's internalized set of rules. Moreover, when preliminary intake is further processed, it turns into "final intake" (Chaudron, 1985), a part of the larger corpus of comprehensible input responsible for enabling the learner to understand and use stored linguistic data.

To achieve successful language acquisition, learners would need the opportunity for meaningful use of the integrated linguistic resources. "Comprehensible output," according to Swain (1985), can extend learners' linguistic repertoire as they attempt

to create precisely and appropriately the meaning desired. When learners attempt to produce the target language, the difficulties which they experience may push them to become aware of what they need to express themselves effectively. Learners would attend to the form of the very language, deal with their problematic linguistic product, and modify it. Such a process assists them in extending their knowledge of the target language. Ellis (1990), echoing Swain, regards production as a medium between the learner's semantic and syntactic processing. Such output can stem from final intake. The relationship among input, intake, and output in SLA may be summarized in Figure 2.1, adapted from Seow, & Tay (2004, p. 17).



Corrective Feedback in Writing

Theoretically, in SLA there exists a close relationship between noticing and output. Noticing is the prerequisite of language acquisition, while comprehensible output is the evidence of whether language acquisition is successful or not.

Pedagogically, errors which appear in production have been treated as opportunities to facilitate SLA. Errors in output, according to Swain (1998), can prompt second

language learners to recognize consciously some of their linguistic problems. They may thus become aware of something they need to find out about their second/foreign language (L2/FL). In Swain and Lapkin's study in 1995, by means of think-aloud, the French immersion participants, average aged 13, reported noticing the gaps between their interlanguage and the target language while producing their compositions. The students were also found to engage in certain thought processes, including grammatical analysis for accuracy, when they encountered difficulties in producing the target language. In addition, the substance of these participants' thoughts was sometimes faulty, which led to incorrect hypotheses and inappropriate generalizations. This implies that relevant feedback can play a central role in improving L2 writing development.

Many L2/FL learners regard corrections as essential and want to be corrected regularly (Havranek, 2002; Leki, 1991; Schulz, 2001; Zhang, 1995). However, regarding feedback, there seems to be a debate over issues such as form/meaning focus (Horowitz, 1986; Hyland, 1998; Paulus, 1999; Zamel, 1988) and effectiveness of teachers' comments or error correction (Ferris, 1999; Polio, Fleck, & Leder, 1998; Semke, 1984; Truscott, 2007; Zamel, 1985). Whatever form feedback may come in, its purpose is to help learners to notice the gaps between their L2/FL output and the native speaker's version.

In fact, if learners can be conscious of the gaps, they are doing their own error analysis (EA), which can be more effective than mere grammatical correction or comments from peers and teachers (James, 1998). Learners first notice something problematic in their own production, and then they compare it with a native-speaker version of it. Practically speaking, James' EA strategy seems more workable in real L2/FL classrooms, especially when the students are at lower levels of proficiency.

Such students can only depend on their own recent learning experiences (especially negative ones) to notice the forms and to make cognitive comparisons (James, 1998). This EA sense of cognitive comparison is consistent with the technique of “reformulation” (Levenston, 1978).

Reformulation

Reformulation is an alternative procedure of giving corrective feedback, which refers to a native speaker’s rewriting of a L2 learner’s composition without changing the latter’s ideas. As proposed by Levenston (1978), to make a composition more native-like, the content the learner provides in the original draft is maintained, but its awkwardness, rhetorical inadequacy, ambiguity, logical confusion, style, and so on, as well as lexical inadequacy and grammatical errors are tidied up.

Inspired by Levenston, Cohen incorporated reformulation in his studies in 1982, 1983, and 1989 with higher-intermediate and advanced L2 learners. He contended that reformulation could benefit L2 writers in vocabulary, syntax, paragraphing, and cohesion. The student-writers, who received the reformulation procedure in his 1982 and 1983 studies, were found to discern problems of cohesion, grammatical rules, precision in the use of vocabulary, as well as differences in levels of formality in the target language.

Qi, & Lapkin (2001) highlights that reformulation is superior to other kinds of CF in three aspects:

1. It provides the structures most relevant to the learner’s personal needs and interests since they are tailor-made for his or her original ideas and intentions.
2. It offers appropriate forms for those who have little experience with the target language and who cannot figure out solutions for themselves.
3. It can be an activity either meaning-driven or form-focused, or both,

depending on the task design and chosen text.

In addition, the reformulation procedure seems in accord with Gass' (1988) comprehended input. That is, the reformulated version of L2/FL writing serves as a kind of comprehended input for the learners. Since it is directly related to their previous output, according to Myers (1997), this later input, or intake, can particularly evoke their personal responses. When language learners evaluate it with their original intentions and knowledge of rules, they may increase their awareness about their common mistakes, and think about how they could have used certain structures and grammar to express their ideas.

Even so, in Cohen's 1983 study, when compared with direct correction, the reformulation treatment was found less successful, particularly in the areas of syntax and cohesion, where it was supposed to excel. Therefore, he explained that only the learners at higher-intermediate levels and above appeared to benefit more in the process of reformulation. In the meantime, he considered that the reformulation technique needed refining, suggesting that further research could be conducted to investigate whether this technique feasible with beginning or intermediate students.

Sachs (2003), following Qi, & Lapkin's study in 2001, conducted two successive studies, the first with 15 high-intermediate ESL university students and the second with 54 ESL university students from a variety of levels (none of whom participated in Study 1). She devised three writing conditions--explicit error correction, reformulation, and reformulation plus think-aloud--to investigate' the students' evidence of noticing by having them compare their originals and the corrected, or reformulated versions. The research measures for Study 1 are demonstrated in Table 2.2, cited from Sachs, 2003, p. 64.

Table 2.2

Three-day sequences of the three experimental conditions (cited from Sachs, 2003, p. 64)

Condition	Tuesday (30 min)	Thursday (15 min)	Friday (20 min)
Error Correction	Write a 30-minute picture description.	Look at explicit error corrections of the essay.	Revise a clean copy of the original essay.
Reformulation	Write a 30-minute picture description.	Compare the essay to a reformulated version.	Revise a clean copy of the original essay.
Reformulation + Think-Aloud	Write a 30-minute picture description.	Compare the essay to a reformulated version while thinking aloud.	Revise a clean copy of the original essay.

In this study, each of the fifteen participants had to go through the three writing conditions by turns. In every condition, each wrote one story describing a set of comic strips; that is, every participant composed three different stories. Two raters coded every story and found 3481 errors, categorized into 40 types. After the error coding and correction (grammatical errors were corrected, style and cohesion improved, and some more accurate vocabulary introduced), reformulations of the original stories were typed on separate sheets of paper and given back to the participants in the reformulation and think-aloud sessions. The next day, based on clean copies of the originals, the participants rewrote the same comic strips without any notes.

For data analysis, Sachs (2003) divided each original, as well as its revision, into T-units, and each T-unit (the shortest unit which a sentence can be reduced to, and consisting of one independent clause together with whatever dependent clauses are attached to it) was coded for evidence of noticing, i.e. “revision accuracy,” to observe whether there was any change in the revised version--at least partially changed (+), completely corrected (0), completely unchanged (-), or not applicable (n/a). Her research results suggested, “error corrections were the most effective in promoting changes in accuracy at the level of T-units, followed by reformulations, and finally

think-alouds” (2003, p. 69).

Sachs (2003) implemented the same research procedures in Study 2, where forty-four participants were either high intermediate or advanced ESL university students, and the other ten came from an ESL class at a local community college. The results again indicated that error correction outperformed reformulation in light of linguistic accuracy in revisions. In other words, both Sachs’ study results came opposed to her initial assumption--reformulation would be more helpful than explicit error correction. Therefore, Sachs further discussed that “memory” and “time” could have affected the study results. As the participants in the Error Correction condition did not have to search for differences or talk about what they were doing, they probably had more time to understand and to remember the corrections.

Research Questions

Reformulation has been investigated in the L2 context where learners have frequent use of English for communication and have access to an abundance of English input (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003). At the same time, it has been found effective with the participants at high intermediate L2 level or above. Nevertheless, little literature, if any, has targeted at the effects of reformulation on EFL high school low-achievers. These English learners are unable to write an accurate English sentence though exposed to formal English instruction for at least five years (Lee, 2009). This may be owing to the fact that they have little access to communicative English use (Fotos, 2001). These students may need to become more conscious of their English use in written form. Therefore, further research should be undertaken to determine whether reformulation can benefit EFL low-achievers. Considering these students’ poor proficiency, the present study is conducted to investigate the effects of reformulation on their paragraph writing, and is intended to

focus on the grammaticalness (form) of their writing products. It is expected that these participants may boost their consciousness of form-meaning correspondence in their use of the target language, English.

The questions to be investigated in this research are listed as follows:

1. Is reformulation, compared to direct error correction, more helpful in Taiwan EFL high school low-achievers' paragraph writing?
2. Among Taiwan EFL high school low-achievers, do those with better English writing proficiency benefit more from reformulation in writing than those with lower English writing proficiency?
3. Is there any change in the errors made by EFL low-achievers after reformulation?
4. What do the students think of reformulation as a way to improve writing?

CHAPTER 3

METHODOLOGY

This chapter describes how the research is designed to investigate whether reformulation can make any positive effect on senior high school EFL low-achievers in paragraph writing in Taiwan.

Participants

The participants in the present study were sixty Taiwan's freshmen from a private senior high school in northern Taipei. They were selected from two classes of 40 according to the test results from the English subset of the Basic Competence Test for Junior High School Students (EBCT) in July, 2009. Based on the EBCT scores, when the participants were assigned, ten students from each class who might affect the homogeneity of grouping were excluded from the list of the participants before the treatment even though they still took part in all the class activities.

The participants, 32 boys and 28 girls, were 15 to 16 years old. They had received formal English instruction in the EFL context for at least five years (2 years in elementary school and 3 years in junior high). While the full marks for EBCT were 80, the mean of the participants' scores appeared relatively low (25.78). This suggested that the participants were low-achievers. In the meantime, the standard deviation (11.335) indicated that the scores were widely distributed among the participants. Ten of them gained EBCT scores between 1 and 14; fourteen scored from 15 to 23; sixteen had scores ranging from 24 to 30; twelve received scores from 32 to 42; and, eight scored between 44 and 51.

Then, based on the results of the writing pre-test (see Table 3.2), these students were divided into two groups, one experimental group and one control group. The experimental group consisted of the students whose writing scores were similar to

those in the control group. In addition, two participants in the control group were absent on the day when the post-test was administered. Therefore, two experimental participants with pre-test writing performances similar to the control absentees were excluded from the statistics to make the experimental and control groups identical both in student number (28) and in writing ability.

In addition, all the participants were instructed by the same English teacher. None of them had received formal English writing instruction before. During the experiment, the experimental group detected and recorded their own errors in writing, while the control group received direct error correction.

Instruments

In order to answer the four research questions, the following instruments were employed in the present study: (a) the 2009 EBCT; (b) a GEPT elementary level writing test; (c) the GEPT holistic scoring guide; (d) the reformulation technique; (e) an error record form; (f) the error classification system; (g) a semi-structured interview.

EBCT in 2009

The present study aimed to investigate EFL low-achievers' paragraph writing in their first semester in senior high. Therefore, the participants' EBCT scores were examined to determine their English performance before the fall semester. The EBCT, held every July, was a national standardized test designed to examine how Taiwan junior high school graduates perform in English after three years of formal English instruction in junior high. It was constituted of 45 multiple-choice questions testing vocabulary, idioms and phrases, grammatical usages, and reading comprehension. In the present study, the EBCT scores were referred to as the participants' English achievements. Considering 80 as the full marks, the test takers who scored far below

it were defined as low-achievers.

