

**A CASE STUDY OF THE RELATIONSHIP BETWEEN  
LEARNING STYLES AND EXPLICIT/ IMPLICIT  
FEEDBACK AMONG SURANAREE UNIVERSITY OF  
TECHNOLOGY STUDENTS**

**Mrs. Pornsawan Manorat**

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กรณีศึกษาหาความสัมพันธ์ระหว่างรูปแบบการเรียนรู้และผลสะท้อนกลับ  
ประเภทชัดเจนและเป็นนัย สำหรับนักศึกษามหาวิทยาลัยเทคโนโลยีสุรนารี

นางพรสวรรค์ มโนรัตน์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาศิลปศาสตรมหาบัณฑิต

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มหาวิทยาลัยเทคโนโลยีสุรนารี

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AMONG SURANAREE UNIVERSITY OF TECHNOLOGY  
STUDENTS**

Suranaree University of Technology has approved this thesis submitted in partial fulfillment of the requirements for a Master's Degree.

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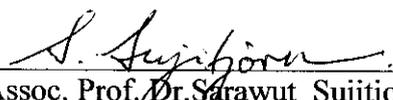
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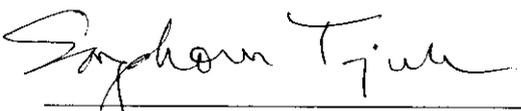
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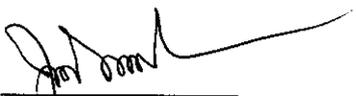
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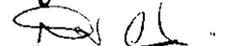
This study investigates the relationship between two learning styles: field dependence/independence and explicit/implicit feedback given to students for their written assignments. A variety of data sources were used including students' assignments, questionnaires and semi-structured interviews. The subjects were students of different years enrolled in an English V course at Suranaree University of Technology.

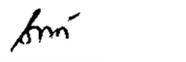
The overall results of the case study through five weeks show a significant relationship between field dependence and explicit feedback. The results of the study indicate that the role of teacher feedback, the proficiency level of English and individual differences affect the achievement in second language learning.

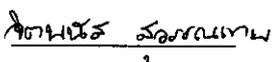
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การวิจัยนี้เป็นการศึกษาหาความสัมพันธ์ระหว่างรูปแบบการเรียนรู้แบบฟังพา/เป็นอิสระ  
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ต่างๆ เช่น งานเขียนของนักศึกษา แบบสอบถาม และผลการสัมภาษณ์ กลุ่มตัวอย่างที่ศึกษาคือ  
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# CHAPTER 1

## INTRODUCTION

This study reports the relationship between specific learning styles and teacher feedback among students at Suranaree University of Technology. The first section explains the rationale of this study. Then, the purpose of the study is explained in the second section. The third section describes the hypotheses, and leads to the research questions in the fourth section. The fifth section demonstrates the scope of the study. The sixth section summarizes the thesis outline, and, lastly, the seventh section defines some key terms.

### **1.1 Rationale**

In Thailand, English writing is mostly used both in education and at work. However, limited knowledge of vocabulary, language structure, and content can inhibit students' performance in a second language (L2, hereafter). As a result, L2 students want more teacher involvement and guidance. Therefore, how best a teacher can promote students' learning how to write seems to be a common question in a writing classroom. Teachers, in particular, need to understand the factors affecting the processes of second language writing. Many researchers (Mackey & Phillip, 1998; Oxford, 2000) suggest factors that could facilitate learning, including classroom interaction, teacher feedback, and also their realization of individual differences.

According to Sakar (2003), learning styles are among the factors which lead to individual differences that could influence language learning. Keefe (1979: 4) defined learning style as “...*cognitive, affective, and physiological traits that are relatively stable indicators of how learners perceive, interact with, and respond to the learning environment...*”. Among all types of learning styles, field dependence/independence is one of the most researched types, mostly relevant to second language learning (Brown, 2000). Many studies (e.g. Johnson, Piror & Artuso, 2000; Nodoushan, 2002) have investigated the relationship between field dependence/ independence and second language acquisition. An awareness of students’ learning styles could help teachers match teaching and learning styles to develop students’ potential in second language learning. Students’ motivation, performance, and achievements will increase and be enhanced when students’ learning styles are matched with appropriate teaching approaches (Brown, 1994).

In an attempt for greater depth of study in classroom teaching, the other factor of teacher feedback is also the focus of the study. Teacher feedback is mostly used in writing classrooms, although it is a debatable issue whether teacher feedback could help L2 student writers improve their writing. Many studies in second language learning support the relationship between teacher feedback and students’ writing abilities (Ferris, 1995; Myles, 2002). A lot of research about teacher feedback and students’ responses aim to seek the answer for when the teacher should provide feedback, and what the different types of teacher feedback are. The other interesting issue concerns the efficacy of various kinds of teacher feedback that enable students to become more effective writers (Chandler, 2003).

Among various types of teacher feedback given, explicit and implicit feedback seem to be the focus of many studies (Kim & Mathes, 2001; Lalande, 1982; Semke, 1984). Much empirical evidence has shown that explicit and implicit feedback can help improve students' writing (Carroll & Swain, 1993; Kim & Mathes, 2001). The extent of explicitness is one issue that teachers must consider before providing the appropriate type of feedback because they must take linguistic and non-linguistic elements as influences or interference from students' native language and level of proficiency into consideration.

Moreover, the problems students have with teacher feedback stem from not knowing how to respond to teacher feedback (Fregeau, 1999). Teachers, thus, should understand students' preferences for feedback in order to help students revise successfully. One potential reason behind unsuccessful revision is a mismatching between students' needs and teacher feedback (Hyland, 1998).

Based on the above reasons, matching the learning styles with teacher feedback could probably shed some light into the area of how to improve students' writing. Despite studies of field dependence/ independence and explicit/ implicit feedback that abound in the L2 literature, systematic studies of the relationship between field independence/dependence and the two feedback types have been surprisingly rare, although they seem to be the important factors influencing success in second language learning.

Hence, it is considered worthwhile to examine this relationship. This research study, therefore, is intended to investigate the relationship between two learning styles, namely field dependence (FD) and field independence (FI) and teacher

feedback (explicit/implicit) for Thai students at Suranaree University of Technology (SUT) who enrolled in an English V course. The question arises from the fact that correcting an error by type or category is a time-consuming task for teachers (Leki, 1990). Considering the time required for correction, teachers' realization of which feedback type is related to the students' learning style is worth investigating.

## **1.2 Purpose of the Study**

In general, teacher feedback is believed to encourage and help students to revise their writing although the topic is still controversial. The purposes of this study, thus, are as follows:

1. To investigate the relationship between learning styles (i.e. field dependence and field independence) and explicit feedback.
2. To investigate the relationship between learning styles (i.e. field dependence and field independence) and implicit feedback.

## **1.3 Hypotheses**

Based on the empirical studies by Brown (1994) and Chapelle (1995), field independent (FI) learning style correlates positively and significantly with language success in the classroom. Moreover, such field independent students often prefer explicit feedback on their grammatical accuracy (Oxford, Rivera-Castillo, Feyten & Nutta, 2001). The null hypotheses are as follows:

1. Field independent students will show a significant relationship with explicit feedback rather than with implicit feedback.

2. Field dependent students will show a significant relationship with implicit feedback rather than with explicit feedback.

#### **1.4 Research Questions**

In order to achieve the above purposes, the present study was designed to address the following research questions:

1. Which students' learning style (field dependence or field independence) is related to explicit feedback?
2. Which students' learning style (field dependence or field independence) is related to implicit feedback?

#### **1.5 Scope of the Study**

In addressing the aforementioned research questions, the study has certain limitations, which are as follows:

First, the subjects of this investigation are students from different years, who enrolled in an English V course at Suranaree University of Technology (SUT), in Nakorn Ratchasima. They should not be considered as representative of students who study in other universities because of the different background knowledge, learning environments, and proficiency levels. The present study focuses only on the learning style of these students. It excludes the subjects' gender, age, background knowledge, and learning environments.

Second, teacher feedback will only be given to the areas of grammar and lexical errors, or form-focused. The results of this study, however, could be used as a

basis for further development of the Academic English Writing Course at SUT (English V) and further research.

## **1.6 Thesis Outline**

This thesis consists of four chapters. The content of each chapter is summarized as follows:

**Chapter 2** reviews the relevant literature on theoretical issues and previous studies on learning styles and teacher feedback.

**Chapter 3** reports the methodology and the design of the two empirical studies. In the feasibility study, subjects were first-year vocational students at Chanapollakan Technology School. The findings of the feasibility study led to the present study which involved students from different years at Suranaree University of Technology.

**Chapter 4** presents and discusses the results of the study in relation to the relationship between two learning styles: field dependence/independence and explicit/implicit feedback.

**Chapter 5** includes the implications of the study and suggests further study.

## **1.7 Definition of Key Terms**

The following terms were used extensively throughout this study.

**Learning style** refers to internally based characteristic, often not used consciously, which are the basis for the intake and understanding of new information (Reid, 1995: preface). According to Wintergerst, DeCapua and Itzen (2001), it is

defined as an innate preference of individuals as to how they prefer to go about the process of learning. Many types of learning style have been proposed, i.e. field dependence/ field independence, visual, auditory, and kinesthetic.

**Field Dependence** refers to the learning style in which a holistic student perceives situations as wholes, rather than analyzing them into components. A person with field dependent style tends to possess less ability to separate details from the background easily. Field dependent students tend to be more sensitive to the social context, are perceived as more considerate than field independent students, and perform well with less structure in their learning (Witkin, Oltman, Raskin & Karp, 1971; Oxford, 1990).

**Field Independence** refers to the learning style in which an analytic student studies with selective attention to specific important aspects. A person with field independent style tends to separate the key details from an ambiguous context easily. Field independent students are less sensitive to the social context, more detached and more logical than field dependent students are (Witkin et al., 1971; Oxford, 1990).

**Explicit feedback** refers to explicit provision of the correct form (Lyster & Ranta, 1997). The teacher provides specific grammatical information to indicate what is incorrect.

Observe [1a] and [1b].

[1a] He send email to his friends.

[1b] He send email to his friends. (Third person singular requires an 's' ending).

From the above example, [1a] is a sample of student's writing while [1b] is a sample of teacher's feedback. The feedback type is explicit feedback with

grammatical explanation including an underlined error indication. In this example, explicit feedback is send and a grammatical explanation is third person singular requires an 's' ending.

**Implicit feedback** refers to the teacher's reformulation of all or part of a student's utterances (Lyster & Ranta, 1997). It includes corrections and confirmation checks without indicating the source of error.

Observe [2a] and [2b].

[2a] He send email to his friends.

[2b] *He sent email to his friends.*

From the above example, [2a] is a sample of a student's writing while [2b] is a sample of a teacher's feedback. The feedback type is implicit feedback with provision of a correct form without an indication of the error. A student must observe a difference between his/ her writing and the teacher's feedback. In this example *send* becomes *sent*, and the error is corrected according to the teacher feedback.

**English proficiency level** refers to students' English ability, especially English grammatical knowledge. Since this study aims to investigate the relationship between field dependence/field independence styles and explicit/implicit feedback of students with different proficiency levels, students' English proficiency levels are evaluated by using the average grade of English in the previous courses (English I to IV).

## **CHAPTER 2**

### **REVIEW OF LITERATURE**

This chapter presents some of the theoretical background. The literature review begins with learning styles in the first section. Within this first section, the difference between field dependence/independence, the learning style instruments, and the relationship between learning style and second language learning are explained. The second section describes the definition of teacher feedback, and the teacher feedback in second language learning. The explicit/implicit feedback is later presented which includes a second language study with explicit/implicit feedback.

#### **2.1 Learning Styles**

Learning styles are often confused with learning strategies since they are related. However, learning styles are not the same and cannot be used synonymously with learning strategies. While learning strategies refer to external skills that students use, often consciously, to improve their learning, i.e. note taking, problem-solving, and meta-cognition (Reid, 1995), learning styles refer to consistent and enduring tendencies or preferences within an individual (Sakar, 2003).

Teachers in the ESL classroom can use students' learning styles as a tool to develop their students' learning. Since the area of learning styles is quite complicated, many researchers have accordingly proposed various terminology and definitions.

For example, Skehan (1991: 288) states that a learning style is “*a general predisposition, voluntary or not, toward processing information in a particular way*”. Similarly, Reid (1995: preface) defined the term learning style as “*...internally based characteristics of individuals for the intake and understanding of new information...*”. Or as “*...learning styles pertain to the manner in which individuals typically acquire, retain, and retrieve information...*”: e.g. a tactile/kinesthetic style for people who prefer a hands-on approach to learning (Felder & Henriques, 1995). In essence, Kinsella (1995) indicated a learning style could refer to an individual behavior that responds to a particular learning environment. Learning styles can be changed with time and context.

Generally, the term ‘learning style’ is discussed in four aspects: (1) cognitive style, i.e., preferred or habitual patterns of mental functioning; (2) patterns of attitudes; (3) a way to seek situations that is suitable for one's own learning patterns and (4) a way to use certain learning strategies and avoid others (Lawrence, 1984, as cited in Oxford, 2000). With respect to cognitive styles, it is an issue that has continued to be explored in the educational research literature for almost 30 years. According to Summerville (1999), a learning style as a cognitive style refers to the specific categories that describe ways in which an individual processes information. A cognitive style includes variables within a single dichotomy such as global-holistic versus focus-detailed, right-brained versus left-brained, and field dependence versus field independence (Hsiao, 1997). Among all the variables above, Kang (1999) finds “*field dependence (FD)*” and “*field independence (FI)*” to be two of the most widely researched areas.

### **2.1.1 Field dependence vs. Field independence**

According to Witkin, Moore, Goodenough, and Cox (1977), the dimensions of field dependence (FD) and field independence (FI) are differentiated by reflecting modes of perceiving, remembering, and thinking. A field dependent student refers to someone who prefers to work within the context of the subject under study, think holistically, and is sensitive to group relations. Conversely, a field independent student refers to someone who prefers to work in isolation, think analytically, and tends to rely on their own points of view and judgement (Clenton, 1996). In other words, field independent students easily separate key details from a complex or confusing background, whereas field dependent students have trouble doing this.

Moreover, Witkin et al. (1977) propose that the implications of field dependence (FD)/ independence (FI) can be found in four learning areas: (1) FD tends to be better at learning social material than FI, (2) FD tends to have more difficulty with unclear structured learning materials than FI, (3) FI tends to learn more under the intrinsically motivating conditions than FD, and (4) FI learns concepts more rapidly when the salient cue is irrelevant to the definition of the concept than FD.

Similarly, Willing (1988) summarized the contrasts on the two poles of the field dependence and field independence in terms of learning strengths, as shown in Table 1.

Table 1

Contrasts between the learning strengths of field dependence/independence

Field dependence (FD)	Field independence (FI)
1. Performs best on tasks calling for intuitive “feel” for language (e.g. expression; richness of lexical connotation; discourse; rhythm and intonation.	Performs best on analytical language tasks (e.g. understanding and using correct syntactical structures, semantically ordered comprehension of words, and phonetic articulation.)
2. Prefers material which has a human, social content; or which has fantasy or humor; personal; musical or artistic.	Favors material tending toward the abstract and impersonal, factual or analytical, useful, and ideas.
3. Less likely to direct own learning: may function well in quasi-autonomy (e.g. “guided discovery”); (but may well express preference for a formal, teacher dominated learning arrangement, as a compensation for own perceived deficiency in ability to structure.	Likely to set own learning goals and direct own learning; (but may well choose or prefer to use for own purpose an authoritative text or passive lecture situation.)
4. Has affinity for methods in which various features are managed simultaneously, realistically, and in an insignificant context.	Has affinity for methods that are focused, systematic, sequential or cumulative.
5. Right hemisphere strengths	5. Left hemisphere strengths

Note: adapted from Willing (1988)

With reference to the learning aspect of field dependence/independence as mentioned above, we can then infer that a field dependent student tends to be someone who performs best on communicative language while a field independent student tends to be someone who performs best on using correct syntactical structures. Based on these distinctions, some instruments have been developed to assess the learning styles.

### **2.1.2 Learning style instruments**

Three main instruments have been developed to measure learning styles which are Witkin et al.'s (1977) Group Embedded Figure Test (GEFT), Riding's (1991) Cognitive Styles Analysis (CSA), and Brown's (1994) Learning Style Questionnaire.

Witkin et al. (1977) developed the GEFT to classify field dependence/independence. The students must complete the task by finding simple graphical figures, which are embedded within more complex backgrounds. The field dependent student refers to those who have difficulty finding the embedded figure while the field independent student refers to the successful ones. The drawback in the effectiveness of the GEFT is that the level of field dependence could be inferred from poor field independence performance.

In order to overcome the limitation of GEFT, the Cognitive Styles Analysis (CSA) was designed by Riding (1991). The CSA differs from GEFT in that it contains two sub-tests. One comprises a simple geometrical shape within a complex background as in the GEFT. The other contains pairs of complex geometrical figures which the student is required to judge whether they are the same or not. In this way, field dependence will be positively measured rather than being inferred from poor field independence capability. Moreover, the CSA offers another advantage in that it can be computerized for administration and scoring. Nonetheless, the limitations of CSA are that it is a computer-based test and there is very little evidence of published literature which demonstrates the reliability of Riding's CSA.

The other instrument used for assessing learning styles (field dependence/ independence) is Brown's (1994) learning style questionnaire. It contains

a ten-item description from which students are required to select five check boxes. The first two boxes indicate that the items' descriptions in the questionnaire are very much alike. The last two boxes indicate that the items' descriptions are somewhat descriptive. The middle box indicates that neither the first two boxes nor the last two boxes are applicable (See detail in Chapter 3, Section 3.1.2A). Although Brown's learning style questionnaire was developed because of the debate about the drawbacks of using GEFT in the ESL language classroom, it seems less popular. No study in the review literature was found that uses Brown's learning style questionnaire to assess field dependence/independence.

### **2.1.3 Learning styles and language learning**

According to Ellis (1989), teachers can help students by understanding or knowing their students' preferred learning styles. Matching learning styles with teaching styles seems to be a significant factor in the success of the learning process (Carrell & Monroe, 1993; Nachiengmai, 1998).

Firstly, Carrell and Monroe (1993) investigated the relationship between ESL composition students and a modified form of the Myers Briggs Type Indicator (MBTI), which is used to identify the students' learning styles. The students from first-year writing classes from the University of Akron volunteered to participate in the study. All participants, 41 native speaker students (NES) and 25 ESL students, first took the MBTI modified for nonnative speakers of English in order to identify their learning styles. After that, each student was assigned to write three compositions throughout the semester. The results showed that the compatibility between the

learning styles and the method of writing instruction could affect the composition positively.

On the other hand, a mismatch between learning styles and teaching styles may have a negative impact on classroom learning (Felder & Henriques, 1995). Based on Reid's (1987) hypothesis, a mismatch between teaching and learning styles causes learning failure, frustration and demotivation. In 2001, Peacock conducted a study by using Reid's questionnaire, interviews and tests. Two hundred and six EFL students and 46 EFL teachers at a Hong Kong university participated in this investigation. The results showed the differences between students and teachers' preferences. Interview results also revealed that 72% of the students were frustrated by a mismatch between teaching and learning styles; 76% said it affected their learning, often seriously; and 81% of the teachers agreed with Reid's hypothesis.

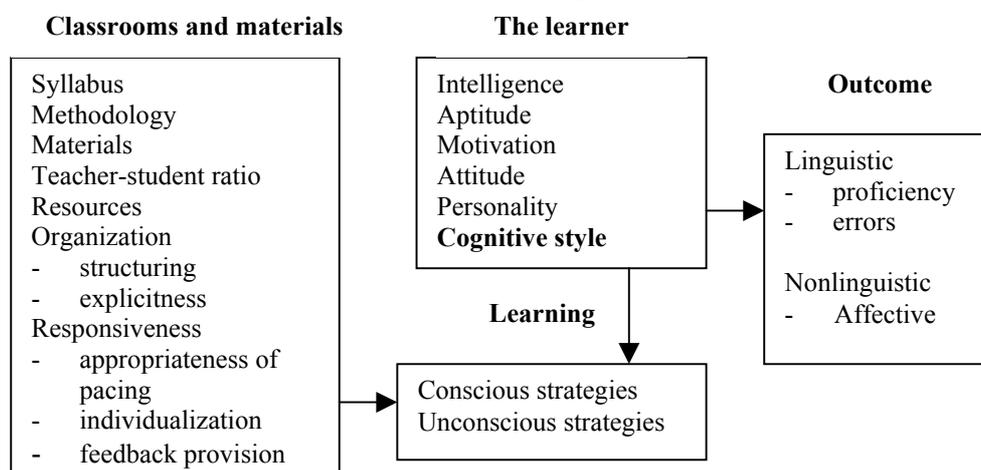
Among second language learning studies, several (Naiman, Frohlich, Todesco & Stern, 1978; Genesee & Hamanyan, 1980; Hansen-Strain, 1984; Brown, 1994) found significant positive relationships between field independence and second language learning. Attempting to provide additional evidence, Nodoushan (2002) conducted a study to provide additional evidence that field dependence/ independence is related to L2 achievement. Sixty students from 240 junior and senior students at Azad University of Bushehr in Tehran were selected to participate in this study. The subjects were divided into two groups according to their learning styles (Field Independence/Field Dependence) as measured by the Group Embedded Figures Test (GEFT). The respondents were asked to identify a simple geometrical figure form within a complex geometrical figure. Some respondents who spotted the simple figure immediately were categorized as field independent students, whereas others who were

more distracted by the surroundings and spent more time to spot the figure were categorized as field dependent students.

Later, only 60 subjects (30 field dependent students and 30 field independent students) from both groups took both the 1990 version of IELTS and the Communicative Test (CT). However, because of practical restrictions, only the reading comprehension, writing, and the listening comprehension sections of the IELTS were used. The IELTS, in this study, was used as a tool for validating the CT, which was specifically developed and used as the main tool for data collection. The CT consisted of the same number of items and had the same readability indices as those of the IELTS. In order to minimize the practice effect, the subjects were randomly classified into two halves: A and B (half A, consisted of a group of FI/ FD, half B, consisted of a group of FI/ FD). The first half took the CT and then the IELTS, whereas the other half took the IELTS and then the CT. The results of a t-test analysis indicate that FD groups are potentially better performers on CT.

Regarding all influential factors on language learning, there are many factors that influence second language learning. Skehan (1989) illustrates a language learning model, which shows the factors in Figure 1.

Figure 1. Factors influencing language learning (partially adapted from Skehan, 1989)



As shown in Figure 1, the model suggests that factors that influence language learning include two main parts: the learner, the classrooms and the materials. For the classrooms and the materials, syllabus, methodology, organization, and responsiveness are included. In terms of the responsiveness, teacher feedback provision was found to be important in second language learning achievement. Therefore, this study will focus on the factor of feedback in order to give the study greater depth.

## **2.2 Teacher feedback**

One of the basic theoretical claims on the relationship between interaction feedback and second language learning is the Interaction Hypothesis proposed by Long (1996: 414). The Interaction Hypothesis suggests that “...*negative feedback obtained during negotiation work or elsewhere may facilitate second language development, at least for vocabulary, morphology, and language specific syntax....*” Likewise, evidence from many studies (e.g. Ferris, 1997; Gass, Mackey & McDonough, 2000) using several feedback techniques, such as peer response, teacher-student conferences, audio-taped commentary, reformulation, computer-based commentary, and handwritten commentary as the primary method of response shows results which support Long’s hypothesis.