GEPT Elementary Level Writing Test

To investigate improvement in writing, a paragraph writing test, adopted from an elementary level test of General English Proficiency Test (GEPT), was employed twice with an interval of ten weeks. Namely, the same writing test was conducted as the pre-test and the post-test. The GEPT was a standardized test developed by the Language Training and Testing Center (LTTC) in Taiwan. With the support of the Ministry of Education, its test results had been accepted widely in Taiwan as an indication of its test takers' general English proficiency. Therefore, GEPT was adopted in the present study to test the participants' paragraph writing ability.

The results from the pre-test were used to determine the participants' initial ability in paragraph writing before any treatment. Meanwhile, the scores were used as reference to divide the participants into one experimental group and one control group so that the two groups appeared homogeneous in terms of initial writing ability. Then four weeks after the treatment, the same test was administered as the post-test to compare the extent of improvement between the two groups.

This test lasted for thirty minutes and required the test takers to write 50 English words to describe the four pictures on the test paper (see Appendix A). The test takers were allowed to write as many words as they could in order to convey their ideas completely. Additionally, those at really poor English levels were encouraged to write as much as possible during the thirty-minute test.

GEPT Holistic Scoring Guide

The GEPT writing scoring guide, researched and developed by the LTTC, was adopted in the present study to evaluate the participants' writings in the pre-test and post-test. As displayed in Table 3.1, a writing product would be assessed as level 0 to

level 5 in consideration of topic development, grammar, wording, spelling, capitalization, and punctuation, as a whole.

Table 3.1

LTTTC Writing Scoring Guide (translated from Chinese)

Level	Criteria
5	Topic is richly and fully developed. Grammar and wording appear nearly error free.
4	Topic is generally clearly and completely developed. Grammar and wording errors are not distracting.
3	Topic is developed clearly, but not completely. Grammar and wording errors are sometimes distracting.
2	Topic development is present, but limited by incompleteness, lack of clarity, or lack of focus. Grammar and wording errors are distracting.
1	Topic development has only one point of view or one dimension. <ul style="list-style-type: none"> ▪ Grammar and wording errors are overarching and seriously distracting.
0	Nothing or little is written.

Reformulation

To probe the effect of noticing (Schmidt, 1990), the researcher reformulated, or rewrote, the writing products from the experiment group in correct English form without changing the authors' original ideas. Reformulation, used in several studies (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003), originally involved both rhetorical and grammatical factors in writing. However, in the present study, given the low achievers' language ability, the technique of reformulation was adapted for the participants to target at their use in English form, and was expected to decrease the grammatical errors in sentence construction. In addition, with the limitation of resources (hiring a qualified native speaker can cost a fortune), the reformulator was

the non-native English teacher-researcher instead of an English native speaker.

Error Record Form

The error record form (see Appendix B), designed by the researcher, was used by the experimental group to record their errors found through comparison between their original sentences and the reformulated ones. The records were regarded as evidence that they had noticed the differences in form between their interlanguage and the target language. In recording the errors, the experiment group might observe how they improved in accuracy of English sentences and could become reinforced to write more accurate sentences.

This form was given and demonstrated to the experimental group when the reformulated versions were given back to them. The list of directions on the form, along with the teacher's oral instructions, led the students to work on individual error identification.

Error Classification System

To analyze the change in the participants' errors, the error classification system (see Appendix C), adapted from Sachs (2003, p. 112-114), had been extensively simplified to enhance its feasibility in the present study. To make the participants fully perceive what error they made, the simplified classification system retained only the most common 18 error types found in the participants' English writing. Moreover, the grammatical terms were presented in Chinese, and were limited to those familiar to the participants. Such modification was intended, firstly, to match up the participants' limited cognition of the form of the target language; secondly, to avoid the participants' pressure and panic from difficult grammatical classification terms. That is, the students were expected to focus their attention only on the errors themselves rather than on the terminology. This modified error classification system was

employed to examine the errors produced in the pre-test and post-test. It aimed to classify those errors and to help indicate the change in the distribution of each type of error before and after the treatment.

Interview

A semi-structured interview was employed to investigate how the experimental students felt about reformulation. The questions were listed as below:

1. What do you think of reformulation as a way to improve your writing?
2. In reformulation, what is easy for you?
3. In reformulation, what is difficult for you?
4. Do you have any suggestions about reformulation?
5. When writing the picture description in the post-test, what do you find about your writing?

During the interview the students' answers were tape recorded for later transcription. The transcripts were coded into several categories for further analysis.

Procedures

The research procedure comprised six steps: sampling and orientation, pre-test, rating and grouping, treatment, post-test and rating, and interview. As to the treatment, it was made up of five writing sessions (see Appendix D). Totally speaking, it took fifteen weeks to finish the six steps: Steps 1, 2, and 3 respectively for one week, Step 4 five weeks; Step 5 conducted four weeks after the treatment took two weeks, and the final step one week. The ten-week interval between the pre-test and post-test were devised to minimize the influence of memory, as discussed in Sachs' studies (2003), and to serve the purpose of examining whether the participants noticed and decreased erroneous use of their original output.

Step 1: Sampling and Orientation

Before the fall semester, based on the EBCT scores, sixty low-achieving freshmen were selected from two classes of forty to participate in the present study (See the **Participants** section). In the first English writing class, both classes were informed that they would have a writing class every week. At this moment, the participants did not know that they would take a picture-description writing test in the following period.

Step 2: Pre-test

In the second English class, the pre-test was administered to collect the data of students' initial ability in writing. The students were asked to write 50 English words to describe four pictures on the test paper. Before the 30-minute picture description, the whole class spent 3 minutes discussing the content of the pictures of a story. By doing this, everyone might have a clear idea of what to write about the pictures. Then they could focus on the use of English rather than think about the plot in the pictures.

With the help of one colleague of the teacher-researcher, the two participating classes took the test concurrently. All the test takers were instructed to read the instructions very carefully before they began to write any sentences. Dictionaries, translators, and peer help were not allowed. The writing test papers were not returned to them until the end of the experiment.

Step 3: Rating and Grouping

The products of the picture description test were first rated by the teacher-researcher and one fellow English teacher before the next writing session. Rating was divided into two stages--holistic scoring and error counting. Such device was implemented after both the pre-test and the post-test. On one hand, the results of holistic scoring were used to answer the first and second research questions

concerning the comparison between the experimental group and control group. On the other hand, error counting dealt with the third research question regarding error change after the treatment. The method of error counting was explained as follows.

Since research question three targeted at the change in error between the pre-test and the post-test, the error counting method was devised by referring to Weltig (2004), and the procedure went as follows. First, the numbers of and the types of error in each piece of writing were recorded and counted. Second, the error total was tallied by adding up the numbers of the 18 types of errors (see Appendix C) in the experimental group. Next, the percentage of each error type was calculated with the following formula: the number of one type of error was divided by the number of all the errors. For example, the error total was 933 and the errors of verb formation appeared 54 times. The error density was thus calculated as $(54/933)*100\%$, which was 5.79%. The error percentage gained in this way would be used later for observation of error change before and after the treatment.

Intra-rater Reliability

To check the intra-rater reliability, ten of these writings were assessed two weeks later, which was the second rating. Each of the two raters independently gave scores based on the GEPT scoring criteria, as she had done for the first rating. All the scores were recorded on separate sheets of paper; that is, the ten writings were kept clean without any marks. When one rater scored the same ten papers, she did not well remember what levels they were assessed as by her for the first rating (since it was two weeks ago).

As for each rater, two sets of grades produced from the first rating and the second rating were respectively calculated with reliability analysis (Cronbach's Alpha value of SPSS 12.0). For the researcher's rating, there was a strong and positive

correlation between the two ratings since the correlation coefficient (r) was .945 ($-1 \leq r \leq 1$). For the other rater, the reliability reached .953 ($-1 \leq r \leq 1$).

Inter-rater Reliability

By referring to the GEPT scoring guide, two clean photocopies of the same ten pre-test writings were scored by the two independent raters individually on the day after the pre-test. The two sets of scores were later analyzed for inter-rater reliability by means of Cronbach's Alpha value of SPSS 12.0. The correlation coefficient (r) was .947 ($-1 \leq r \leq 1$). This result indicated there was a close and positive correlation between the ratings of the raters. Namely, there was great agreement between the raters in operating the GEPT scoring guide, which led the rating to be highly reliable.

Next, the participants' pre-test scores were gained by calculating the means of the scores from the two raters. For instance, student A was rated as level 4 by one rater and as level 3 by the other, so his pre-test writing scored 3.5. These scores were then used to select 56 participants out of the 80 students into the experimental group of 28 and the control group of 28. Both were at a similar level of writing.

Grouping

Before the experiment, two senior high freshman classes of forty had taken the pre-test where each student was asked to write a 50-word English paragraph describing four pictures (see Appendix A). However, only the 56 participants' pre-test results were compared by using independent-sample t-test (SPSS 12.0) and listed as below:

Table 3.1

T-test Result for Pre-test

Group	Means	SD	T-value	df
Class A (n=28)	3.83	.77	2.17	54
Class B (n=28)	3.45	.57		

** = $p < .005$

T-value (2.17, $p < .005$) indicates no significant difference in writing performance between the two groups of students, so no adjustment was necessary to form one experimental and one control group. Thus, randomly, Class A was the experimental group and Class B the control group.

Step 4: Treatment

All the paragraphs produced by the experimental group were rewritten by the teacher in correct English grammar without changing the writers' original ideas. There was no correction or comment marked on the experimental group's originals. In contrast, those in the control group were given direct error corrections on their writings.

The Experimental Group

In the second writing class, the original paragraphs and the reformulated versions, as well as blank error record forms, were returned to the experimental group. Each participant in this group was asked to fill out the form while they were comparing the sentences in the originals with those in the reformulated versions. In this session, the students only had to examine the sentences related to the first picture. They were asked to identify and record their errors in the column labeled as observed errors. In the process, the teacher answered the questions from those who were unable to find out their errors or those who did not know how to correct their errors. In addition, all

the participants revised their problematic sentences based on their findings of the errors and their knowledge of English grammar. This whole activity took ten to fifteen minutes. After that, the originals, reformulations, and error record forms were collected by the teacher.

Before the next session of writing, the teacher read through the error record forms from the experimental group. When she found that one participant had not discovered all of his or her errors on the error record form, she made such comments as “It’s great for you to find one error, but the other two were left unnoticed. Try to find them!” on the column labeled as Teacher’s comments. These comments from the teacher could help make sure that every student in the experimental group found out each error which he or she had made.

In the third session, all the sheets were given back to the participants. First, the students were asked to read the comments from the teacher. Then, some of them had to perfect their error hunt for the first picture based on the teacher’s comments, while the others examined the sentences describing the second picture and kept records of errors. Finally, when all in the experimental group completed the error hunt with the second picture, they gave all their sheets back to the teacher.

The same procedure continued until these students finished examining the sentences concerning the fourth picture. (See Appendix D)

The Control Group

In the second writing session, the control group received their corrected paragraphs. The teacher asked each student to read through his or her paragraph. Then she targeted at one serious error shared by most of the students. For example, many of the students might mistakenly put the accusative case of a pronoun where its genitive case should be. The sentence might go like “The ball hit him eye.” After such

discussion, all the students were asked to revise where they found the discussed error in another sheet of paper. Five minutes later, all the sheets were returned to the teacher.

In the third class, the teacher gave back all the sheets from the control group. Then she discussed another serious error made by many of the students. Soon after that, the students revised the discussed point. Finally all the written results, including the originals and revisions, were collected by the teacher.

The same procedures went on in the following two weeks, as explicated in Appendix D.

Step 5: Post-test and Rating

Four weeks after the treatment (Appendix D), the thirty-minute post-test was administered to examine whether the participants had made any progress in accuracy of sentence construction. The test content was identical to the pre-test in order to control the writing content for later comparison. This device was expected to suit the purpose of investigation into the extent to which the participants noticed the errors which they had ever made. Again, both classes took the test at the same time. Before the test, all the test-takers were guided to read the instructions carefully. No dictionary, translator, or peer help was allowed in the process. Then the sentences were scored by the teacher-researcher with the same rating method.