Teacher feedback has been investigated both as a factor in learning theory and as error correction. As a factor in learning theory, a behaviorist views teacher feedback as a positive and negative reinforcement. Chaudron (1988) considers positive feedback as positive praise or repetition of students’ correct responses while

negative feedback refers to grammar explanation and modeling of correct responses. Moreover, for cognitive theorists feedback is viewed not only as useful information, but also as reinforcement of language learning.

Teacher feedback, as an error correction, can be seen as an inevitable constituent of classroom interaction such as a teacher-act and student-response. For a teacher, feedback entails the accuracy of students' target language production. For a student, feedback is used as information to interact with the teacher whether it is positive or negative, that is, students can use teacher feedback to correct their target language and it may be a potential source of improvement (Chaudron, 1988).

Moreover, teacher feedback seems to be essential to the writing process. Keh (1990: 294) stated that feedback is "*what pushes the writer through the various drafts and on to the eventual end-product*". Teacher feedback in the form of error correction is probably one important aspect of classroom interaction. In most composition classes, teachers tend to give feedback by correcting lexical errors, phonological errors, syntactic errors, and other language problems.

### **2.2.1 Teacher feedback in second language learning**

Giving teacher feedback in second language learning, however, is a debatable issue. Some researchers (Cohen & Cavalcanti, 1990; Ferris, 1995) attempt to investigate students' reaction toward teacher feedback in second language learning. Cohen and Cavalcanti (1990) pointed out the disadvantages in giving teacher feedback. In their study, there were three groups of students: 11 students in the EFL institute, 13 university EFL students, and 19 Portuguese L1 students. All students were asked to respond to a questionnaire constructed to inquire about the type of

feedback and also the students' writing abilities. Three teachers selected three students from three groups to provide in-depth verbal reports about how they handled teacher feedback. The result showed that teacher feedback was found to be inconsistent, unclear, and over-emphasized negativity.

Moreover, the interview results of Fregeau's (1999) case study revealed that the teachers' different grammatical requirements make students confused and frustrated. The result of this study concluded that ineffective error correction could distract the students. Likewise, Truscott (1996, 1999) claimed that teachers who lack the skill to explain the students' problems often gave an ineffective correction. Instead, Truscott suggested the idea of a correction-free situation. Many studies (Burkland & Grimm, 1986; Hillocks 1986; Sperling & Freedman, 1987) also indicated that teacher feedback has little impact on students' composition.

On the other hand, other studies show that second language students prefer receiving teacher feedback and in fact they obtain a positive result from teacher feedback (Hedgcock & Lefkowitz, 1994; Leki, 1986; McCurdy, 1992). Many studies (Cohen, 1987; Ferris, 1995; Ferris & Robert, 2001; Lee, 1997) indicate that students seem to be eager to receive teacher feedback on their errors.

In an attempt to investigate the L2 students' reactions to teachers' feedback, Ferris (1995) conducted a survey of 155 students in two levels of California State University ESL composition program. A questionnaire was used to collect the data. The results indicated that the students paid more attention to teacher feedback provided on preliminary drafts and felt that teacher feedback could help them improve their writing.

According to Myles (2002), L2 writers require teacher feedback as part of the instructional process in order to improve their writing. Sufficient feedback on errors and individual attention can help learners develop their writing skills. Likewise, Leki (1990) stated that teacher feedback on student writing could help students improve their writing although it was time-consuming for the teacher.

Despite the fact that it is an ongoing debate whether teacher feedback is required and whether teacher feedback affects students' performance, most teachers tend to use feedback as a guide for students to improve their performance (Lee, 2003). Many types of feedback are therefore used in L2 teaching and learning both in oral and written forms.

### **2.2.2 Types of teacher feedback**

Generally, feedback could be categorized in many ways such as “form-focused” and “content-focused,” “explicit” and “implicit,” “correcting” and “helping,” or “affective” and “cognitive” (Chaudron, 1988; Vigil and Oller, 1976). Form-focused and content-focused feedback is mostly investigated in several studies (Krashen, 1984; Fathman and Whalley, 1990; Taylor, 1981) in second language learning to see whether teachers should focus on form or content and how to use them as parts of teacher feedback. Form-focused feedback is mostly provided at the sentence level which includes verb tense, third person singular present simple verb ending, negation, pronoun, article, punctuation, spelling, and other grammatical functions. Content-focused feedback, on the other hand, affects the meaning of and across the sentence.

Apart from form-focused and content-focused, feedback has also been categorized as “explicit” and “implicit” and this distinction seems to be the focus of many second language acquisition studies. According to Lyster and Ranta’s (1997) study, ‘explicit feedback’ refers to explicit provision of the correct form. The teacher will provide specific grammatical information to indicate what is incorrect, as illustrated in [3] and [4].

[3a] He wear a blue hat.

[3b] He wear a blue hat. (Third person singular verb requires an ‘s’ ending)

[4a] She buyed a new dress yesterday.

[4b] She buyed a new dress yesterday. (buy is irregular verb).

Both [3a] and [4a] are samples of students’ writing while [3b] and [4b] are the teacher’s feedback respectively. It is to be noticed that in [3b] and [4b] the teacher provides explicit feedback together with specific grammatical information.

On the contrary, ‘implicit feedback’ refers to the teacher’s reformulation of all or part of a student’s utterance (Lyster & Ranta, 1997). Implicit feedback or recast, according to Long and Robinson (1998) are corrections and confirmation checks without indicating the source of error, as shown in [5] and [6].

[5a] He wear a blue hat.

[5b] *He wears a blue hat.*

[6a] She buyed a new dress yesterday.

[6b] *She bought a new dress yesterday.*

Both [5a] and [6a] are samples of students’ writing while [5b] and [6b] are the teacher’s feedback, respectively. It can be seen that in [5b] and [6b] the

teacher provides implicit feedback by correcting without giving either specific grammatical information or error indication.

There is little existing evidence as to whether explicit or implicit feedback can help students in their writing. Many studies (Carroll & Swain, 1993; Ferris & Roberts, 2001; Kim & Mathes, 2001) show an ambiguous result over whether feedback, explicit and implicit, can benefit students.

Based on Carroll and Swain's (1993) study, 100 Spanish-speaking students of English as a second language were given training session on eight items about the use of dative sentences i.e. "*Peter wrote a letter to Theresa*" and asked for the alternative form i.e. "*Peter wrote Theresa a letter*". The students were divided into five groups and given different kinds of feedback. Those five groups received zero feedback, feedback in the form of being told that they were wrong, implicit feedback in the form of a question that inquired whether they were sure of their answer, explicit negative feedback group with explanations, and the modeling plus implicit negative feedback group. The study aimed to investigate the effect of each type of feedback on the ability of students to learn the dative alternation rule in English. The results showed that the groups of students who received explicit and implicit feedback performed significantly better than the groups receiving other forms of feedback.

On the other hand, Kim and Mathes (2001) have replicated Carroll and Swain (1993) in order to determine whether explicit or implicit feedback benefits students more. Twenty native speakers of Korean from classes at an American University volunteered to participate in the experiment. Students were randomly formed into two groups according to the type of explicit and implicit feedback. Both

groups were trained in the dative alternation in the form of one structural change but received different types of feedback. Dative alternation relates to different syntactic constructions of a dative verb and its argument i.e., *John sent Ann a package*, and *John sent a package to Ann*. The results revealed no significant differences between the groups.

Likewise, in a classroom research study by Ferris and Roberts (2001), 72 university ESL students and eight teachers were involved in an experiment to study how explicit error feedback should be. Two groups of students enrolled in a three-unit composition class and a voluntary one-unit “grammar for writers” tutorial. They met for 2 hours/week for 6 weeks. During the first week of the class, they were asked to write on different essay topics. Then they were randomly assigned to three treatment groups of feedback condition. Group A, the “codes” group, would receive error markings and codes feedback from the teacher as illustrated in [7] – [8] below:

[7a] He goed to the mall.

[7b] He goed<sup>VE</sup> to the mall.

[8a] If you are interested, please ask for more informations.

[8b] If you are interested, please ask for more informations<sup>NE</sup>.

Both [7a] and [8a] are samples of students’ writing while [7b] and [8b] are the teacher’s feedback, respectively. It can be observed that in [7b] and [8b] the teacher provides explicit feedback with codes. For example, the code “VE” means there is an error in verb tense or form, whereas “NE” means a missing or unnecessary noun ending (plural or possessive).

Conversely, group B, the “no codes” group, would receive error markings and no codes in their feedback. The last group, group C, is the control group

that receives no error markings. All three groups performed the self-editing task. The result showed that the two groups receiving explicit and implicit (codes and no codes) feedback significantly outperformed the control group on the task. However, there were no significant differences between the codes and the no codes groups. Thus, the conclusion is that the no coded group seems to help students self-edit as well as the coded group.

Another study that focuses on beneficial feedback types is Mantello (1997) who conducted an experimental study with two error correction methods: coded or explicit feedback and reformulation or implicit feedback. The first type of coded feedback provides students with both the location and the nature of the error, while the second addresses students' surface errors of grammar and vocabulary and makes it sound more like native speakers. The L2 student can compare his/her text with the reformulated version. The study shows significant improvement in students' ability to identify and to produce the composition structure correctly. The coded feedback method worked well with the weaker L2 students while the reformulation, or implicit feedback, method worked well with the better L2 students.

Despite the fact that many studies in the L2 literature support the field dependence/independence and explicit/implicit as factors which influence second language learning, it seems that there are few studies which have attempted to link the explicit/implicit feedback to individual students. This present study will therefore investigate the relationship between teacher feedback (explicit and implicit feedback) and individual students.

With regards to language proficiency, Gass and Varonis (1985) propose that students' proficiency levels affect the amount of negotiation between

teachers and students. According to Lyster and Ranta (1997), teachers need to carefully take into account their students' proficiency levels in particular when they make decisions about feedback. The results of their study indicate that the more proficient students tend to respond to recast or implicit feedback less than the less proficient students.

Furthermore, Song (2002) conducted a study in order to investigate whether proficiency had an effect on students' responses to recast. Fourteen Korean adult ESL students at English Language Institute in Fort Lee, New Jersey took part in the study. Students were categorized as low and high proficiency according to the placement test offered by the Institute. Two weeks of classroom interaction were audio-recorded and transcribed. The results of students' opinions show that recast seemed to be effective for students with low proficiency.

Realizing the important role of students' proficiency, the researcher has therefore decided to investigate the relationship between teacher feedback and students' proficiency to obtain additional evidence about the nature of this relationship.

### **2.3 Summary**

This chapter has referred to some previous literature that is relevant to the present study in the areas of learning styles, and teacher feedback. In the area of learning styles, the review includes the difference between field dependence/independence, the learning style instruments, and the relationship between learning style and second language learning. Likewise, the area of teacher feedback includes the teacher feedback in second language learning, and the explicit/implicit feedback.

On the basis of this literature review, we will proceed to the proposal of our research hypotheses in the next chapter.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

This chapter includes the research methodology and findings of two studies, namely the feasibility study and the present study (Sections 3.1 and 3.2 respectively). The feasibility study was conducted to determine the efficacy of the research instruments. Based on the findings of the feasibility study, the subject and some methodologies have been modified in the present study to seek the answers to the research questions (see Chapter 1, Section 1.4).

#### **3.1 The feasibility study**

With the primary purpose of finding an appropriate methodology for the study, a feasibility study was conducted as part of the Academic English writing course at Chanapollakan Technology School, a vocational school in Nakorn Ratchasima.

In this study, the researcher acted only as a classroom observer while the teacher who is a Thai male with seven years' experience in teaching EFL to adults played the role of the researcher in a classroom. The teacher studied in Australia for three years and has also gained considerably experience in giving feedback to students both orally and in writing at this vocational school. The researcher randomly selected a group of students in one classroom to be the subjects of this feasibility study.

### **3.1.1 Subjects**

Twenty-three first-year students of a Foreign Language for Business and Service participated in this study. All of the subjects were native speakers of Thai whose ages ranged from 18-23 years old with a mean age of 21. All the 23 students were randomly selected to take part in the study. Based on students' performances and written ability in English, the teacher considered these students to be beginners with respect to their level of proficiency in the English language.

### **3.1.2 Instruments**

Since the feasibility study investigated a small group of subjects, multiple data gathering instruments were used, including the learning style assessment questionnaire, classroom observation, the semi-structured interview, and a collection of written data. The data collected included completed questionnaires, tapes of interviews and protocols, drafts of written assignments, revised versions of those drafts after feedback, together with copies of all students' tasks relating to the writing program. All teacher feedback on the subjects' written work was carefully documented. None of the feedback generated had been created specifically for this study, and the researcher made no intervention in the giving of the feedback. The following were the instruments used in this study.

#### **A. Learning style questionnaire**

Although there are few empirical studies using Brown's (1994) learning style questionnaire, the researcher decided to adapt Brown's learning style questionnaire in this feasibility study because it is an instrument used to assess the

field dependence/independence which was referred in the second language course. The learning style questionnaire comprises 10 item descriptions in two separate columns. The description in the left column refers to students' preferences for field dependence while the right column refers to students' preferences for field independence.

The students were asked to select one out of the five check boxes, which were provided to assess the subjects' learning styles, either field dependence or field independence. Boxes A and E indicate that the items' descriptions in the questionnaire are very much alike. Boxes B and D indicate that the items' descriptions are somewhat descriptive. Box C indicates neither. Figure 2 shows examples of Brown's (1994) learning style questionnaire (field dependence/independence).

	A	B	C	D	E	
I don't mind if people laugh at me when I speak.	<input type="checkbox"/>	I get embarrassed if people laugh at me when I speak.				
I like to try out new words and structures that I'm not completely sure of.	<input type="checkbox"/>	I like to use only language that I'm certain is correct.				
I feel very confident in my ability to succeed in learning this language.	<input type="checkbox"/>	I feel quite uncertain about my ability in learning this language.				
I want to learn this language because of what I can personally gain from it.	<input type="checkbox"/>	I am learning this language only because someone else is required.				

Figure 2. Brown's (1994) Learning style questionnaire

## B. Classroom observation

In order to investigate the context within which oral feedback was given to each individual student and to observe the students' behavior, the

researcher acted as an observer in the classroom. The researcher designed a checklist (see Figure 3) to observe the students' behavior in a systematic and manageable way. The items in the checklist referred to relatively observable behavior.

Student's name	_____	
Gender:	<u>Male/ Female</u>	
Character:	congenial	friendly
	serious looking	self-confident
Preference:	group work	work alone
Others:	_____	
	_____	
	_____	

Figure 3. Observation checklist

### C. Recording of semi-structured interview

The researcher carried out a semi-structured interview by asking questions without any particular list of questions. The field independent and dependent students were selected by using the stratified sampling method. These students were interviewed in Thai about the received feedback in order to investigate the students' opinion about teacher feedback. The ten-minute interview session was tape-recorded and then transcribed.

#### 3.1.3 Procedure

The academic writing course typically lasts 18 weeks. The course is based on the principles of process writing including the study of the essay outline (i.e. introduction, body, and conclusion), and the way a thesis statement develops in a

paragraph. The writing topic is limited to academic subjects; for example, environment, health, tourism, and sexual harassment.

The researcher, acting as an observer in the classroom, let the teacher conduct the study, which had been designed as summarized in Table 2.

Table 2.

Design of the feasibility study

<b>Studied group</b>	
Week 1-7	Writing process + Internet, email, and surfing the Net
Week 8	Learning style questionnaire administration
Week 9-10	First draft submitted
Week 11-12	Second draft submitted
Week 13	Final product submitted + semi structured interview (done by researcher)

During Weeks 1-7, the teacher explained to the students in general terms the principles of the Academic writing process. He also motivated students by additionally introducing how to use the Internet, email, and how to surf the Net. The [www.google.co.th](http://www.google.co.th) search engine was recommended for searching topics of interest. Some other web sites were provided for the students to do self-study about essay writing, dictionary work, and other things.

In Week 8, the teacher asked the students to respond to the learning style assessment questionnaire (see Section 3.1.2A), which was adapted from Brown (1994). The results showed that most students misunderstood the meaning of the English questionnaire and selected only the middle box indicating that neither applied.

Thus, the second time, the researcher deleted the middle box in order to avoid ambiguous results. All of the students were asked to respond to the revised questionnaire in the classroom. The researcher, acting as a teacher assistant, explained

the meaning of all the ten questions in Thai to ensure that all students had the same understanding of the questionnaire. Unfortunately, the results showed that five out of 23 students selected both choices for one question. The researcher was unable to conclude the number of FI and FD students from these results.

Finally, the researcher translated the 10 questions into Thai and put them beneath the English counterparts (see Figure 4 below). The results showed that there were 13 field independent students and 10 field dependent students. Field independent students would be those who preferred working dependently and focusing on grammar whereas field dependent students would be those who preferred communicating and working within a group.

	A	B	C	D	
I don't mind if people laugh at me when I speak. ข้าพเจ้าไม่ใส่ใจว่าจะมีใครหัวเราะขณะที่พูดภาษาอังกฤษ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I get embarrassed if people laugh at me when I speak. ข้าพเจ้ารู้สึกอายถ้ามีใครหัวเราะเวลาที่พูดภาษาอังกฤษ
I like to try out new words and structures that I'm not completely sure of. ข้าพเจ้าชอบทดลองใช้คำศัพท์หรือรูปประโยคใหม่ๆ ที่ไม่แน่ใจในความหมายของคำนั้น	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I like to use only language that I am certain is correct. ข้าพเจ้าจะใช้คำศัพท์หรือรูปประโยคที่แน่ใจและมั่นใจในความหมายเท่านั้น
I feel very confident in my ability to succeed in learning this language. ข้าพเจ้ารู้สึกมั่นใจในความสามารถของตนเองในการเรียนรู้ภาษาอังกฤษ	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	I feel quite uncertain about my ability in learning this language. ข้าพเจ้าไม่มีความมั่นใจในความสามารถของตนเองในการเรียนรู้ภาษาอังกฤษ

Figure 4. Modified questionnaire of Brown's learning style.

By Weeks 9 and 10, the students selected the topic for their essay and were assigned to write the first draft of their essays, which were to be about 1-2 pages in length. Then the teacher gave feedback by using handwritten comments in English and oral feedback in Thai in the classroom. Both types of explicit and implicit

feedback would be used where appropriate though the teacher did not train students in either explicit or implicit feedback.

The researcher decided to stop conducting this feasibility study after Week 10. However, some students were interviewed and observed during the tenth week. The reason for this will be given in the following section.

### 3.1.4 Results

Having looked through the first draft of students' compositions including the teacher feedback, most of the first drafts were incomprehensible (see Figures 5 and 6). Students tended to write English by translating from Thai to English word by word. Moreover, the teacher gave implicit feedback rather than explicit feedback. There were a lot of errors but the teacher gave too little feedback because he considered that most of the writing needed to be rewritten and it would take too much time to give feedback on all the errors.

*” Every body and every life this is born on the world. When to grow up every body to have the dream. And to expect altogether and If on the day we have to life as usual and happy. We will ~~make to expect~~ and to the dream but we to know to have sevens day will be to die”* make our dream  
come true

Figure 5. A sample of student's essay with teacher feedback

*“First thing: I will ~~to~~ do ~~in~~ everything. I want and I like. I will ~~be don't~~ cry and everything will to take born. Because I'm not die to day to this time but I have sufficient ~~of~~ time I will ~~be to~~ make thing a good for seven day and every thing isn't stop up to die”.*

Figure 6. A sample of student's essay with teacher feedback

Figures 5 and 6 show examples of students' writing that is almost incomprehensible because of so many errors. However, the teacher decided to correct only some of the mistakes. Based on this feedback, the students might not be able to improve their writing.

Furthermore, due to the time limit, the teacher gave mostly oral feedback on such errors as incorrect prepositions and incorrect word forms. There was little teacher feedback provided which would help students to learn. The students were not likely to be able to correct many of their errors in their second draft.

With respect to classroom observation, the researcher found that it was probably unsuitable for use in this study. Many factors (e.g. students kept walking in and out of classroom, noise from outside) seemed to interfere with the learning atmosphere. The students' behavior could not be revealed by classroom observation.

Nonetheless, the research tried to test the recorded semi-structured interview with some students from both field independent and field dependent groups. Unfortunately, the results did not reflect the learning styles as assessed by Brown's learning style questionnaire. The following are some samples of the students' interviews, which have been translated into English.

**Student 1:**

Tipa was a nineteen years old student. She is friendly and congenial. The learning style assessment, adapted from Brown, showed that she was a field dependent student who tends to prefer communication. Her interview reflected a preference for field dependence: *"I dislike writing. I don't know how to transfer my ideas into English. Could you understand my writing? (laugh) It's a shame for me. But I am not shy when I speak. I believe that the teacher can understand me."*

**Student 2:**

Sutee is another student whose style is field independence. His interview shows a different preference: *“Speaking is easier than writing. I can speak, just using simple words. I thought people could understand it but I ran out of words when I wrote. English grammar is difficult”*.

The above interviews show that Brown’s learning style questionnaire seems to be invalid because the students’ preferences do not reflect the typical learning style as assessed. The researcher, therefore, decided to stop the feasibility study at Week 10 and concluded the findings shown in the next section.

**3.1.5 Summary of Findings**

The findings of the feasibility study are summarized as follows:

1. Overall, the learning style assessment instrument used in this study tends to confuse the students. It seems that the students’ responses were based on their understanding of the Thai translation rather than on the concepts the learning style represented. Though the middle box was finally deleted, some students were still confused by both the left and right columns. They sometimes checked both the boxes on the left and right columns.
2. The level of English proficiency seems to play an important role as a variable in this investigation. The students’

proficiency, which is quite low, meant that they were unable to convey the meaning of the content in their essays.

3. Explicit and implicit feedback was not clearly distinguished by the teacher. Thus, the researcher could not base the results on the number of explicit and implicit types of feedback given in the statistical analysis.

In conclusion, the result of the feasibility study failed to answer the research questions (see Chapter 1, Section 1.4). The researcher therefore terminated the study in Week 10 and decided to conduct the present study with a new group of subjects and also to change some of the methodologies.

## **3.2 The present study**

On the basis of the feasibility study results, the subjects and some of the research methodology were modified in order to suit the study's requirements. The details of these changes will be explained in the following sections (see Sections 3.2.1 and 3.2.2 respectively).

### **3.2.1 The subjects**

As reviewed in Chapter 2, Section 2.2.3 and considering the result of the feasibility study, students' proficiency level tends to be an important factor that may affect the research study. Reading some English compositions written by students at Suranaree University of Technology (SUT), in Nakorn Ratchasima, in Northeast Thailand, the researcher found that most students were able to convey their

meaning despite some errors. Figures 7 and 8 show some examples of English compositions written by SUT students.