Step 6: Interview

Two weeks after the post-test, the pre-test and post-test results, including the error rates and numbers, were given back to the experimental group. In this way, each experimental participant had a clear idea of how they performed in both tests and of whether they made any progress in writing. Immediately after that, a semi-structured interview was conducted with the experimental group students who scored top 5 and

those who were rated bottom 5. The talks were tape recorded and transcribed for further analysis.

Data Analysis

The methods for data analysis in the present study came by referring to Cohen's in 1983, Sachs' in 2003, and Weltig's in 2004. In Cohen's study, only the first 100 words of each essay were corrected and reformulated for comparative analysis. Then four respects of each 100-word excerpts--vocabulary, syntax, cohesion, and total--were holistically rated according to a nine-point scale (1-2/very poor; 3-4/poor; 5-6/average; 7-8/good; 9/excellent). Finally, a t-test was employed to compare the writing performances in the four aspects between a reformulation group of 8 and a correction group of 8, both made up of advanced learners of Hebrew as a second language. However, it was problematic for the present study to assess the writings in the four categories as in Cohen's paper. Firstly, over 95 % of the participants wrote less than 100 words and many of the sentences were in incomplete structure. Secondly, considering the participants' low proficiency, this present research targeted at change in grammatical errors. Therefore, only the t-test method, as with Cohen's study, was adopted in the present study.

As to Sachs' study in 2003, all the errors were coded in 40 types so that the observation would focus only on whether one participant noticed and corrected any of the 40 types of errors (namely, any newly produced error type was excluded from discussion). This device facilitated comparison between the originals and reformulated versions. Sachs' data analysis centered on comparison of revision accuracy between groups, and abandoned any further discussion on individual error types simply because that was problematic. The reasons were as follows:

1. Newly produced error types could be introduced and then repeated through the revision.
2. Major or related errors could be memorized, spotted, and then corrected immediately.
3. Statistical analysis became difficult owing to individual participants' differences in number of errors and in distribution of error type.

In agreement with Sachs, the present research focused on error change in group rather than in individual participants. When it comes to error coding, with the low-achievers' stage of linguistic development in mind (judged from their performances in writing), the 40 types observed in Sachs' research were simplified to 18 types, which were common and understandable to the present participants with low proficiency.

Furthermore, the method of essay coding in Weltig (2004) was given special consideration, for it followed Sachs' coding of 40 error types, but concerned error density, or frequency of errors of each type. For instance, error totals were 933 in Weltig's collected essays and the error of verb formation appeared 54 times. The error frequency of verb formation was $54/933$, which was 0.058. This statistical method suited the need of the present study to count and compare the density of grammatical errors appearing in the participants' pre-test and post-test writings.

By adaptation and integration of the data-analysis methods above, the data collected for the present research were analyzed as explained below in order of the four research questions.

To answer the first research question, the data of the participants' scores were calculated by means of SPSS 12.0. That is, independent-sample t-test was employed to compare the mean scores of the two groups in the post-test.

Research question two aims to compare the extent of improvement between the

students with better writing proficiency and those with lower proficiency. For the purpose, top ten and bottom ten participants in the experimental and control group were decided according to the pre-test results. Next, independent-sample t-test was used to examine whether there was significance between the pre-test and post-test results of the top ten students in both groups. The same procedure was done with the bottom ten.

To answer the third research question, the number of each kind of error made by the experimental group was recorded and compared, quantitatively and descriptively, between the pre-test and the post-test. The result of comparison could indicate the change in error between the two tests.

To deal with research question four, all the experimental participants were interviewed about how they felt about the treatment, about what difficulties they encountered in the process, and about what they found about their writing before and after the treatment. Their replies were then categorized and summarized to help the researcher assess the reformulation technique and consider its practicality in the future writing teaching.

CHAPTER 4

RESULTS

This chapter addresses the findings on the four research questions which the experiment was conducted to answer. They center on the results of the pre-test and post-test, where the same picture description paragraph writing was tested with an interval of ten weeks to minimize the effect of memory. The tests were administered with one experimental group and one control group--the former went through the reformulation procedure before the post-test, whereas the latter received direct correction in writing. As to rating, the writing products were firstly scored holistically by operating the GEPT scoring criteria (see Table 3.1). Then 18 types of error rates were calculated in the way mentioned in the subsection, Rating and Grouping, chapter 3.

Chapter four consists of four parts: the first part deals with the result gained by comparing the writing performances of the experimental and control group in the post-test. The second part presents the finding gained by comparing the writing performances of the participants with better writing proficiency and the poorer ones in both groups. The third part is concerned with the change in errors made by both groups. The last part treats the experimental participants' opinions on reformulation as a way to improve writing.

RQ1: Is reformulation, compared to direct error correction, more helpful in Taiwan EFL high school low-achievers' paragraph writing?

To answer the first research question, the post-test grades between the experimental and the control group were compared with independent-sample t-test (SPSS 12.0). The statistical result, as showed in Table 4.1, indicated that the two

groups significantly differed from each other in their writing performances since T-value came as 6.95** ($p < .005$) in the post-test. That is to say, the experimental group (mean = 4.38) performed much better than the control group (mean = 3.18).

Table 4.1

Independent-sample T-test Result for Whole Group **Post-test**

Group	Means	SD	T-value	df
Experimental (n=28)	4.38	.46	6.95**	54
Control (n=28)	3.18	.78		

** = $p < .005$

Table 4.2

Independent-sample T-test Result for Whole Group **Pre-test**

Group	Means	SD	T-value	df
Experimental (n=28)	3.83	.77	2.17	54
Control (n=28)	3.45	.57		

** = $p < .005$

Moreover, as displayed in Table 4.1 and Table 4.2, the standard derivation (SD) of the experimental group decreased by 0.31, whereas that of the control group increased by 0.21. This suggests a less wide distribution among the experimental participants' grades after the treatment, while the post-test scores of the control group were distributed in an even wider range than before the experiment. In other words, individual difference in writing performance apparently diminished among the experimental participants. In contrast, that in the control group became even more distinct.

To sum up, when we compared the grades based on the raters' holistic impression, either the t-test results or the SDs indicated that the experimental group

outperformed the control group in English paragraph writing.

RQ 2: Among Taiwan EFL high school low-achievers, do those with better English writing proficiency benefit more from reformulation in writing than those with lower English writing proficiency?

Research question two aims to compare the extent of improvement between the low-achievers with better writing proficiency and those with relatively lower proficiency. Since the pre-test, or the paragraph writing test before the treatment, determined the initial levels of these participants' writing, "top ten," as its results indicated, referred to the ten participants graded highest, whereas "bottom ten" denoted the students ranking the last ten.

Research question two was treated in two aspects. First, the top ten students' post-test performances in the experimental group were compared with those in the control group by using independent-sample t-test. Table 4.3 presented the statistical result of comparing the writing performances between the two top ten subgroups. Second, the same procedure was done with the bottom tens. Table 4.4 displays the result of comparing the bottom ten subgroups.

Table 4.3

Independent T-test Result for **Top Ten Post-test**

Subgroup	Means	SD	T-value	df
Experimental (n=10)	4.55	.37	3.501**	18
Control (n=10)	3.60	.77		

** = $p < .005$

Table 4.4

Independent T-test Result for **Bottom Ten Post-test**

Subgroup	Means	SD	T-value	df
Experimental (n=10)	4.15	.53	4.174**	18
Control (n=10)	3.05	.64		

** = $p < .005$

Comparatively speaking, T-value in Table 4.4 (4.174) was higher than that in Table 4.3 (3.501) by 0.673, though both indicated significance. It seemed that the bottom ten participants made greater progress than the top ten in the experimental group. This may signify that reformulation can have exerted a greater effect on the EFL low-achievers with poorer writing proficiency. However, to give a more complete picture of the improvement of the subgroups, Table 4.5 summarizes the pre-test and post-test results of the top ten and bottom ten participants in both groups.

In the experimental group, as the top-ten mean score went up (from 4.45 to 4.55), its standard derivation (SD) also increased slightly by .09. This indicated that after the treatment, there was a wider distribution in the scores of the top ten experimental students. As to the bottom ten, there existed more obvious change in the mean score and SD--the former rose from 3.1 to 4.15, whereas the latter descended from .81 to .53. Comparatively speaking, although both experimental subgroups made progress as indicated by the increase of their means, the improvement of the bottom ten appeared to overtop that of the top ten, for the bottom subgroup's SD dropped by .28, symbolizing a narrower distribution in scores after the treatment.

Table 4.5

Pre-test and Post-test (Top Ten vs. Bottom Ten)

Group	Subgroup	Means		SD	
		<i>Pre-test</i>	<i>Post-test</i>	<i>Pre-test</i>	<i>Post-test</i>
Experimental	Top (n=10)	4.45	4.55	.28	.37
	Bottom (n=10)	3.10	4.15	.81	.53
Control	Top (n=10)	4.05	3.60	.37	.77
	Bottom (n=10)	2.90	3.05	.21	.64

In light of the control group, as Table 4.5 presents, its top-ten mean score declined from 4.05 to 3.60 and the SD climbed slightly from .37 to .77. On the other hand, the bottom subgroup's mean went up from 2.9 to 3.05, with its SD increasing from .21 to .64. From the change in means, the bottom control subgroup improved while the top one performed much worse than before the experiment. Even so, the bigger SDs in both control subgroups signified that individual differences in writing became even more distinct in the post-test.

On the whole, the findings on research question two could be briefed in two aspects--the t-test results and the change in mean scores. First, by means of independent-sample t-test, the T-value gained by comparing the bottom tens is relatively higher than that of dealing with the top tens. Second, contrary to the experimental top ten (from 4.45 to 4.55), those in the control group went backward in the mean score instead (from 4.05 to 3.60). Nevertheless, the mean scores mounted in the bottom groups. In other words, either the t-test results or the change in mean scores indicated that the bottom tens in both groups, representative of low-achievers with lower proficiency in writing, appeared to make more improvement than the top tens, who were on behalf of the low-achievers with better writing proficiency.

RQ 3: Is there any change in the errors made by EFL low-achievers after the treatment?

The third research question targets the effects of reformulation and of direct correction on the error change among the participants. To observe the change in error before and after the treatment, error totals of 112 (pre-test: 56 writing pieces; post-test: 56 writing pieces) English paragraphs describing the same pictures were counted by categorization of 18 error types, as listed in Table 4.6. In addition to error totals, the percentage of each error type was calculated with the formula: the sum of each error type was divided by the total of all the errors. The reasons for adopting this method to calculate errors are discussed as below.

For one thing, in the present study, the errors were classified into 18 types, which were selected out of the 40 types used in Sachs' studies (2003). To fit in with the low-achievers' knowledge of English writing, only the 18 most common and understandable ones were adapted for the participants to detect and correct their errors in writing. For another, the post-test products in the present study were not the revisions of the pre-test writings, it was impossible for the students, without the originals at hand, to compose exactly the same sentences when they described the same story. This could thus produce different types of errors and different numbers of errors. Accordingly, observation only on the error totals would be in doubt. Therefore, as Sachs (2003) did, any errors other than the 18 error types were excluded from the statistics. In the meantime, instead of error numbers, error percentage was adopted as the standard to determine the extent of improvement of language use after the treatment.

Furthermore, to make the discussion of change in percentage manageable, all the comparisons in error percentage between the pre-test and post-test were dependent on

the percentages which had been rounded up or off to the digit in ones. Take the error type of spelling for example. It accounted for 11.30% of the errors in the experimental group's pre-test, and was responsible for 10.56% in its post-test (see Table 4.6). However, the percentages, after being rounded up or off, became 11% (pre-test) vs. 11% (post-test). The above data indicated that the error change in spelling was considered very minor in percentage in comparison of the pre-test and post-test results.

In the following, the experimental group and control group are compared in error change. Their similarities and differences are presented in three subsections--first, the error change in the experimental group; second, the error change in the control group; finally, the comparison in error change between the two groups. In each subsection, the error change between the pre-test and post-test was addressed in three dimensions: the error types with similar percentages between the two tests, those with lower percentages in the pre-test than in the post-test, and those with higher percentages in the pre-test than in the post-test.