*“SUT students should use an electronic mail (e-mail) to communicate with their friends and families. Because of, convenient, free, and it is very fast. To begin with, use an electronic mail (e-mail) to communicate with friends and family is not use papers and not to go to send it at post office”.*

Figure 7. English composition, written by Student 1 at SUT

*“There has been many ways to communicate such as, letter and phone. Untill today, there are always develop to mobile phone, fax, and electronic mail. All of ways to communicate have some different, i.e. time, system, manufacturing, area, and price”.*

Figure 8. English composition, written by Student 2 at SUT

The researcher, therefore, selected some new subjects from those enrolled in English V, a three-credit academic writing course at SUT. The course focuses on paragraph writing, language structures necessary for academic writing and an argumentative essay. Out of 750 students from 15 classrooms of mixed university years, two classrooms of 23 and 24 students participated in this study. This selection was done according to the convenience sampling method for management reasons. All of the subjects were native speakers of Thai whose ages ranged from 20-23 years old with a mean age of twenty-one. Regarding the small sample size, Roscoe (1975: 184) noted that *“in simple experimental research with tight experimental controls, successful research may be conducted with samples as small as 10 to 20 in size”*. The sample size in the present study, thus, should be acceptable.

### 3.2.2 Instruments

Since the present study is small-scale, both quantitative and qualitative methods were used to elicit the answer to the research questions (see Chapter 1, Section 1.4). The instruments used for data collection in this study included a) language background questionnaire, b) learning style questionnaire, c) composition questionnaire, and d) recording of semi-structured interviews.

#### A. Language background questionnaire

Due to the fact that students' proficiency levels seems to be the most important factor affecting the students' writing abilities, the researcher evaluated the students' proficiency levels by using a language background questionnaire (see Appendix A), adapted from Ferris and Robert (2001). The language background questionnaire comprised three questions. The first two questions in the questionnaire asked in general about the students' knowledge of grammar. The third question was used to evaluate and assign the students to an appropriate English proficiency level. These three questions are shown in Table 3.

Table 3.  
Three questions in the language background questionnaire.

1.	In the English classes you have taken before, have you learnt any grammar rules?
2.	What problems do you have with using English grammar in your writing?
3.	What were your grades in the previous courses taken?

## **B. Learning style assessment questionnaire (GEFT)**

Based on the feasibility study, the learning style assessment questionnaire adapted from Brown was considered invalid and unreliable. Among the learning style instruments, the Group Embedded Figure Test (GEFT) appears to be the most widely used instrument because researchers have evaluated the validity and reliability of the GEFT (Melancon & Thompson, 1989). Moreover, Alptekin and Atakan (1990) found that field dependence/independence seems to relate significantly to the second language learning as the factor that affects language achievement.

The GEFT, developed by Witkin, Oltman, Raskin and Karp in 1971, has a reliability of 0.89 on test-retest over a three-year period and validity or a correlation of 0.82 between the two major sub-sections. The GEFT will measure primarily through non-language-based tests. It is based on the belief that a contrast can be made between analytic and holistic individuals. Field independent or analytic people are more inclined to focus on the parts of a whole while field dependent or holistic people tend to consider the whole or broader picture. Thus, the present study used GEFT (Appendix B) to assess the learning styles of students during the first week.

The GEFT is a paper-and-pencil task in which all the subjects must find and trace simple forms embedded within a complex background (see Figure 9). The subjects were instructed to locate and outline those figures, which were embedded in a complex background within 15 minutes. The instrument has two sections with nine items each. The score was the number of items correctly traced. In this present study, the students were dichotomized as either field dependent, scoring from 0-9 on the instrument, or field independent, scoring from 10-18 on the

instrument. Figure 9 shows Form A on the left. Students need to find Form A, which is embedded in the middle figure. The right side shows the answer for Form A, which is highlighted.

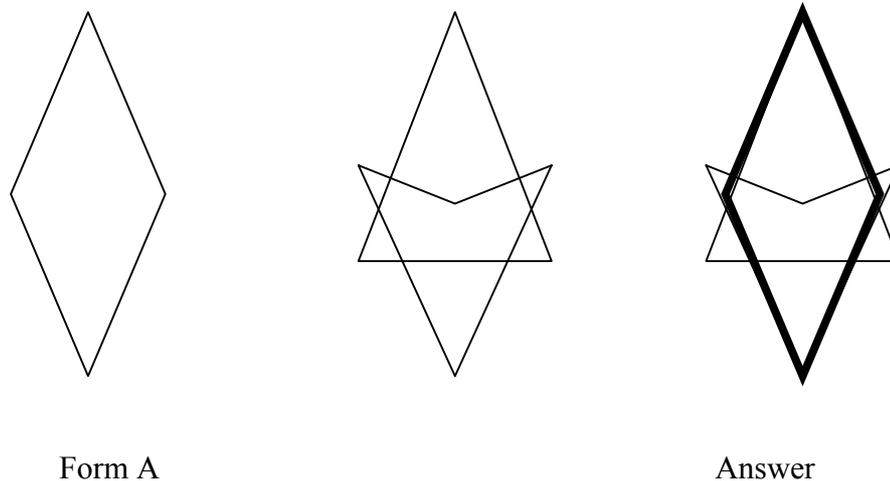


Figure 9. Example of Group Embedded Figure Test

### C. Composition questionnaire

Instead of using classroom observation to examine the students' behavior, the present study used the composition questionnaire (Appendix C), which was adapted from Ferris's (1995) and Kim and Mathes's (2001) study to assess the students' opinions as supplement any data. There were eight questions provided in the composition questionnaire. The first three questions ask how much attention students pay to teacher feedback. Questions 4-6 imply and confirm the students' learning styles. Questions 7-8 help identify the students' preferable feedback types. Table 4 shows the eight questions in the composition questionnaire. However, the questionnaire the students received was translated into Thai to ensure that students would understand the questions correctly and to avoid any confusion that might occur.

Table 4.

Eight questions in the composition questionnaire

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1.	How much of each composition do you read over again when your instructor returns it to you?
2.	How many comments and corrections do you receive?
3.	How much attention do you pay to the comments and corrections given?
4.	What do you do after you read your instructor's comments and corrections?
5.	Are there ever any comments or corrections that you do not understand? If so, can you give any examples?
6.	What do you do about those comments or corrections that you do not understand?
7.	When you make a mistake in your use of English, how would you like to be corrected by an instructor?
8.	When you make a mistake in your use of English, what do you think is the best way for an instructor to correct you?

---

#### **D. Recording of semi-structured interview**

A tape recording was made of the interview session, which would be used to assess the students' opinions about the types of feedback that they received. Because of a time-limit constraint, eight students from the two classrooms were selected as representatives of FI and FD students based on the stratified sampling method. The researcher performed a semi-structured interview lasting 15 minutes by asking questions in Thai without using any particular list of questions. This interview was later transcribed. The questions covered the following issues: the interviewee's family, education, and English language background, the interviewees' opinions about English, and toward teacher feedback (see Appendix D).

#### **3.2.3 Procedure**

The academic writing course (English V) lasts 12 weeks. The students usually meet the teacher twice a week for sessions of two hours and one hour, respectively (three hours altogether). The course is based on the principles of process

writing including the study of the essay outline (i.e. introduction, body, and conclusion) and also paragraph writing, the principles of writing an academic essay with special emphasis on an 'argumentative essay'.

In order to avoid interfering with this Academic course, the researcher acted as a teacher assistant to conduct the study in the first five weeks only. The design of the study is summarized in Table 5.

Table 5.  
Design of the present study

<b>All two groups</b>	
Week 1	Language background questionnaire + GEFT
Week 2	Feedback training + writing assignment
Week 3	First draft + feedback
Week 4	Second draft + feedback
Week 5	Final draft + composition questionnaire + in-depth interview

Initially, the subjects were asked to respond to the language background questionnaire (see Section 3.2.2A) to indicate their language background, what problems with English grammar they have in their writing, and what grades they received in the previous courses taken (English I to IV). The purpose was to place them into groups of appropriate proficiency levels. With respect to the degree of English proficiency of the subjects, the average grades in the previous courses (English I to IV) were used to divide the subjects into three proficiency groups. The high proficiency group was students whose grades were between 3-4 and never less than 2.0 in any course. The mid-proficiency group was between 2.0-2.9. The low proficiency group was for the others whose average grade was lower than 2.0. Nevertheless, the mid-proficiency group was excluded in order to differentiate the proficiency levels clearly and to distinguish the results.

Subsequently, the subjects were asked to do the GEFT (see Section 3.2.2B) to identify their learning styles. These subjects were independent samples based on the different types of teacher feedback (explicit/implicit). They were then divided into two subgroups of field dependent (FD) students and field independent (FI) students according to the results of the GEFT. Twenty-three students of classroom A belonged to two subgroups: 11 FD, and 12 FI. Twenty-four students of classroom B belonged to two subgroups: 13 FD, and 11 FI.

After completing the language background questionnaire and the GEFT, in Week 2, the researcher performed a training session for all of the students in both classrooms (A and B). The researcher explained about explicit feedback types to all the 23 students in Classroom A and distributed some examples of the specified error categories. The explicit feedback was given with errors underlined and also the code of error categories (see Table 6). The students were instructed that they should correct the error by using the codes of error categories to revise the draft. By contrast, 24 students in Classroom B were told about the implicit feedback with a correct form provided. There was no underlining or error codes. The students were instructed to correct the errors by using the correct forms provided.

Based on the samples of SUT students' writing, the most frequent error types were similar to the error categories which were found in Ferris and Robert's (2001) study. Thus, the researcher adapted these error categories in the study. The errors were categorized into 5 categories (see Table 6 for more detail).

Table 6.  
Description of error categories used for feedback and analysis

Categories	Description
Verb errors	All errors in verb tense or form, including relevant subject-verb agreement errors. (a). They can <u>writing</u> <sup>VE</sup> on computer. (b). An E-mail offers users to modify the font that help users <u>to easily to read</u> <sup>VE</sup> the message.
Noun ending errors	Plural or possessive ending incorrect, omitted, or unnecessary. (a). Please gives me some more <u>informations</u> <sup>NE</sup> . (b). His <u>furnitures</u> <sup>NE</sup> look terrible!
Article errors	Article or other determiner incorrect, omitted, or unnecessary. (a). <u>An</u> <sup>AR</sup> article that he is looking for is not on shelf. (b). I can't find <u>the</u> <sup>AR</sup> car now.
Wrong word	All specific lexical errors in word choice or word form, including preposition and pronoun errors. Spelling errors only included if the (apparent) misspelling resulted in an actual English word. (a). Their friends and families can receive letters <u>under</u> <sup>WW</sup> two minutes. (b). His <u>recommend</u> <sup>WW</sup> is to stop immediately.
Sentence structure	Errors in sentence/ clause boundaries (run-ons, fragments, comma splices), word order, omitted words or phrases, unnecessary words or phrases, other unidiomatic sentence construction. (a). <u>Most network communication use internet to communicate which have spread to around the world</u> <sup>SS</sup> . (b). <u>They are sure convenient in send each</u> <sup>SS</sup> .

Adapted from Ferris & Robert's study (2001)

All errors in five categories would be underlined and coded when the teacher gave the explicit feedback type. On the other hand, implicit feedback would give the corrections of the errors in these five categories. If the researcher found some errors that did not match the five categories specified, she would provide some other feedback types where appropriate. Nevertheless, the researcher focused only on the explicit feedback with codes and the implicit feedback specified in this present study.

At the end of the training sessions, the researcher asked the subjects to write a 100-word essay entitled "Why is English important to me?". This essay topic

was chosen because it was relatively easy for all students to write and to elaborate on according to the students' level of proficiency.

In approximately Week 3 or 4, all students submitted their essays and the researcher gave feedback on the students' first draft and second draft accordingly by using handwritten comments in the form of the error codes or the correct forms. Explicit feedback in the form of the error codes was used for Classroom A students, whereas implicit feedback in the form of the correct forms was used for Classroom B students. Before returning the students' assignments with the teachers' feedback, a native speaker teacher reviewed all the types of feedback to ensure that they were correct. Finally, in Week 5, the final version of the essay was submitted.