The Experimental Group

As indicated in Table 4.6, eight error types had nearly the same percentages in both pre-test and post-test (with all the percentages rounded up)--spelling (11% vs. 11%), verb formation (22% vs. 22%), wording (12% vs. 12%), infinitive (1% vs. 1%), word order (2% vs. 2%), whole sentence aberrant (8% vs. 8%), verb missing/added (7% vs. 7%), and conjunction (3% vs. 3%). Especially, the first three made up 45% of all the errors in each test. Among them, "verb formation" outnumbered all the other error types and was responsible for over one-fourth of all the errors.

The error types which climbed up in percentage were "preposition" and "article" (both increasing by approximately 4%), "noun clause formation" (from 0 to 1%),

“pronoun” (4% vs. 5%), “auxiliary verb” (1% vs. 2%), and “adverb/modifier” (1% vs. 3%). From the above, such categories as “preposition” and “article” appeared to account for the highest error growth when the other types grew only by one or two percent.

As to the types dropping in percentage, “punctuation” declined from 3% to 2%, “verb tense” plunged from 5% to 0%, “singular for plural or vice versa” dropped by approximately 4%, as well as “capitalization” decreasing by about 2%. Of the four percentage-declining types, “verb tense” and “singular for plural or vice versa” showed the greatest change, with the former dropping to zero and the latter falling by 4%.

On the whole, in the experimental group, it seemed that 8 out of the 18 error types made minor difference, 6 rose, and 4 dropped in error percentage when the pre-test and post-test results were compared.

Table 4.6

Error Change in Experimental and Control Group (Pre-test vs. Post-test)

Group	Experimental (n = 28)				Control (n = 28)			
	Pre-test		Post-test		Pre-test		Post-test	
Test	Sum	Percentage (%)	Sum	Percentage (%)	Sum	Percentage (%)	Sum	Percentage (%)
1. punctuation	17	3.24	6	1.86	16	3.76	15	2.97
2. noun clause formation	0	0	2	0.62	0	0	0	0
3. spelling	59	11.30	34	10.56	49	11.53	38	7.52
4. verb formation	115	21.94	71	22.05	100	23.53	27	5.34
5. wording	63	12.02	39	12.11	44	10.35	65	12.87
6. preposition	23	4.39	27	8.39	16	3.76	26	5.15
7. singular for plural or vice versa	31	5.92	7	2.17	23	5.41	26	5.15
8. infinitive	5	0.95	2	0.62	4	0.94	1	0.19
9. word order	10	1.90	5	1.55	10	2.35	14	2.77
10. whole sentence aberrant	41	7.82	27	8.39	35	8.24	26	5.15

11. article	35	6.68	34	10.56	40	9.41	57	11.29
12. pronoun	21	4.01	15	4.66	19	4.47	28	5.54
13. auxiliary verb	5	0.95	5	1.55	5	1.18	3	0.59
14. conjunction	14	2.67	11	3.42	19	4.47	17	3.36
15. verb missing/added	36	6.87	23	7.14	20	4.71	30	5.94
16. adverb/modifier	6	1.14	11	3.42	3	0.71	5	0.99
17. verb tense	27	5.15	0	0	5	1.18	116	23
18. capitalization	16	3.05	3	0.93	17	4	11	2.18
Total	524	100	322	100	425	100	505	100

The Control Group

When the pre-test and post-test results were compared (with all the percentages rounded up), error change in the control group was quite different from that in the experimental group. This would be further discussed in the next subsection (The Experimental Group vs. the Control Group).

As Table 4.6 displayed, firstly, the error types without obvious change in percentage included noun clause formation (0 vs. 0), singular for plural or vice versa (5% vs. 5%), auxiliary verb (1% vs. 1%), and adverb/modifier (1% vs. 1%).

Secondly, the error types mounting in percentage included wording (10% vs. 13%), preposition (4% vs. 5%), word order (2% vs. 3%), article (9% vs. 11%), pronoun (4% vs. 6%), verb missing/added (5% vs. 6%), and verb tense (1% vs. 23%). Among them, the change in verb tense appeared relatively great, as its percentage rose by 22%, while the rest changed slightly between 1% and 3%.

Lastly, regarding the error types which declined in percentage, “punctuation” fell from 4% to 3%, “spelling” from 12% to 8%, “verb formation” from 24% to 5%, “infinitive” from 1% to 0, “whole sentence aberrant” from 8% to 5%, “conjunction” from 4% to 3%, and “capitalization” from 4% to 2%. Noteworthy, the type of verb formation

plunged drastically by 19%, whereas the other error types dropped merely by the maximum of 3%.

As a whole, the comparison between the pre-test and post-test results indicated that in the control group, four error types presented themselves in no obvious change, whereas another seven types climbed up and the other seven descended in percentage.

The Experimental Group vs. the Control Group

The findings previously mentioned were summarized in Table 4.7, which was divided into three sections--Similar Section (error types with similar percentages of errors between the pre-test and the post-test), Regress Section (those with lower percentages of errors in the pre-test than in the post-test), and Progress Section (those with higher percentages of errors in the pre-test than in the post-test)--to discuss the differences and similarities of error change between the experimental and control group.

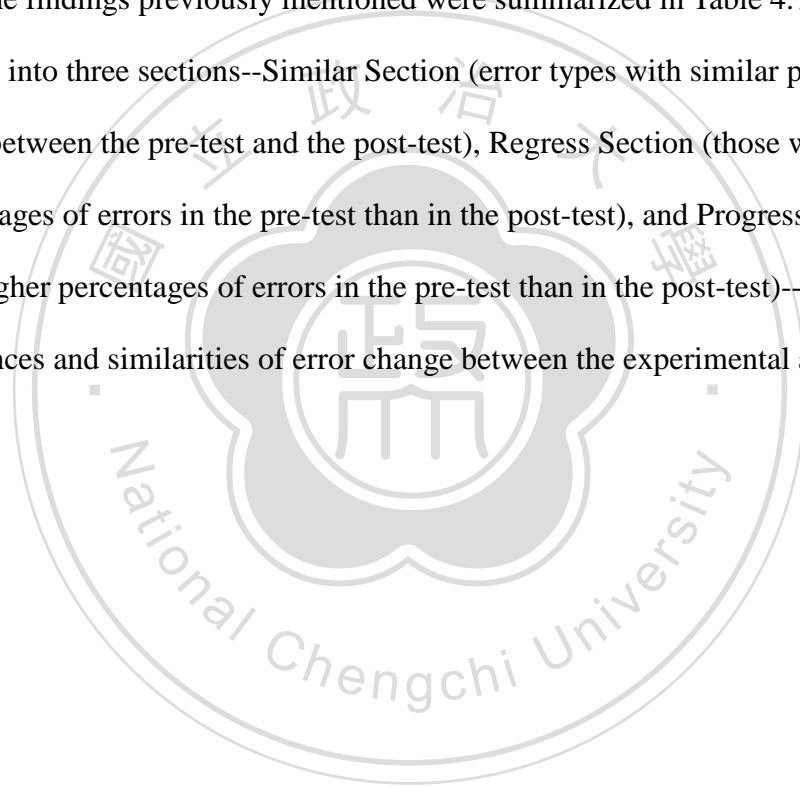


Table 4.7

Summary of Error Change in Experimental and Control Group

(Pre-test vs. Post-test)

Group	Experimental			Control		
Item	Error type	Pre- vs. Post- (%)	Post- minus Pre- (%)	Error type	Pre- vs. Post- (%)	Post- minus Pre- (%)
Similar Section (Pre- = Post-)	spelling	11 vs. 11	0	noun clause formation	0 vs. 0	0
	verb formation	22 vs. 22	0	singular for plural or vice versa	5 vs. 5	0
	wording	12 vs. 12	0	auxiliary verb	1 vs. 1	0
	infinitive	1 vs. 1	0	adverb/modifier	1 vs. 1	0
	word order	2 vs. 2	0			
	whole sentence aberrant	8 vs. 8	0			
	verb missing/added	7 vs. 7	0			
	conjunction	3 vs. 3	0			
Item	Error type	Pre- vs. Post- (%)	Post- minus Pre- (%)	Error type	Pre- vs. Post- (%)	Post- minus Pre- (%)
Regress Section (Pre- < Post-)	preposition	4 vs. 8	4	preposition	4 vs. 5	1
	article	7 vs. 11	4	article	9 vs. 11	2
	pronoun	4 vs. 5	1	pronoun	4 vs. 6	2
	noun clause formation	0 vs. 1	1	wording	10 vs. 13	3
	auxiliary verb	1 vs. 2	1	word order	2 vs. 3	1
	adverb/modifier	1 vs. 3	2	verb missing/added	5 vs. 6	1
				verb tense	1 vs. 23	22

Table 4.7 (continued).

Item	Error type	Pre- vs. Post-	Post- minus	Error type	Pre- vs. Post-	Post- minus
		(%)	Pre- (%)		(%)	Pre- (%)
Progress Section (Pre- > Post-)	punctuation	3 vs. 2	-1	punctuation	4 vs. 3	-1
	capitalization	3 vs. 1	-3	capitalization	4 vs. 2	-2
	verb tense	5 vs. 0	-5	spelling	12 vs. 8	-4
	singular for plural or vice versa	6 vs. 2	-4	verb formation	24 vs. 5	-19
				infinitive	1 vs. 0	-1
				whole sentence	8 vs. 5	-3
				aberrant		
				conjunction	4 vs. 3	-1

Note. The highlighted parts signified the overlaps in error type in the experimental and control group.

To begin with, in the Similar Section, no error types were identical between the two groups. In the meantime, those in the experimental group, after being totaled, accounted for up to 66 % of all its errors. This percentage was far higher than that in the control group, where the four error types with minor difference in percentage between the two tests occupied no more than 7% of the total errors.

Next, in the Regress Section, both groups shared three error types which grew in percentage--preposition, article, and pronoun. Besides, the number of error types in the experimental group (6) was close to that in the control group (7). Nevertheless, “verb tense” in the control group strikingly grew by 22 percent from the pre-test (1%) to the post-test (23%). This phenomenon did not appear in the findings of the experimental group.

Finally, the Progress Section indicated that the experimental group was similar to the control group in the part that two categories of error--punctuation and capitalization--declined in percentage between the two tests. As to the total of error types, the experimental group (4) had fewer error types appearing in this division than the control group (7). Apart from that, there existed dramatic change in percentage of verb formation (tumbling by 19 %), which far exceeded all the percentage changes in the experimental group's errors.

In summary, as Table 4.7 illustrated, there seemed fewer similarities but more differences existing in error change between the experimental and control group. First, compared with the experimental group, the error change in the control group appeared more distinct. For one, it had relatively fewer error types in the Similar Section, but had more error types in the Progress Section. For another, two error types in the control group--verb tense (a 22% increase in the post-test) and verb formation (a 19% decrease in the post-test)--changed too remarkably in percentage. Second, even though there was not much difference in the Degree and Progress Section, both groups performed worse in the error types of proposition, article and pronoun, but made improvement in the error types of punctuation and capitalization. As a whole, there seemingly existed no obvious pattern in error change in this study.

RQ 4: What do students think of reformulation as a way to improve writing?

The fourth research question tackled what the experimental group thought of the effects of reformulation on their EFL writing. To collect the information, a semi-structured interview was conducted with all the 28 participants in this group one week after the post-test. The five interview questions were listed as below:

1. What do you think of reformulation as a way to improve your writing?
2. In reformulation, what is easy for you?

3. In reformulation, what is difficult for you?
4. Do you have any suggestions about reformulation?
5. When writing the picture description in the post-test, what do you find regarding your writing behavior?

By consulting and altering Cohen's coding scheme of students' evaluation questionnaires (1983, p. 23), the interview results were summarized in Table 4.8 and Table 4.9. In the following, the students' views on the reformulation procedure were discussed in order of the five interview questions.

Table 4.8

Experimental Group' Views on Reformulation (n = 28)

Questions	Students' Views	Frequency	
Reformulation as a way to improve writing	Strengths	1. Detect errors in writing	13
		2. Know how to write in English.	8
		3. Improve knowledge of grammar	5
		4. Improve writing ability	3
		5. Learn how to put words properly.	2
		6. Increase willingness to try English writing	1
	Weaknesses	7. Require higher language proficiency	4
		8. Time consuming	3
Easy parts	1. Develop content	20	
	2. Nothing is easy.	3	
	3. Manage the parts of speech	2	
Difficult parts	1. Lack vocabulary	17	
	2. Detect errors	7	
	3. Make sentences	5	
	4. Use grammar	5	
	5. Give the correct form of verbs	3	
	6. Use nouns/verbs/prepositions	1	
	7. Everything is difficult.	1	

Students' Views on Reformulation as a Way to Improve Writing

The first interview question was to inquire the students' views on reformulation as a way to improve writing. The data in Table 4.8 revealed what the students considered were the strengths and weaknesses of practicing reformulation in class. The following are the summaries of the students' answers.

When it comes to the strengths of reformulation, more students (13) mentioned that it helped them better understand their errors in composing sentences, and stated that in this way they became more conscious of these errors and would attempt to prevent themselves from making the same mistakes in future writing. Eight students even said that they came to realize what English writing was like and became more willing and confident to attempt more relevant activities. Five found their knowledge of grammar was improved and were amazed that they were capable of tackling their own grammatical errors. In addition, three participants gained the sense of achievement from reformulation because they made progress in English writing. Two appreciated this procedure in that they seemed to acquire a better mastery of wording.

In terms of weaknesses, first, four participants considered their low language ability was the main cause for difficulty in implementing this activity. To fulfill the requirements of the reformulation activity, they had to seek help from the teacher and from the peers constantly. Second, three students thought that this activity was time consuming, for they did not like to spend much time detecting every error, but preferred an easier way to understand their problems with writing.

Easy Parts for Students

The second question was to ask whether there was anything for the students to handle easily in the reformulation procedure. As Table 4.8 indicated, a large proportion of the participants (20) stated that they did well on the part of generating

ideas. They mentioned that the given pictures promoted their imagination and guided them to generate ideas for writing. Hence, they knew what to write about and would not write something irrelevant to the pictures. This contributed to the process where they compared their writing pieces and the reformulated ones, for they could thereby easily find the differences between their output and the native-like version. Moreover, two students considered it easy to manage the parts of speech, such as derivations and inflections. Even so, three participants could not find anything easy for them in the process of reformulation.

Difficult Parts for Students

The third question dealt with the students' opinions on the difficulties which they encountered in the process of comparing their writings and the reformulated versions and of revising their originals. The students' difficulties were categorized into seven items, as summarized in Table 4.8.

First, the majority of the students (17) regarded lack of vocabulary as their fatal deficiency in English writing, which was especially highlighted when they compared their works with the reformulated ones. At the same time, to overcome this difficulty, several of them further committed themselves to more efforts in enriching their word bank.

Second, seven participants viewed error detection as the greatest problem in the reformulation procedure. They thought it took much effort to find the errors even with the help of their teacher and classmates.

Third, five students thought converting their ideas into the form of English sentences was the most difficult. In fact, by observing the reformulated pieces, the students could perceive how their ideas could be expressed in English, but they also knew how different their output was from what a native English user would write.

This perception made them frustrated to some extent.

Fourth, grammar was difficult for five students in managing correction and revision of their sentences. They did refer to their reformulated works and attempt at error correction and sentence revision. However, in the process they sensed their low proficiency and limited knowledge of grammar as great hinders in writing.

Finally, three students mentioned they had a hard time using the correct forms of verbs while correcting their errors and revising their sentences. In addition, one found he just could not tell when and where he should use a certain form of a word in a sentence; namely, the derivations and inflections of English words were simply difficult for him. Another participant admitted that every requirement in the reformulation procedure was too difficult for him.

Table 4.9

Experimental Group' Views: Suggestions and Behavior Change (n = 28)

Questions	Students' Views	Frequency
Suggestions on the activities	1. Increase frequency or duration of the activities	15
	2. No suggestions	6
	3. Decrease level of difficulty by examining a sentence at a time	4
Change regarding writing behavior	1. Decrease writing anxiety	8
	2. Become careful with vocabulary and grammar	7
	3. Know how to use words better	5
	4. Become motivated to increase vocabulary for use	4
	5. Know more about grammar	4
	6. Know more about one's problems in writing	4
	7. Writing is improved.	3
	8. Write more confidently	2
	9. Describe the pictures in more precise words	1

Students' Suggestions

The students gave suggestions on what they would like to see if the teacher continues to implement the reformulation procedure in their future writing classes. As shown in Table 4.9, there were two major points as reference for future implementation of reformulation.

For one thing, fifteen participants showed positive attitudes toward the application of reformulation and hoped the teacher to increase the frequencies of the relevant activities in the following semester. Nevertheless, another six students did not give any suggestions on the activities. For another, four experimental students thought they might benefit more from the reformulation activities, as long as the level of difficulty could be reduced by giving them more time for each sentence.

Students' Change in Writing Behavior

The last part of the interview was concerned with what change in writing the participants perceived after the reformulation procedure. As shown in Table 4.9, first, eight students found they became less anxious about writing in English, for they found it was not so difficult as they had expected. Second, the comparison between the pre-test writings and the reformulated versions led seven of the students to start to monitor their use of vocabulary and grammar consciously when they wrote in the post-test. Third, five participants mentioned that they started to select proper words to give a more precise description of the pictures.

Fourth, consistent with the previous five's views, another four students stressed the importance of enlarging their vocabulary for use, and found that they became greatly motivated to make efforts in this aspect. Fifth, four participants confessed that they knew how to compose grammatical sentences rather than just put words together. Sixth, in four students' opinion, the reformulation procedure helped them understand

their problems in writing. These students said that they not only became more aware of their weaknesses in English writing, but even attempted to overcome these difficulties. In other words, the reformulation activities enlightened them on the misused part of English which they did not really pay attention to before.

Seventh, after the treatment, three students were positive of their improvement in English writing. One of them could not wait for more activities for writing. Eighth, two students stressed that they became more confident in English writing, for they had understood what they should pay attention to for a good piece of writing. Lastly, careful choice of words was mentioned again by one student, who learned to select words to describe the pictures with precision after the treatment.

All in all, the findings from this interview should function as reference for the teacher to further modify the reformulation activities into those which could serve EFL low-achievers' needs more effectively in developing writing ability.

CHAPTER 5

DISCUSSION & CONCLUSION

This study is to explore whether Taiwan EFL low-achievers progress in paragraph writing through reformulation, and to probe into its possible effect on EFL learners at different English proficiency levels. This chapter covers four sections: summaries and discussions of the findings, pedagogical implications, limitations of the study, and suggestions for further studies. In the first section, the findings are briefed and discussed in order of the four research questions. Next, based on the findings, some implications for classroom teaching are provided. In the third section, the factors limiting the study are elaborated. Finally, given the limitations, some suggestions for further studies are proposed.

Summary and Discussion

Based on the results from the pre-test, the post-test, and interviews, answers to the research questions are summarized and discussed as below:

Helpfulness in Low-achievers' Writing: Reformulation vs. Direct Error Correction

1. Direct error correction may not be so helpful in learners' writing.

After the treatment, the experimental group (reformulation) got an average score of 4.38 on the post-test. Compared to its pre-test mean (3.83), it made progress with an increase of 0.55. In contrast, the control group (error correction) got an average score (3.18) on the post-test, which was even lower than its pre-test mean (3.45). The result corresponds to Truscott's (2007) comment that error correction is more likely to hinder nonnative students' improvement in writing instead of boosting their writing ability. There are two possible reasons. First, students tend to care more about the scores their writings are rated, and relatively, they pay less attention to what is corrected (Gu enette, 2007; Miao, Badger, & Zhen, 2006). Namely, students passively

receive the corrected forms. Second, even though the control group (explicit correction) seemed to have a clearer sense of what needed to be corrected in their work and why, noticing does not guarantee that input will become intake (Ellis, 2001; Gass, 1988; Robinson, 1995; Schmidt, 1990).

2. Modified reformulation technique appears effective.

The t-test result (6.95**, $p < .005$), obtained by comparing the post-test means (experimental 4.38 vs. control 3.18), reveals that the experimental group was indeed superior to the control group in writing performance based on the raters' holistic impression. However, this finding contradicts two other reformulation studies (Cohen, 1983; Sachs, 2003), both of which concluded that error correction excels the reformulation procedure in L2 students' writing progress. Such difference can result mainly from the factors: participants' proficiency, task demands, time, and memory, as found in Cohen (1983) and Sachs (2003).

According to Cohen (1983), the reasons why reformulation was not so effective in his study were that the reformulated writings could be beyond the students' learning capacities in some way, and that the students could doubt their perceptions of what they could do to promote their writings to a native-like level. For the two reasons, Cohen's participants did not do well in the last essay writing. Nevertheless, in the present study the reformulation procedure had been modified to fit in with the low-achievers' proficiency and focused primarily on raising the students' consciousness of the accurate form of the target language. For instance, the error types to compare and record are limited to 18 in number and each type is the most familiar to the participating low-achievers. In other words, task demands and participants' level of proficiency can account for the results of the present study, which are greatly different from Cohen's.

3. *“Memory” and “time” can make a difference.*

Sachs (2003) reported, “reformulation was not more helpful than explicit error correction for the purpose of producing revisions with greater accuracy and evidence of noticing.” Her remarks reveal two characteristics with which the present study is distinguished from hers.

First, while the present research required the experimental group to revise their sentences to conform to the accurate form of the target language, the revised sentences were recorded only as evidence indicative of students’ endeavors in noticing the differences between their output and the native-like versions. When the students took the post-test, they did not have the originals, error records, or reformulations at hand. They just wrote, equipped with what they had learned about English writing. At the same time, with an interval of four weeks between the treatment and the post-test, little chances are that they remembered the sentences they composed previously. However, in Sachs’s study, the reformulation students and the correction students both did revision based on their originals. These revisions were later used as the data for determining whether they made improvement in accuracy or not. Therefore, Sachs’s participants stood a good chance of recalling what they could do to adjust their originals to more accurate versions. “Memory” may thereby contribute to the better performance in revision among the students with a clearer sense of what was corrected, namely, the explicit correction group.

Second, in Sachs’s study, the correction group had more time to memorize what was corrected in their originals since their errors had been marked clearly on the papers, whereas the reformulation group had to spend most of their time and energy finding and correcting the errors during the same amount of given time. This did not happen in the present study, where both experimental and control students could

fulfill the activity requirement at their own pace, for only a maximum of five sentences needed treating each time. Even when some of them could not complete the demanded task in one writing session, they could finish it in the next session. In the meantime, the teacher and the peers were ready to offer help. In other words, “time” for examining the errors appears to weigh more heavily in Sachs’s study than in the present study.

To conclude, despite inconsistency with Cohen’s and Sachs’s studies owing to the differences in participants’ proficiency, task demands, time, and memory, the comparison between the pre-test and post-test results or between the post-test results between two groups seemingly supports the idea that the modified reformulation technique outperforms direct error correction in helping Taiwan EFL high school low-achievers improve overall paragraph writing performance. Also, the triumph of reformulation over explicit error correction implies that students’ active involvement in learning does play a decisive role in writing improvement. To fulfill the requirements of reformulation, the experimental group had to take the initiative in recognizing and remolding their output, which took much of their time and effort. In comparison, though given sufficient time to examine the corrected papers, the control group was inclined to forget about what they had learned over time, for they seemed to perform more poorly in the post-test administered four weeks after the treatment.