At the end of Week 5, all the students were asked to respond to the composition questionnaire (Appendix C). The questions asked them (1) how much attention they paid to the teacher feedback, (2) to reconfirm their learning styles and (3) to identify their preferable feedback types. Then, some students in each group of FI/FD students with high/low proficiency, selected by stratified sampling method were interviewed using the semi-structured questions (see Section 3.2.2 D, Appendix D).

#### **3.2.4 Data collection**

Multiple data gathering instruments were used, including a language background questionnaire, the learning style diagnosis questionnaire (GEFT), a composition questionnaire, and a tape-recording of the semi-structured interviews. The data collected included completed questionnaires, tapes of interviews and protocols, two drafts of the written assignments, two revised versions of those drafts

after feedback, together with the teacher's feedback. All the teacher's feedback on the subjects' written work was carefully checked. Only the feedback type provided during the training sessions was focused on specifically. Then, the native speaker teacher helped proofread these students' assignments and all of the given feedback to ensure the validity and reliability of the study.

### **3.2.5 Data analysis**

The students' assignments (both two drafts and final draft) and written teacher feedback were categorized and analyzed. In order to ensure the reliability and validity of the data analysis, an experienced native English teacher also analyzed the teacher feedback and revisions. The two analyses were compared and only a few areas of disagreement were found. These were discussed and then it was agreed that the researcher would first give the teacher feedback which would in turn be reviewed by the native English teacher. Some areas of disagreement would be corrected by the native English teacher. All the teacher feedback given was considered as feedback points, including underlining of problems and complete corrections.

Since one feature considered in this present study was the extent to which the teacher feedback given on the drafts was used by these students, all teacher feedback on the two drafts and the final product of the students' writing assignments were studied and considered as 'Usable' feedback. The classification has been done on the basis of its potential for revision of a draft.

However, students may sometimes not act on the teacher feedback. Only the feedback that was actually used by the students in their revisions was

classified as ‘Acted on’. The feedback acted on was calculated as the ‘Acted on’ proportion.

Examples:

Explicit feedback given:

- S-1<sup>st</sup> English is international language that people around the world use to communicate together.
- T-1<sup>st</sup> English is \_<sup>AR</sup> international language that people around the world use to communicate together<sup>WW</sup>.
- S-2<sup>nd</sup> English is the international language that people around the world use to communicate.
- T-2<sup>nd</sup> English is the<sup>AR</sup> international language that people around the world use to communicate.
- S English is an international language that people around the world use to communicate.

All S-1<sup>st</sup>, S-2<sup>nd</sup> and S were samples of a field independent student’s written assignment in the first draft, second draft, and the final product respectively while T-1<sup>st</sup> and T-2<sup>nd</sup> were the teacher’s feedbacks in the first and second draft respectively. One can see that in T-1<sup>st</sup> and T-2<sup>nd</sup> the teacher gave explicit feedback with the code \_<sup>AR</sup> and communicate together<sup>WW</sup> in the first draft and explicit feedback the<sup>AR</sup> in the second draft respectively. (see codes in Section 3.2.3, Table 4).

Implicit feedback given

- S-1<sup>st</sup> Most of printed and mass medias in the world use English language.
- T-1<sup>st</sup> Most <sup>Most printed</sup> of printed <sup>material</sup> and mass medias <sup>media</sup> in the world use English <sup>English</sup> language.
- S-2<sup>nd</sup> Most of printed material and mass medias in the world use English language.

T-2<sup>nd</sup> Most <sup>Most printed</sup> of printed material and mass medias <sup>media</sup> in the world use English <sup>English</sup> language.

S Most printed material and mass media in the world use English.

All S-1<sup>st</sup>, S-2<sup>nd</sup>, and S were samples of a field dependent student's written assignment in the first draft, second draft and final product while T-1<sup>st</sup> and T-2<sup>nd</sup> were the teacher's feedback in the first and second drafts respectively. One can see that in T-1<sup>st</sup> and T-2<sup>nd</sup> the teacher gave implicit feedback with the correct form Most <sup>Most printed</sup>, printed <sup>material</sup>, medias <sup>media</sup>, and English <sup>English</sup> language in the first draft and and Most <sup>Most printed</sup>, medias <sup>media</sup>, and English <sup>English</sup> language in the second draft.

After that, the total number of 'usable', 'acted on' for the two drafts were summarized and calculated as an 'acted on' proportion. Table 7 shows the data analysis of the two groups of explicit and implicit feedback in each classroom, based on the afore-mentioned examples of two different types of teacher feedback (explicit/implicit).

Table 7

Example of data analysis of students' assignment

	EXPLICIT			IMPLICIT		
	Usable	acted on	Acted on proportion	Usable	acted on	Acted on proportion
1 <sup>st</sup> draft	2	2		4	1	
2 <sup>nd</sup> draft	1	1		3	3	
total	3	3	1.0000	7	4	0.5714

From Table 7, the proportion of 'usable' feedback offered and 'acted on' feedback was calculated based on the total of the two draft values. The 'Acted on' proportion indicates the number of 'usable' feedback items that were responded to by

the students. This was calculated by dividing 'acted on' by the 'usable' feedback. From the above table, we can see that the 'acted on' proportion of students who received explicit feedback is 1.0000 ( $3/3 = 1.0000$ ) while the 'acted on' proportion of students who receive implicit feedback is 0.5714 ( $4/7 = 0.5714$ ).

### 3.2.6 Summary

This chapter reports the methodology and the results of two studies, the feasibility study and the present study. Based on the findings of the feasibility study, the subjects, some of the instruments, and parts of the study design were modified to suit the research questions (see Chapter 1, Section 1.4). The following summarizes all changes made in the present study:

1. The subjects were SUT students whose English proficiency was in general higher than those in the feasibility study.
2. The Group Embedded Figure Test (GEFT), developed by Witkin, et al.(1977), was used to assess the students' learning styles (Field independence/dependence).
3. Using the grades for English obtained in the previous courses, the subjects' proficiency for the low and high group was determined. A group of mid proficiency students was excluded in order to differentiate the proficiency level clearly and to distinguish the result.
4. Unlike the feasibility study, the explicit feedback referred to the feedback with grammatical codes (see Section 3.2.3, Table 6)

and underlining whereas the implicit feedback referred to the provision of the correct forms.

5. The researcher acted as a teacher assistant to help in giving the teacher's feedback on the students' assignments in order to avoid improper provision of both explicit and implicit feedback.
6. The composition questionnaire was a new instrument, used to examine the students' opinions on the teacher feedback.
7. To ensure the validity and reliability of this study, a native-speaker teacher who has experience in teaching English for academic writing proof read the students' assignments and all of the written teacher feedback.

The next chapter provides the results and also a data analysis of the present study. These findings will lead to a discussion of the results based on the research questions.

## **CHAPTER 4**

### **RESULTS AND DISCUSSION**

This chapter presents the results of the investigation and deals with two kinds of data analysis: quantitative data analysis to investigate the relationship between the learning styles and teacher feedback and qualitative data analysis to examine the students' opinions about teacher feedback and to observe the students' behaviors regarding their learning styles. The chapter begins with an overview of statistical procedure, the analysis of the students' assignments, then the students' opinions on the teacher feedback, and concludes with the summary of findings. The last section presents the discussions of the results based on the two research questions (see Chapter 1, Section 1.4).

#### **4.1 Overview of Statistical Procedure**

In order to do data analysis, the data were drawn from the two drafts and the final product of students' assignments. Its purpose was to find out the relationship between the learning style, i.e. field dependence (FD)/field independence (FI), and the teacher feedback, i.e. explicit/implicit feedback. The 47 students, who were independent samples, randomly selected according to the convenient sampling method, wrote the assignments and then revised the drafts by correcting the errors

according to the teacher feedback given. The total of 'usable' feedback and the 'acted on' feedback were calculated into 'acted on' proportion (see Chapter 3, Section 3.2.5).

In an attempt to investigate the relationship between two learning styles and two types of teacher feedback, there were 2 statistical tools selected. Firstly, the point biserial correlation was used to measure the relationship between the field dependence/independence and teacher feedback (explicit/implicit). The point-biserial correlation is simply the correlation between one dichotomous variable and one continuous variable. It turns out that this is a special case of the Pearson correlation. So computing the special point-biserial correlation is equivalent to computing the Pearson correlation when one variable is dichotomous and the other is continuous. In this study, SPSS version 8.0 for Windows was used to calculate the point biserial correlation coefficient, here symbolized as  $r_{pbi}$ . By convention, the dichotomous variable is treated as the X variable, its two possible values being coded as  $X_1=0$  and  $X_2=1$ ; and the non-dichotomous variable is treated as the Y variable.

Two assumptions for using this tool are that (1) the two learning styles (field dependence/independence) are considered as dichotomous variables (FD=1 and FI=0), and (2) the 'acted on' proportion of explicit/implicit feedback is considered a continuous or multi-step variable. Therefore, it seems that the point biserial correlation for two variables is appropriate for the present study to measure how these two variables are related.

Secondly, due to the fact that the two samples are nearly equal in size and the design of the present study was equivalent to using two experimental treatments (explicit and implicit feedback), the two independent samples t-test was used as the other statistical tool by using SPSS version 8.0 for Windows. Roscoe (1975) stated

that this tool, t-test for independent samples, is one of the most popular statistical tests. He pointed that there were two assumptions underlying the use of this tool: (1) the distribution of the measures in both samples is normal, and (2) the variances of the two populations are equal. Nonetheless, when the two samples are of equal or near equal size, the statistical test is quite insensitive to violations of these assumptions. Therefore, it seems that the t-test for two independent samples is appropriate for determining whether the criterion means for the two groups differ significantly.

In the light of explicit and implicit feedback groups, statistical procedures in the present study involved 3 steps.

1. Two random samples were independently drawn from all of the students enrolled in English V at Suranaree University of Technology. They were the subjects of two different experimental treatments (explicit/implicit feedback groups).
2. The 'acted on' proportion of each student's assignments, as previously explained (see Chapter 3, Section 3.2.5), was calculated into mean value and also the standard error of the difference between the means.
3. To determine if significant differences existed between the field dependent and field independent students responding to the explicit and implicit feedback, the t-test was used. The t-test demonstrated whether the means between groups were significantly different at an alpha level of 0.05 ( $p < 0.05$ ).

The results of these 2 statistical tools were interpreted to provide general guidance in evaluating the answers to the research questions.

## 4.2 The Analysis of Students' Assignments

At the end of the data collection, the two drafts and final product of the students' assignments were collected. The researcher then checked the 'usable', 'acted on' in order to calculate the 'acted on' proportion (see Section 3.2.5) based on each treatment (explicit/implicit). Table 8 shows the results of the data analysis for all 23 students in Classroom A.

Table 8.