Effect of Modified Reformulation on Low-achievers at Different Proficiency Levels

In the present study, the ten students who scored the highest in the pre-test respectively in the experimental and control groups represented the low-achievers with better English proficiency, whereas the ten participants who performed the worst in the pre-test were defined as the low-achievers with lower English proficiency.

More importantly, the difference between the T-value of the top groups and that of the

bottom ones was examined to determine which group of students the reformulation procedure was more helpful to in paragraph writing, the low-achievers with better English proficiency or those with lower English proficiency.

The two groups of top ten students' post-test means (experimental: 4.55; control: 3.60) were computed with independent sample t-test and the T-value was 3.501** ($p < .005$). The significant difference between the two means signifies that the top ten students in the experimental group performed obviously better than those in the control group. In addition, similar result is revealed by the T-value (4.174**, $p < .005$) gained by comparing the post-test mean scores of the bottom ten students. That is, the bottom students in the experimental group significantly outperformed those in the control group. In other words, either the top or bottom students in the experimental (reformulation) group exceeded those in the control (direct error correction) group.

Furthermore, the T-value (4.174) from comparison of the bottom groups is relatively higher than that (3.501) from comparison of the top groups. That is to say, the bottom students, who are on behalf of low-achievers with lower writing proficiency, seem to benefit more from reformulation than the top students, representing those with better writing proficiency. Such inference is inconsistent with previous research conducted by Cohen (1983) and Qi, & Lapkin (2001), showing that the reformulation procedure appear more successful with intermediate and advanced learners than with beginners and that L2 learners with lower proficiency may not be able to identify errors owing to their limited L2 knowledge.

The difference can be caused by the modification of the reformulation procedure and of the post-test design for the present study. First, considering low-achievers' proficiency, the present study targeted mainly at the grammaticalness of their paragraph writings when the treatment went on. However, in Cohen's (1983) and Qi,

& Lapkin's (2001) studies, overall writing elements were examined by their high-proficiency participants, including vocabulary, syntax, cohesion, and style. To put it differently, demand load, task complexity, and proficiency level can have caused the difference in results between their research and the present one. Moreover, compared with Cohen's and Qi, & Lapkin's participants, the focus on grammatical factors of writing may bring the present study's students less confusion and pressure, and can thereby lessen their anxiety in accomplishing the demands of reformulation.

Second, the post-test design may account for the inconsistency between the present results and Cohen's (1983) and Qi, & Lapkin's (2001). Both Cohen and Qi, & Lapkin adopted the comparison between learners' first drafts/revisions and final revisions as the standard to determine whether the learners noticed and improved their writings. Nevertheless, in the present research, both pre-test and post-test shared identical pictures for paragraph writing. With the latter administered four weeks after the treatment, the participants could barely remember what they wrote in the pre-test. In this way, the same picture-description task limited what they could write about. Namely, the four-week interval minimized the memory problem; thus the two test results became comparable in determining the improvement in between. In other words, overall quality of revision in Cohen's (1983) and Qi, & Lapkin's (2001) was used as indication of the participants' progress in writing, while the present study targeted at whether the learners could upgrade their writings to a higher degree in grammaticalness when describing the same pictures without the originals at hand.

While comparison of T-values indicates that the low-achievers with lower proficiency seem to benefit more from reformulation, the mean scores in Table 4.5 reveal something worthy of note. In comparison between the pre-test and post-test results, in the experimental (reformulation) group, the top and bottom students

progressed with an increase in means (top: 4.45 vs. 4.55; bottom: 3.10 vs. 4.15), whereas in the control (explicit correction) group, only the bottom students made advancement (2.09 vs. 3.05). Its top students performed worsely with the mean decreasing from 4.05 to 3.60. This result seems to correspond to Truscott's (2007) verdict that explicit error correction can harm students' writing accuracy, and that students are prone to forgetting over time, especially when they no longer have the same learning tasks to remind them. The ineffectiveness of explicit error correction has been discussed in several previous studies (Polio et al., 1998; Semke, 1984; Truscott, 2007); therefore, it seems not a coincidence for the present study. The only difference lies in the fact that the former research did not make a further comparison of the performances of learners at different levels of proficiency.

To add up, Table 4.5 displays that only the SD of the bottom experimental students declined from .81 to .53, while the other three subgroups rose in their SDs. This signifies that the reformulation treatment may help shorten the difference in writing ability among the bottom experimental students, which occurred to neither of the top and bottom students receiving direct error correction. This finding again comes partly in line with Truscott's (2007) doubt of the effect of explicit error correction on improvement in writing accuracy.

In conclusion, the bottom students may be said to benefit more from reformulation from two perspectives. For one, comparison of the t-test results between the top and bottom groups indicates that the bottom experimental students excelled the top experimental students in extent of improvement. For another, in the experimental group, reformulation seems to help shorten the difference in writing ability among the bottom participants, but, comparatively speaking, the top students appear more different in their writing performances with the SD growing from .28

to .37. From either perspective, the reformulation procedure seems relatively more helpful with the low-achievers with lower English proficiency than with those with better proficiency.

Change in Errors after Treatment

Table 4.6 indicates that in the experimental group, 8 error types (spelling, verb formation, wording, infinitive, word order, whole sentence aberrant, verb missing/added, and conjunction) made almost no difference, 6 (preposition, article, noun clause formation, pronoun, auxiliary verb, and adverb/modifier) increased, and 4 (punctuation, verb tense, singular for plural or vice versa, and capitalization) declined in error percentage. As to the control group's change in error percentage, 4 error types (noun clause formation, singular for plural or vice versa, auxiliary verb, and adverb/modifier) were found no obvious change, 7 error types (wording, preposition, word order, article, pronoun, verb missing/added, and verb tense) increasing, and 7 (punctuation, spelling, verb formation, infinitive, whole sentence aberrant, conjunction, and capitalization) decreasing. However, regarding the error types with the highest average percentage (gained by averaging the pre-test and post-test percentages of an error type), the experimental group's top five are verb formation (22%), wording (12%), spelling (11%), article (9%), whole sentence aberrant (8%), while the control group's top five are verb formation (14.5%), verb tense (12%), wording (11.5%), spelling (10%), and article (10%).

Based on the above results, several focal points could be discussed when the experimental (reformulation) and the control (explicit error correction) group were compared in percentage change of error types. First, no error types were identical when it comes to those without obvious change. However, regarding the experimental group's errors without obvious change, those of spelling, wording, word order, whole

sentence aberrant, verb missing/added, and conjunction confirm what Ferris (1999, 2001) defined as “untreatable” errors--word choice and sentence structure. In her definition, these errors are difficult for students to amend since there is no handbook or set of rule to consult. Furthermore, lack of change in errors concerning word choice seems to go in line with Cohen’s finding in 1983 that reformulation was not more successful in improving the use of vocabulary than direct error correction.

To add up, the control group’s errors of singular for plural or vice versa, though labeled as “treatable” by Ferris (1999, 2001), also remained in close percentages in both tests. Chances are that errors of different types may vary in degrees of treatability, as Ferris (1999) contends.

Second, only three types--preposition, article, and pronoun--climbed up in error percentage in both groups. With regard to average percentage (gained by averaging the pre-test and post-test percentages of an error type), the errors of preposition, article, and pronoun, respectively, occupied about 6%, 9%, and 4.5% in the experimental group, whereas the three error types accounted for 4.5%, 10%, and 5% each in the control group. Although comparison of percentages of the three error types indicates that there seems not much difference between the two groups, they have been discussed as typical error types in relevant research (Bitchener et al., 2005; Ferris, 1999, 2001; Weltig, 2004). Apart from the three error types, the control group’s errors of verb tense were worthy of discussion, too. They increased largely from 1% (pre-test) to 23% (post-test). All the above confirms the finding of Bitchener et al. (2005) that L2 immigrant learners had a hard time with prepositions, articles, and the simple past tense.

Nevertheless, to some degrees, the same findings are inconsistent with Ferris’s (1999, 2001) treatable, or rule-governed, categories of error, including verb, noun

ending, and article errors. Unlike Ferris's study in 2001, direct error correction was far less effective in treating verb and article errors in the present study, where these errors even increased after the treatment. The possible reason is that Ferris (2001) did not further discuss verb errors by classifying them into two categories--verb formation and verb tense, for in the present study errors of verb formation dropped largely in percentage after the direct correction treatment.

Third, although in both groups punctuation and capitalization were the only two error types dropping in error percentage, the control group (7) had more error types decreasing in error percentage than the experimental group (4) did. On the one hand, this implies that reformulation and explicit correction may both have a positive effect on the decrease of errors regarding mechanics, like punctuation and capitalization. These errors are considered easier to treat since they "occur in a patterned, rule-governed way" (Ferris, 1999). On the other hand, as the control group had more error types declining in percentage after the treatment, it is likely that explicit correction is more helpful in boosting linguistic accuracy in writing than reformulation does, as coincides with Cohen's (1983) and Sachs's (2003) findings. Cohen found error correction exceeded reformulation particularly in the areas of syntax and cohesion, while Sachs's participants receiving direct error correction produced the most accurate revisions.

Moreover, in the present study, direct error correction appeared more effective with verb errors than reformulation did, as Ferris (2001) pointed out. For instance, the control group's errors of verb formation declined from 24% (pre-test) to 5% (post-test), whereas the experimental group's remained in the percentage (22.05%) close to that (21.94%) before the treatment.

Finally, verb formation, wording, spelling, and article were the four error-prone

types with the highest frequency in both groups. This roughly corresponds to the findings of Bitchener et al. (2005) and Weltig (2004). The former indicated that prepositions, definite articles, and the simple past tense troubled immigrant L2 learners most. According to the latter, punctuation, preposition, singular for plural or vice versa, wording, article, spelling, and verb formation were the seven error types with the highest frequency in the ESL essays. Also, Ferris (2001) mentioned verbs, noun endings, articles, word choice, and sentence structure as five major error types which her students would make in writing. As a result, either former research (with higher-intermediate participants) or present study (with low-achievers) suggests that the error types concerning verbs, articles, and wording have negatively affected the writing quality of L2/FL learners at different levels of proficiency.

All in all, in this study, error changes in both groups are roughly comparable with previous research (Bitchener et al., 2005; Cohen, 1983; Ferris, 1999, 2001; Sachs, 2003; Weltig, 2004). The results of holistic rating indicate that reformulation seems more effective than direct error correction in improving the low-achievers' writing quality. However, the comparison of error change between the experimental group and control group shows that direct error correction is also a little helpful in treating certain error types, like verb formation.

Students' Views on Reformulation as a Way to Improve Writing

Five interview questions, as listed in chapter 3, were asked to investigate the students' comments on reformulation. The participants' answers to the interview questions are divided into two parts: first, the students' views on the reformulation treatment; second, the students' suggestions on the reformulation activities and their change in writing behavior. Relevant discussion in this study is consistent with those of several researchers (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003; Skehan,

2002).

Students' Views on Reformulation Activities

The participants proposed the reformulation activities as quite helpful in several aspects. First, the students learned to detect and edit errors in writing. Second, the reformulation process helped them know how to write in English and put words properly. Third, after reformulation, they found their knowledge of grammar was improved and their writing ability was boosted. Lastly, the students' motivation for English writing was strengthened. The above comments, to some degrees, go in line with how Cohen's participants evaluated the reformulation procedure. In his 1982 research, most of them thought highly of this approach, and several even asked for an increase of its frequency. Like the participants in this study, they favorably found that they became more conscious of their lexical and grammatical choices in writing, and thus they knew how they could adjust their writing. In addition, as with Cohen's study in 1983, nearly 50% of the students indicated that they would continue to use the insights (knowledge of wording and grammar in this study), which they developed in the treatment, for future writing activities.

On the other hand, two weaknesses of reformulation were pointed out. First, it took relatively more time for the participants, especially those with even lower proficiency, to find and correct the errors, as compared with direct error correction. Such comment accords with Cohen's (1983) participants' complaint--they had to devote so much time to the reformulation procedure. What is more, as Sachs (2003) discussed, in the same given time, the error-hunting participants carried heavier task loads than those whose papers were explicitly marked with errors. While the former were still hunting for errors, the latter could have engaged in more evaluation and cognitive comparison. Even so, this so-called weakness is actually a good way to

ensure “true noticing” or “active noticing.”

Second, higher language proficiency may be required for the reformulation activities. For example, in this study, five participants were troubled by error identification, another five were overwhelmed by grammar, still another three could not deal with verb forms on their own, and even one confessed that every demand in the process was just difficult. The students’ problems may be explained by the contention in former research (Cohen, 1982, 1983; Qi, & Lapkin, 2001)--that an advanced knowledge of vocabulary and grammar is required for the reformulation approach to be truly meaningful. Namely, lower proficiency learners may not be able to identify errors due to limitations in their L2 knowledge.

Furthermore, a large proportion of the participants (20 out of 28) considered it simple to generate ideas for the picture story (see Appendix A), but found their major difficulty lay in dealing with vocabulary. This corresponds to their comments regarding the proficiency problem. That is, lack of vocabulary did trouble more than half of the low-achievers (17 out of 28) in the present study. This result agrees with Cohen’s study in 1983, where reformulation was not more successful than error correction in treating the errors concerning vocabulary. In addition, the vocabulary problem had been regarded as difficult to treat by Ferris (1999, 2001) since word choice was not rule-governed. After all, the last stage of second language acquisition, namely lexicalizing, can only be gradually achieved, following stages of “noticing, pattern identification, extending, complexifying, integrating, becoming accurate, creating a repertoire, and automatizing rule-based language” (Skehan, 2002). Therefore, it seems understandable why use of words worries the students in this study as lexical items, according to Sachs (2003), may simply be “learned” rather than be understood like other linguistic items with a system (such as articles).

Students' Suggestions on Reformulation and Change in Writing Behavior

The students in this study provided two suggestions for future implementation of reformulation. For one, nearly half of them would like this approach to be conducted with an increase in frequency, and some even requested to lengthen its time for practice in each writing session. This confirms Cohen's interview results in 1982, indicative of students' need for the procedure to be carried out several times in order that their newly learned insights about writing could be produced when necessary. For another, a few participants hoped to start by examining one sentence only in each writing session for two plausible reasons. First, they may have sufficient time for error treatment despite their poor prior knowledge. This arrangement may lessen the impact of proficiency mentioned by several researchers (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003). Second, the detrimental side of reformulation (frustration), indicated by Cohen (1982), may be avoided; that is, the students would not feel discouraged with too many errors to handle at a time. Also, they may have relatively more opportunities for cognitive comparison. This finding agrees with Cohen's (1982) suggestion that it may be more beneficial for students to have more opportunities to compare two versions of one writing.

With regard to writing behavior, the students in this study commented on their change before and after the treatment. Their change in writing behavior can be addressed in three respects: attitude toward writing, knowledge about writing, perception of improvement and of writing problems.

First, the students started to hold a more positive attitude toward writing. For example, eight felt less anxious about English writing, seven became more careful with vocabulary and grammar when writing, four intended to enlarge their vocabulary for use in future writing, and two became more confident of writing in English. Like

Cohen's study in 1982, the students in this study appeared favorable to the reformulation procedure. It may be because the activities effectively improved their writings. Apart from that, the simplified reformulation treatment in this study may have helpfully decreased the possibility of low-achievers' frustration with heavy task loads, a problem pointed out by Cohen (1982).

In addition, although Qi and Lapkin (2001) suggested that lower-proficiency L2 learners (like those in this study) may not be able to notice the gap between the interlanguage and native-like language as well as those with higher proficiency, according to Sachs (2003), restriction to fewer error types (like 18 types in this study) for investigation may lead to greater accuracy in students' post-test writings. In other words, certain linguistic forms may be focused on for a few more times. Therefore, unlike Cohen's low-proficiency participants, those in this study felt less anxious about writing probably due to their sufficient practice in classes.

Second, the participants made progress in knowledge about writing. Five claimed to know more about wording, and four spoke of advancement in knowledge of grammar. Third, the students sensed their improvement and problems in writing. Four participants had a clearer idea of their writing problems, so they knew what to do with their future writing. Three thought they had progressed in English writing; another said he could describe the picture story with more precise words. The above two points of view indicate that reformulation in this study seems effective in alerting nonnative writers to their problems in writing, especially in the area of vocabulary, as mentioned by Cohen (1982, 1983). That is, the students noted the use of vocabulary that was not yet learned. In addition, this kind of individual attention directed them to adjust their writing. Their progress suggests the association between noticing and subsequent linguistic accuracy, as Qi, and Lapkin (2001) and Sachs (2003) implied in

their studies. Namely, once nonnative writers can give a reason for an error, it is more likely to be corrected than not.

Overall, the students are positive of the reformulation activities despite limitation to proficiency and consumption of time. Based on the findings about their writing behavior, each student benefits from the treatment to a different extent. However, most have learned something about their writing problems; many even become motivated to work on writing further. In other words, although the reformulation procedure in this study targets mainly at grammatical factors, it may have brought the students a deeper understanding of their written output in this respect, and may have provided them with a direction of progress in writing, just as what Cohen (1982) and Qi and Lapkin (2001) found about their participants.

Implications of the Study

The answers to the four research questions may provide some implications for pedagogy. First, when writing activities are designed, students' readiness for learning should be taken into account. There should always be assistance available to lower students' learning anxiety, so that they can benefit the most from doing the class exercises. Like the present study, students' anxiety with error detection and correction is mostly reduced possibly because they can consult the teacher or classmates about their difficulties.

Second, students are supposed to bear more responsibility for their own learning. For this, the teacher should create as many opportunities as possible for learning by doing. That is to say, there should be class time spared for students to work on their individual problems, which tends to be more advantageous than merely proceeding with the preset class schedule. Take the present study for example. The students were surprised to find they could learn on their own and requested to experience more of

this in the future. This can reinforce their willingness to learn independently, which may turn out to be helpful in their future studies.

Third, comparison between one's written output and its reformulated version can indeed enhance students' understanding in either grammar or other aspects of writing. They tend to be impressed by their weaknesses and to be more careful with them when given the second chance to write. This is exemplified in the present study: the students receiving reformulation outperformed those who underwent the direct correction treatment in overall writing performance when both groups took the post-test four weeks after the treatment.

Fourth, student-student and teacher-student discussions should be an essential element in writing classes. They help meet different needs of learners at various levels of proficiency. Students with lower proficiency can go to the teacher or the classmates with better proficiency for help. Those at the same level may have similar problems and can work them out through discussion with one another. In other words, every participant can learn from discussion. This idea had been carried out in the present study and proved to be effective.

Fifth, as this study suggests, reformulation and direct correction may help writing learners in different ways: the reformulation treatment works as an opportunity for them to adjust their use of the target language to be more native-like, whereas direct correction explicitly shows them where they could have used the target language more accurately. That is, direct correction seems to cater to lower proficiency learners better. Therefore, teachers may implement both ways of corrective feedback alternately to serve the needs of students at different levels of language proficiency and to solve writing problems of different kinds. Most of all, teachers can moderately adjust or even modify the reformulation technique to help

students at different proficiency levels in writing.

Lastly, as suggested by several low-achievers in this study, the reformulation activities may begin by examining one or two sentences to make students acquainted with how the technique is operated. In this way, students can adjust their pace of learning and their anxiety can be lowered. Later the length of writings for examination can be longer and more complex to gradually build up the students' sensitivity to their written output as well as their writing ability.

Limitations

The present study is limited in generalization from four perspectives--participants, activities, collected data, and statistical methods.

First, the participants were low-achievers in a senior high school, whose English proficiency was naturally not as good as the subjects in other studies (Cohen, 1982, 1983; Qi, & Lapkin, 2001; Sachs, 2003). Therefore, the same treatment may bring about distinctly different results with learners at other language levels.

Second, the modified reformulation activities used in the present study may not serve the needs of students at different levels of proficiency. That is, they can be too easy for higher-achievers in other senior high schools. In addition, when the memory factor is considered, learners are inclined to forget what they engage in for a short period of time, as stressed by Guénette (2007) and Truscott (2007). This suggests that if the two treatments--reformulation and explicit correction--are to be implemented for three or more times, their long-term effects on learning may become more distinguishing, which can sway the experimental results and lead to a different conclusion from that of this study.

Third, the writing materials for investigation are in paragraph length. Probably when it comes to examining two or three paragraphs, the results could be very

different from what were found in this study. Even so, one point to bear in mind is that every learning activity is supposed to be student-centered in nature; namely, students' preliminary knowledge should be considered in advance. After all, it goes against morality to conduct a teaching experiment for its own sake.

Fourth, although Sachs's (2003) 40 error types were consulted for the present study, the error types in this study were limited to 18 most common to the participating low-achievers, and mainly restricted to grammatical inaccuracy. At the same time, in terms of statistical methods, all the errors were calculated in percentage for comparison between the experimental and the control group (see chapter 3); even error percentages were rounded up or down for the convenience of discussion. Once the statistical methods are changed, the results may come out differently. Therefore, the experimental results in this study cannot be generalized.

Suggestions for Further Studies

Based on the limitations in this study, some suggestions may be helpful for those who would like to conduct relevant research.

First, the pre-test and post-test in this study are identical in content and administered only once. Future researchers can try incorporating two or three sets of pre-test and post-test on different topics of picture description. The factor of practice can make some difference in learners' subsequent writing performance.

Second, paragraph writing in this study can be changed to essay writing for high-achievers. That is, researchers interested in reformulation can duplicate the present study, but conduct it with senior high school high-achievers. When the control and experimental groups both consist of high-achievers, the experimental results may be quite different from those in this study.

Third, in the present study, the error treatment was performed with sentences of a

different picture in each writing session. It is suggested that in further research the whole picture story can be examined at a time since it is only one paragraph in length. Therefore, participants can be asked to write several picture stories on various topics so that more writing and error-treating opportunities are created. Again, participants' writing ability has to be taken into account in advance of this implementation.

Fourth, error examination can be restricted to only one or two error types at a time. It is likely to cause the effect of cognitive comparison to become even more obvious. Further research can be conducted to explore whether the restriction can reinforce the treating effect in both control and experimental groups, and whether it may influence the post-test results.

Conclusion

Teachers should make attempts at different methods to help their students process writing feedback better. There is no one perfect way to give feedback, and each way can exert different effects on the learning of students at different learning stages. To put it differently, any way to give feedback can be adjusted or modified to serve students' needs, just as the reformulation technique in the present study. Nevertheless, besides students' language proficiency, writing length, class size, and limited time and energy should be taken into account in implementation of reformulation; after all, the teacher has other work demands to fulfill in school. Faced with a class of 40 students, 40 paragraph writings are more manageable than 40 essays. Therefore, when dealing with essays, the teacher may reformulate only the first 100 words as Sachs (2003) did in her study. Even so, the reformulation work in the teacher's part still consumes much time and energy; thus, it is suggested that such treatment can be conducted twice or three times at most in a semester. In addition, as a nonnative speaker, the teacher may occasionally have difficulty giving exactly

native-like expressions to convey a student's idea, for that idea may be so Chinese in nature and no counterpart in the target language for replacement. Regardless of the possible difficulties above, a teacher should attempt different ways to help students go further in learning.