The relationship between learning styles and explicit feedback

Style	1 <sup>st</sup> draft		2 <sup>nd</sup> draft		Explicit feedback		
	Usable	Acted on	Usable	Acted on	Usable	Acted on	Acted on proportion
FD	7	7	2	2	9	9	1.0000
FD	19	18	3	3	22	21	0.9545
FD	19	19	14	14	33	33	1.0000
FD	10	10	6	6	16	16	1.0000
FD	12	12	10	7	22	19	0.8636
FD	20	20	3	3	23	23	1.0000
FD	11	11	6	6	17	17	1.0000
FD	14	14	5	5	19	19	1.0000
FD	8	8	3	3	11	11	1.0000
FD	9	9	2	2	11	11	1.0000
FD	10	10	3	3	13	13	1.0000
FI	12	12	6	5	18	17	0.9444
FI	9	9	2	2	11	11	1.0000
FI	10	10	4	3	14	13	0.9286
FI	12	11	8	8	20	19	0.9500
FI	17	17	13	13	30	30	1.0000
FI	11	11	7	7	18	18	1.0000
FI	8	6	6	4	14	10	0.7143
FI	20	18	3	3	23	21	0.9130
FI	13	13	10	10	23	23	1.0000
FI	12	11	4	4	16	15	1.0000
FI	13	13	5	5	18	18	1.0000
FI	13	13	2	2	15	15	1.0000

From Table 8, Classroom A had 11 FD students and 12 FI students who received the explicit feedback. The total of the 'usable' and 'acted on' feedback in the two drafts were calculated for the 'acted on' proportion ('acted on' divided by 'usable' i.e.  $9/9 = 1.0000$ ). The result showed that 9 out of 11 FD students used all of

the ‘usable’ feedback provided. Their ‘acted on’ feedback was the same as ‘usable’ feedback; thus the value of the ‘acted on’ proportion was 1.0000. On the other hand, 6 out of 12 FI students used all of ‘usable’ feedback provided. Their ‘acted on’ feedback was the same as the ‘usable’ feedback, thus the value of the ‘acted on’ proportion was 1.0000.

Table 9 shows the results of the data analysis of the two drafts and the final version of the students’ assignments in Classroom B who received the implicit feedback.

Table 9

The relationship between learning styles and implicit feedback

Style	1 <sup>st</sup> draft		2 <sup>nd</sup> draft		Implicit feedback		
	Usable	Acted on	Usable	Acted on	Usable	Acted on	Acted on proportion
FD	17	14	10	10	27	24	0.8889
FD	17	16	6	5	23	21	0.9130
FD	16	16	4	4	20	20	1.0000
FD	8	7	9	9	17	16	0.9412
FD	17	15	17	15	34	30	0.8824
FD	33	33	13	13	46	46	1.0000
FD	18	16	2	2	20	18	0.9000
FD	23	19	7	7	30	26	0.8667
FD	10	10	4	6	14	13	0.9286
FD	20	18	5	5	25	23	0.9200
FD	31	27	6	6	37	33	0.8919
FD	20	19	10	10	30	29	0.9667
FD	23	21	10	5	33	26	0.7879
FI	16	13	5	3	21	16	0.7619
FI	20	19	5	5	25	24	0.9600
FI	12	10	8	7	20	17	0.8500
FI	15	15	5	5	20	20	1.0000
FI	15	13	4	4	19	17	0.8947
FI	19	17	14	10	33	27	0.8182
FI	13	13	4	4	17	17	1.0000
FI	22	18	6	6	28	24	0.8571
FI	16	14	9	9	25	23	0.9200
FI	26	24	4	4	30	28	0.9333
FI	21	21	4	4	25	25	1.0000

From Table 9, there were 13 FD students and 11 FI students in Classroom B who received implicit feedback. The results showed 2 out of 13 FD students corrected

the error according to the teacher feedback (the value of ‘acted on’ proportion = 1.0000). As for the FI students, 3 out of 11 corrected the error according to the teacher feedback (the value of ‘acted on’ proportion = 1.0000).

Since these results may simply be the result of the differences in the way the FD and FI students responded to the two teacher feedback types, the researcher decided to look closer at the English language proficiency levels. These subjects were therefore divided by the average grade in the previous English courses (see Chapter 3, Section 3.2.2A). The results are shown in Tables 10 and 11 respectively.

Table 10

The relationship between proficiency and explicit feedback

Prof.	1 <sup>st</sup> draft		2 <sup>nd</sup> draft		Explicit feedback		
	Usable	Acted on	Usable	Acted on	Usable	Acted on	Acted on proportion
High	7	7	2	2	9	9	1.0000
High	19	18	3	3	22	21	0.9545
High	19	19	14	14	33	33	1.0000
High	11	11	6	6	17	17	1.0000
High	14	14	5	5	19	19	1.0000
High	12	12	6	5	18	17	0.9444
High	9	9	2	2	11	11	1.0000
High	10	10	4	3	14	13	0.9286
mid <sup>a</sup>	8	8	3	3	11	11	1.0000
mid <sup>a</sup>	9	9	2	2	11	11	1.0000
mid <sup>a</sup>	10	10	3	3	13	13	1.0000
mid <sup>a</sup>	20	18	3	3	23	21	0.9130
mid <sup>a</sup>	13	13	10	10	23	23	1.0000
mid <sup>a</sup>	12	11	4	4	16	15	0.9375
mid <sup>a</sup>	13	13	5	5	18	18	1.0000
mid <sup>a</sup>	13	13	2	2	15	15	1.0000
Low	12	12	10	7	22	19	0.8636
Low	20	20	3	3	23	23	1.0000
Low	12	11	8	8	20	19	0.9500
Low	17	17	13	13	30	30	1.0000
Low	11	11	7	7	18	18	1.0000
Low	8	6	6	4	14	10	0.7143
Low	10	10	6	6	16	16	1.0000

<sup>a</sup> the mid-proficiency group was excluded from the data analysis of the present study

Table 10 focused on the relationship between the high/low proficiency levels and the explicit feedback given to students in Classroom A. The results showed that 9

out of 15 high- and low-proficiency students corrected the error according to the explicit feedback. In other words, the ‘usable’ and the ‘acted on’ were the same for these 9 students which made the ‘acted on’ proportion 1.0000 (they followed the entire given teacher feedback).

Similarly, Table 11 shows the relationship between the English proficiency level and the implicit feedback. Only 3 out of 14 high-and low-proficiency students corrected the error according to the teacher feedback. In other words, the ‘usable’ and the ‘acted on’ were the same for these 3 students which made the ‘acted on’ proportion 1.0000.

Table 11.

The relationship between proficiency and implicit feedback

Prof.	1 <sup>st</sup> draft		2 <sup>nd</sup> draft		Implicit feedback		
	Usable	Acted on	Usable	Acted on	Usable	Acted on	Acted on proportion
High	17	14	10	10	27	24	0.8889
High	17	16	6	5	23	21	0.9130
High	10	10	4	3	14	13	0.9286
High	16	13	5	3	21	16	0.7619
High	20	19	5	5	25	24	0.9600
High	12	10	8	7	20	17	0.8500
High	15	15	5	5	20	20	1.0000
High	15	13	4	4	19	17	0.8947
mid <sup>a</sup>	17	15	17	15	34	30	0.8824
mid <sup>a</sup>	33	33	13	13	46	46	1.0000
mid <sup>a</sup>	18	16	2	2	20	18	0.9000
mid <sup>a</sup>	23	19	7	7	30	26	0.8667
mid <sup>a</sup>	20	18	5	5	25	23	0.9200
mid <sup>a</sup>	31	27	6	6	37	33	0.8919
mid <sup>a</sup>	20	19	10	10	30	29	0.9667
mid <sup>a</sup>	23	21	10	5	33	26	0.7879
mid <sup>a</sup>	26	24	4	4	30	28	0.9333
mid <sup>a</sup>	21	21	4	4	25	25	1.0000
Low	16	16	4	4	20	20	1.0000
Low	8	7	9	9	17	16	0.9412
Low	19	17	14	10	33	27	0.8182
Low	13	13	4	4	17	17	1.0000
Low	22	18	6	6	28	24	0.8571
Low	16	14	9	9	25	23	0.9200

<sup>a</sup> the mid-proficiency group was excluded from the data analysis of the present study

#### 4.2.1 FD/ FI and explicit/implicit feedback

This section presents the statistical analysis of the students' assignments, calculated by using the point biserial correlation and the two independent samples t-test.

Regarding the point biserial correlation ( $r_{pbi}$ ), the value of this statistic ranges from -1.00 to +1.00. A positive value indicates that FD students also have higher value on the 'acted on' proportion in responding to the explicit/implicit feedback than FI students. A negative value indicates that FD students have low value on the 'acted on' proportion in responding to the explicit/implicit feedback and FI students had high responses to the explicit/implicit feedback. A near zero value indicates that there is little relationship between the two learning styles and the two types of teacher feedback.

For the purpose of comparison, the statistical analysis was analyzed by SPSS version 8.0 for Windows shown in Table 12.

Table 12

The point biserial correlation coefficient ( $r_{pbi}$ ) between learning styles and teacher feedback

Feedback	Learning style	N	Mean	Variance	t	df	Sig (2-tailed)	$r_{pbi}$
Explicit	FD	11	0.9835	0.0017	1.06	21	0.3012	0.225
	FI	12	0.9542	0.0068				
Implicit	FD	13	0.9144	0.0033	0.20	22	0.8433	0.044
	FI	11	0.9087	0.0064				

The Significant level ( $p < 0.05$ )

From Table 12, the 23 students from Classroom A received explicit feedback whereas the other 24 students from Classroom B received implicit feedback. We have found that 11 FD students and 12 FI students responded to the explicit feedback at the level of 0.9835 and 0.9542 respectively. The differences between two

groups of FD and FI students responding to explicit feedback are insignificant (significant 2-tailed is 0.3012). The point biserial correlation coefficient is 0.225. The results indicate the positive correlation between the learning styles (FD/FI) and explicit feedback.

Similarly, regarding the 24 students from Classroom B who received implicit feedback, we have found that 11 FD students and 12 FI students responded to the implicit feedback at the level of 0.9144 and 0.9087 respectively. The differences between two groups of FD and FI students responding to implicit feedback are insignificant (significant 2-tailed is 0.8433). The point biserial correlation coefficient is 0.044. The results do not indicate a correlation between the learning styles (FD/FI) and implicit feedback.

Moreover, another statistical tool (two independent samples t-test) was used to give further support. For the purpose of comparison, the significant level ( $p < 0.05$ , see Section 4.1) is displayed in **bold type**. Two independent samples t-test was used to find out the difference between the two groups of teacher feedback for each learning style as shown in Table 13.

Table 13

Mean of 'acted on proportion' responded by FD/ FI students regarding the explicit/implicit feedback.

Learning style	Feedback	N	Mean	Variance	t	Df	Sig (2-tailed)
FD	Explicit	11	0.9835	0.0017	3.321	22	0.003
	Implicit	13	0.9144	0.0033			
FI	Explicit	12	0.9542	0.0068	1.340	21	0.194
	Implicit	11	0.9087	0.0064			
All	Explicit	23	0.9682	0.0044	2.757	45	0.008
	Implicit	24	0.09918	0.0045			

The Significant level ( $p < 0.05$ )

Table 13 shows the mean 'acted on' proportion of the responses of both FD and FI students from the two classrooms with respect to explicit and implicit feedback. The overall mean of 'acted on' proportion of all 47 students who responded to the explicit feedback (N=23) and the implicit feedback (N=24) were 0.9654 and 0.9118 respectively. The two independent samples t-test with significant level at 0.05 reveals that the mean difference (t) between these proportions is 2.757. The 2-tailed significance of value of all FD and FI students is **0.008**. The result confirms the significant difference between the explicit feedback and the implicit feedback.

With regard to the 24 field dependent students (FD), 11 students received explicit feedback (N=11) whereas the other 13 students received implicit feedback (N=13) independently. It was found that the FD students responded to the explicit and implicit feedback 0.9835 and 0.9144 respectively. The two independent samples t-test with the significant level ( $p < 0.05$ ) reveals that the mean difference (t) between these proportions is 3.321. The 2-tailed significant of value of the field dependent is **0.003**. The results indicate a significant difference among the FD students in their response to the explicit feedback compared with the implicit feedback. In other words, the FD students tend to respond to the explicit feedback rather than to the implicit feedback.