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Appendix A

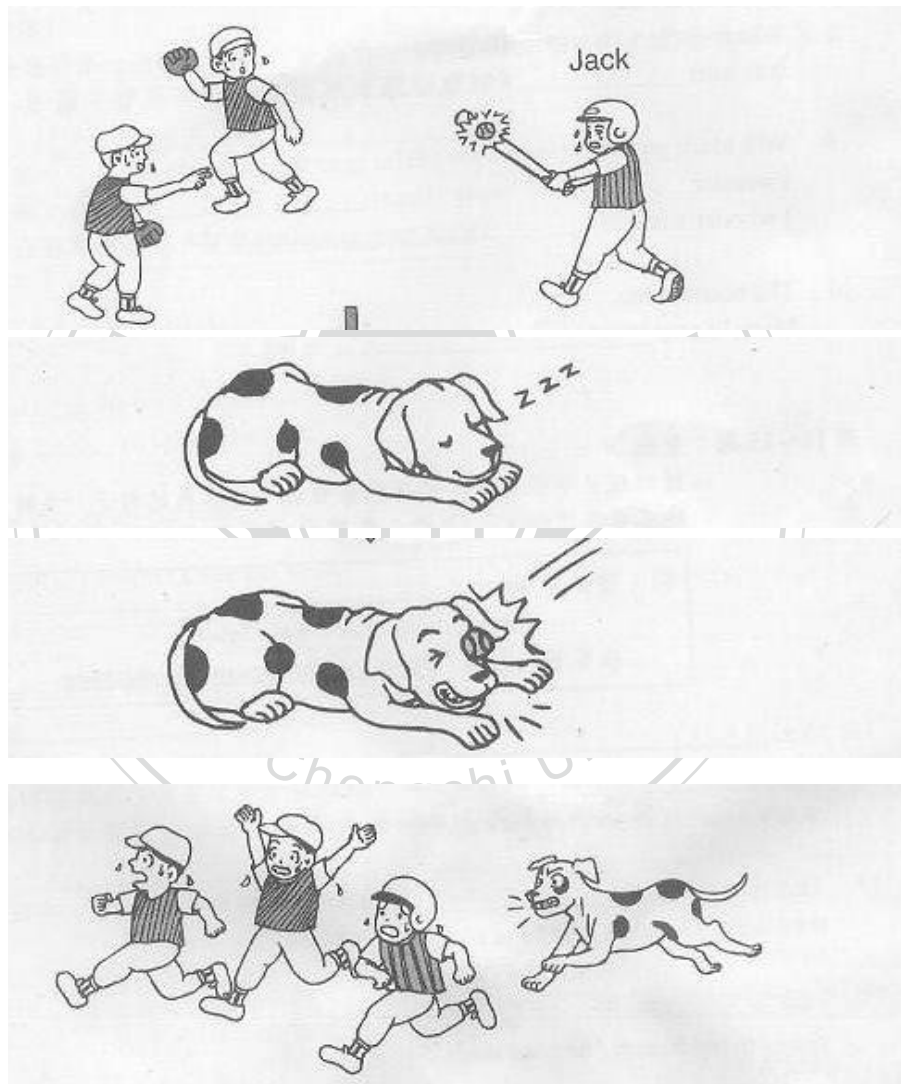
Paragraph Writing

段落寫作：請依照說明及圖片事件發生順序(免標題)，寫一篇 50 字的英文短文。

說明：1. 第一句請用“上週六 Jack 和他的朋友在公園裡打棒球...”開頭。

2. 請用英文盡力於三十分鐘內將圖片內容表達清楚。

3. 必須獨力作答，不得進行任何求助(包括同學、字典、老師等)。



Appendix B Error Record Form

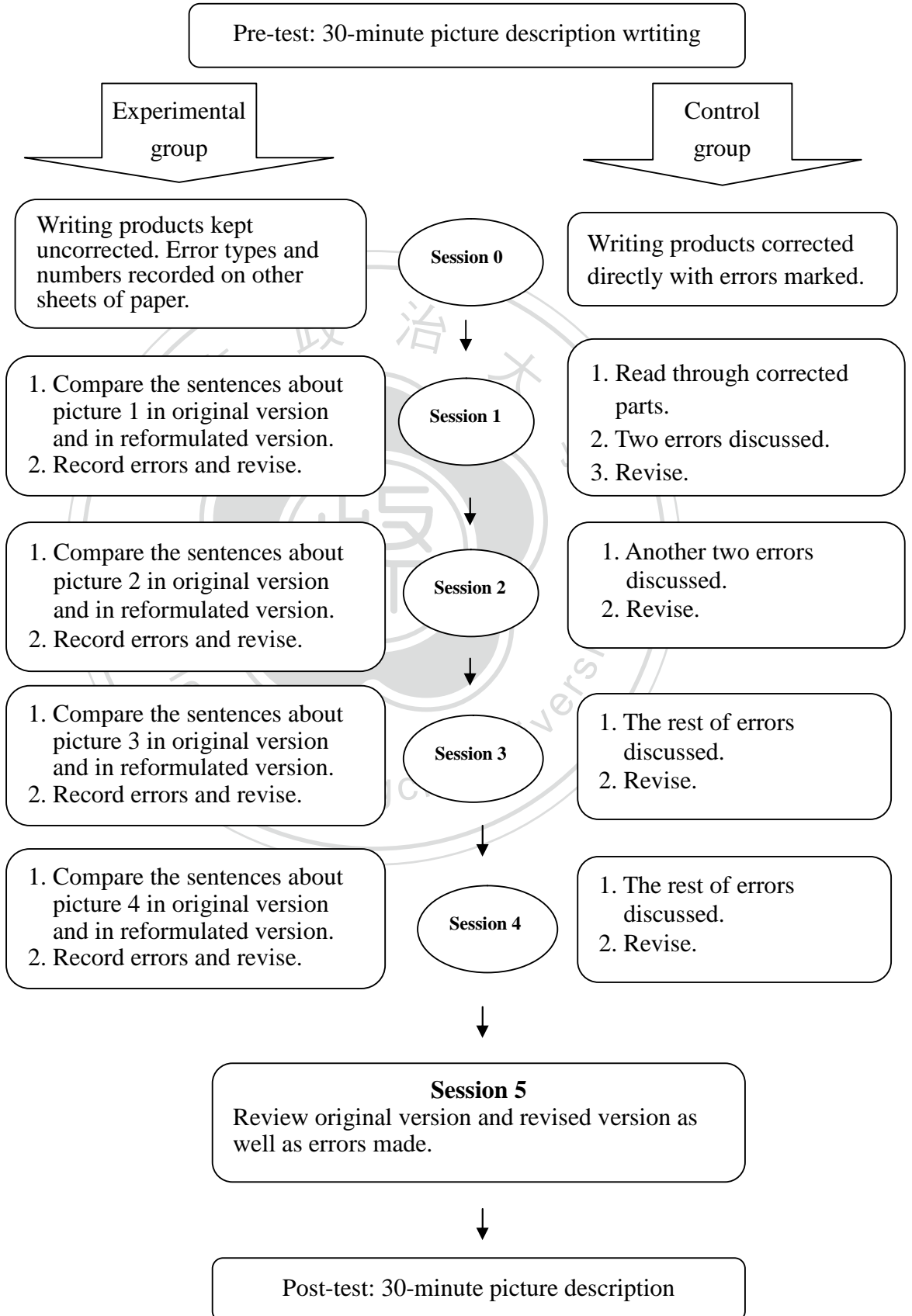
- 說明：1. 本找碴活動每次時間為十分鐘到十五分；
2. 請將原句抄入第一欄；
 3. 參考老師給的範本，將發現的錯誤，用自己的話寫在第三欄，看不出來可以問老師；
 4. 把老師的範本蓋起來，在第二欄中開始改寫自己的原句；
 5. 將全部紙本交回給老師。

第一欄	第二欄	第三欄	第四欄
Original sentences 原句	Revised sentences 改寫句	Observed errors 觀察到的錯誤	Teacher's comments 老師評語

Appendix C
Error Classification System
(Extensively simplified from Sachs (2003))

- a. 標點符號 (缺少、濫用、誤用) (punctuation)
- b. 拼字 (不包括動詞變化錯誤) (spelling)
- c. 動詞變化 (verb formation)
- d. 選字 (wording)
- e. 介係詞 (缺少、誤用) (preposition)
- f. 名詞單複數 (singular for plural/plural for singular)
- g. 不定詞 (infinitive)
- h. 字序 (word order)
- i. 句意不全 (句子缺字；用中文語法寫；主動與被動不分) (whole sentence aberrant)
- j. 冠詞 (the/a/an 不分、缺少、濫用) (article)
- k. 代名詞(格) (含意指不清；主格、受格、所有格不分或濫用、誤用) (pronoun)
- l. 助動詞 (缺少、誤用) (auxiliary verb)
- m. 連接詞 (缺少、誤用) (conjunction)
- n. 動詞不見或多出動詞 (把動詞以分詞形態表示；be 動詞與一般動詞並行)
(verb missing or added)
- o. 副詞或修飾語 (adverb or modifier)
- p. 時式 (現在式與過去式不分、濫用、誤用) (verb tense)
- q. 大小寫 (capitalization)
- r. 名詞子句 (noun clause formation)

Appendix D
Flow Chart for Writing Sessions



Appendix E

Student's Original vs. Reformulated Version

Original version

Jack and his friends in the park play basketball on
this week Sunday. They play in the basketball
Look dog sleeping, wops, don't carefully hit
the dog eyes, The dog won, won angry run
Jack and his friends, Then, They three
boy's stop hand basketball turn run away
carzy

Reformulated version

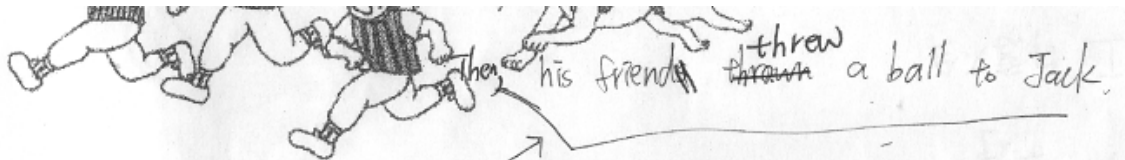
Jack and his friends played basketball last Saturday. While they were playing, they saw a dog sleeping nearby. Unfortunately, they were not careful enough and their ball hit that dog's eye. It woke up, barked angrily, and ran after Jack and his friends. The three boys could not but stop playing basketball and ran for their lives.

Appendix F

Student's Error Record

第一欄	第二欄	第三欄	第四欄
Original sentences 原句	Revised sentences 改寫句	Observed errors 觀察到的錯誤	Teacher's comments 老師評語
Jack play the baseball with his friends in the park Saturday.	Jack played the baseball with his friends in the park Saturday.	C.b	①想一下 play basketball 和 play the basketball 的差別。②介詞
When they were happiness, the ball was hit the rearing dog.	When they were very happy, the ball hit a sleeping dog.	C.b	
The dog was very angry and crazy, because this dog was hit a big black eye.	The dog was very angry, because that dog got a black eye.	b.c.d	because 前面通常有標點符號嗎?
However, the dog want bite they, they run around.	However, the dog want to bite them, so they ran around.	C.e	①動詞的時態是 ②想一下 they, them 的差別
Jack and his friends were very scare.	Jack and his friends were very scared.	C.B	
And they were cry.	And they were cry.		were 後面可直接加其他動詞嗎
But they were no say sorry to dog.	But they didn't say sorry to the dog.	n	
That is so bad.	That is so bad.		考慮動詞的時態

Appendix G
Direct Correction



Jack and his friends played ~~the~~ baseball in the park last Saturday. They played very ~~delightfully~~ ^{delightfully}. Just ~~then~~ ^{then} the ball ~~hit~~ ^{was} hit by Jack, ~~or~~ ⁱⁿ In the park ~~near~~ ^{near} ~~Jack~~ ^{Jack} spot dog was sleeping so sweetly. Suddenly the ball hit its eye. It was very painful. ~~the dog was very~~ ^{and} annoyed. Jack and his friends saw the ball ~~to~~ ^{to} ~~attack~~ ^{attack} far on the dog. They were very ~~scared~~ ^{afraid}. Then, the dog ~~ran~~ ^{ran} quickly. ~~They~~ ^{the boys} know that ~~the~~ ^{the} dog wanted to bite them, ^{so} ~~this~~ ^{this} ~~by~~ ^{by} they ~~and~~ ^{to} ~~they~~ ^{they} were ~~run~~ ^{run} quickly because ~~the~~ ^{the} dog ~~attack~~ ^{was} attacking them.