Similarly of the 23 FI students (FI), 12 students received explicit feedback (N=12) whereas the other 11 students received implicit feedback (N=11) independently. It was found that the FI students responded to the explicit and implicit feedback 0.9542 and 0.9087 respectively. The two independent samples t-test with the significant level ( $p < 0.05$ ) shows that the mean difference (t) between these proportions is 1.340. The 2-tailed significant of value of the field dependent is 0.194.

The results lead us to conclude that the proportion of the corrected responses attained by the FI students regarding explicit feedback are not statistically significant. In other words, the FI students show no difference in responding to either explicit feedback or implicit feedback.

Since this present study is small-scale, the researcher further focused on the students' proficiency at high and low levels to provide an in-depth result. It should be remembered that the mid-proficiency level students were excluded in order to differentiate the proficiency level clearly and also to distinguish the results. The point biserial correlation coefficient ( $r_{pbi}$ ) and the two independent sample t-test were used to find out the relationship between the students' proficiency levels and feedback types as shown in Tables 14 and 15 respectively.

Table 14

The point biserial correlation between FD/ FI students who were at high- and low-proficiency level regarding the explicit/ implicit feedback.

Prof	Feedback	Learning style	N	Mean	variance	t	Df	Sig (2-tailed)	$r_{pbi}$
High	Explicit	FD	5	0.9909	0.0004	1.67	6	0.1460	0.563
		FI	3	0.9577	0.0014				
	Implicit	FD	3	0.9102	0.0004	0.30	6		
		FI	5	0.8933	0.0087				
Low	Explicit	FD	4	0.9534	0.0041	0.55	5	0.6060	0.239
		FI	3	0.9048	0.0272				
	Implicit	FD	2	0.9706	0.0017	1.15	4		
		FI	4	0.8988	0.0063				

The Significant level ( $p < 0.05$ )

Table 14 shows 16 out of 47 students were considered high proficiency students, using the average grades in the previous courses. Five of field dependent students (N=5) and 3 field independent students (N=3) responded to the explicit

feedback at 0.9909 and 0.9577 respectively whereas 3 field dependent students (N=3) and 5 field independent students (N=5) responded to the implicit feedback at 0.9102 and 0.8933. The differences between these 'acted on' proportions attained by the high proficiency students (FD and FI students) responding to the explicit and implicit feedback are insignificant (significant 2-tailed are 0.1460 and 0.7743 respectively). The point biserial correlation coefficient, measured between the two learning styles students and explicit/implicit feedback is 0.563 and 0.121 respectively. Regarding the high proficiency level students, the results show more correlation between the high proficiency level students and the explicit feedback than the implicit feedback.

On the other hand, 13 out of 47 students were considered low proficiency students, using the average grades in the previous courses. Four of the field dependent students (N=4) and 3 of the field independent students (N=3) responded to the explicit feedback 0.9534 and 0.9577 respectively, whereas 2 field dependent students (N=2) and 4 field independent students (N=4) responded to the implicit feedback 0.9706 and 0.9288. The differences between these 'acted on' proportions attained by the low proficiency students (FD and FI students) responding to the explicit and implicit feedback are insignificant (significant 2-tailed are 0.6060 and 0.3142 respectively). The point biserial correlation coefficient, measured between the two learning styles of the students and the explicit/implicit feedback is 0.239 and 0.500 respectively. Regarding the low proficiency level students, the results show more correlation between the low proficiency level students and the implicit feedback than explicit feedback.

With respect to the two independent samples t-test, the relationship between the students' proficiency levels (high- and low- proficiency students) and feedback types (explicit/implicit feedback) is shown in Table 15.

Table 15.

Mean of 'acted on proportion' responses by high- and low- proficiency students regarding the explicit/ implicit feedback.

Proficiency level	Learning style	Feedback	N	Mean	variance	t	Df	Sig (2-tailed)
High	FD	Explicit	5	0.9909	0.0004	5.464	6	<b>0.002</b>
		Implicit	3	0.9102	0.0004			
	FI	Explicit	3	0.9577	0.0014	1.110	6	0.309
		Implicit	5	0.8933	0.0087			
Low	FD	Explicit	4	0.9534	0.0041	0.334	4	0.755
		Implicit	2	0.9706	0.0017			
	FI	Explicit	3	0.9048	0.0272	0.064	5	0.951
		Implicit	4	0.8988	0.0063			

The Significant level ( $p < 0.05$ )

From Table 15, 16 out of 47 students were considered high proficiency students, using the average grades in their previous courses. Within a high proficiency group, 5 and 3 field dependent students (N=5, N=3) responded to the explicit and implicit feedback 0.9909 and 0.9102 respectively. As for the field independent students group, 3 and 5 field independent students (N=3, N=5) responded to the explicit and implicit feedback 0.9577 and 0.8933 respectively. The two independent samples t-test with the significant level ( $p < 0.05$ ) reveals that the mean differences (t) between these 'acted on' proportions attained by both the field dependent and independent students with high proficiency levels are 5.464 and 1.110 respectively. The 2-tailed significant value of the high proficiency students is **0.002** and 0.309 for

field dependent and independent students respectively. Regarding the high proficiency level students, the results show a significant difference between the group who received explicit feedback and those who received implicit feedback. In other words, it is the field dependent students at high proficiency level who tended to respond to the explicit feedback significantly.

Likewise, 13 out of 47 students were considered low proficiency students, using the average grades in their previous courses. Four field dependent students responded to the explicit feedback (N=4) 0.9534 whereas the other 2 students (N=2) responded to the implicit feedback 0.9706. With respect to the field independent students, 3 out of 7 students responded to the explicit feedback (N=3) 0.9048 while the other 4 students (N=4) responded to the implicit feedback 0.8788. The two independent samples t-test with the significant level ( $p < 0.05$ ) reveal that the mean differences (t) between these 'acted on' proportions attained by both the field dependent and independent students with low proficiency levels are 0.334 and 0.064 respectively. The 2-tailed significant value of the field dependent and independent students at a low proficiency is 0.755 and 0.951 respectively. With respect to the low proficiency level students, the analyses show that they do not have any preferences for either explicit or implicit feedback.

#### **4.2.2 Findings**

To conclude, the results of the data analysis analyzed by using the point biserial correlation coefficient ( $r_{pbi}$ ) in Table 12 indicate a higher relationship between the learning styles and explicit feedback. Field dependent students seem to show a higher correlation to the explicit feedback. Similarly in Table 13, the two

independent samples t-test show that field dependent students' response to explicit feedback is significantly different from those receiving implicit feedback ( $p < 0.05$ ). Furthermore, Table 14 indicates a closer correlation between the high proficiency students and explicit feedback than between the high proficiency students and implicit feedback whereas the low proficiency students seemed to show a higher correlation to the implicit feedback than to the explicit feedback. The result of the two independent samples t-test in Table 15 indicate that the high proficiency students show a significant difference for the explicit feedback ( $p < 0.05$ ). These findings thus refute Research Hypothesis 2, which states that field dependence will show significant relationship with the implicit feedback rather than with the explicit feedback. On the other hand, the field independent students did not show a preference for either explicit or implicit feedback. This finding does not support Research Hypothesis 1, which states that field independence will show a significant relationship with the explicit feedback rather than with the implicit feedback.

### **4.3 The Students' Opinions on the Teacher Feedback.**

#### **4.3.1 The composition questionnaire's results**

To examine the students' opinions on the teacher feedback, a composition questionnaire was used (see Section 3.2.2C, Table 4). All of the 47 students' responses to a composition questionnaire (Appendix C) were analyzed according to the group of field dependent and field independent students. Table 16 shows the students' opinions in percentages.

Table 16

The students' opinions on the teacher feedback in percentages

<b>Q. 1 How much of each composition do you read over again when your instructor returns it?</b>				
	<i>All of it</i>	<i>Most of it</i>	<i>Some of it</i>	
FD	83.33	16.67	-	
FI	69.57	26.09	4.35	
<b>Q. 2 How many comments and corrections do you receive?</b>				
	<i>A lot</i>	<i>Some</i>	<i>A little</i>	
FD	20.83	79.17	-	
FI	17.39	69.57	13.04	
<b>Q. 3 How much attention do you pay to the comments and corrections given?</b>				
	<i>A lot</i>	<i>Some</i>		
FD	41.67	58.33		
FI	56.52	43.48		
<b>Q. 4 What do you do after you read your instructor's comments and corrections?</b>				
	<i>Ask a friend</i>	<i>Check from a book</i>	<i>Self-check</i>	
FD	20.83	45.83	16.67	
FI	13.04	21.74	52.17	
<b>Q. 5 Are there ever any comments or corrections that you do not understand? If so, can you give any examples?</b>				
	<i>No example</i>	<i>Can't read</i>	<i>Disagree</i>	<i>Can't apply</i>
FD	25	25	0	41.67
FI	34.78	13.04	8.7	39.13
<b>Q. 6 What do you do about those comments or corrections that you do not understand?</b>				
	<i>Ask a teacher</i>	<i>Ask a friend</i>	<i>Check from a book</i>	<i>Self-check</i>
FD	16.67	45.83	20.83	16.67
FI	8.7	26.09	30.43	34.78
<b>Q. 7 When you make a mistake in your use of English, how would you like to be corrected?</b>				
	<i>Explicit feedback</i>		<i>Implicit feedback</i>	
FD	-		-	
FI	-		8.7	
<b>Q. 8 When you make a mistake in your use of English, what would you like to be corrected?</b>				
	<i>Explicit feedback</i>		<i>Implicit feedback</i>	
FD	100		-	
FI	91.3		-	

According to Table 16, regarding Question 1, it appears that they read all of the teacher feedback given on the returned assignment over again (83.33% for

FD, 69.57% for FI). However, regarding Question 2, they considered that they received only some the teacher feedback (79.17% for FD, 69.57 % for FI).

As for the attention paid to the teacher feedback (Question 3), 58.33% of FD students paid some attention to the teacher feedback given whereas 56.62% of FI students paid a lot of attention.

With respect to Question number 4, the 45.83% of FD students checked a book and 20.83% asked friends after they read the given teacher feedback. The 52.17 % of FI students mostly checked and corrected by themselves after receiving teacher feedback.

Both FD and FI students indicated their understanding of some of the comments or the given teacher feedback (Question 5). It was found that 41.67 % of FD students could not apply the teacher feedback given though they understood it whereas 34.78 % of FI students did not understand some points of the teacher feedback.

When students did not understand the teacher feedback given (Question 6), 45.83 % of FD students asked their friends whereas 34.78 % of FI students found the answers for themselves.

The last two questions (Questions 7-8), which asked for the students' preferences, indicated that 100 % of FD students preferred the explicit feedback to the implicit feedback. Similarly, FI students preferred the explicit feedback to the implicit feedback (91.30% explicit and 8.7% implicit).

### **4.3.2 Findings of the composition questionnaire results**

The findings from the 47 students' responses to the composition questionnaire (Appendix C) can be summarized as follows:

1. Most of the FD and FI students tend to pay attention to the teacher feedback given.
2. Both FD and FI students responded differently when they did not understand the feedback. The different responses were according to their typical learning styles. FD students who preferred to rely on other people checked the book or asked their friends. FI students conversely corrected errors by themselves because of their independent learning preferences.
3. Both FD and FI students, however, responded to the composition questionnaire and clearly showed their preferences for explicit feedback.

### **4.3.3 Semi-structure interview results**

Through the semi-structure interviews, using the stratified random sampling method, eight students out of 47 students were asked about their personal background, learning styles, and preferred feedback types in Thai (see Appendix D) for 15 minutes. These eight students were four couples of FD/ FI with high/low proficiency students. The results of the interview are reported in Table 17.

Table 17  
Results of semi-structure interview

<b>Question</b>	<b>Prof.</b>	<b>FD</b>	<b>FD</b>	<b>FI</b>	<b>FI</b>
How students consider their English background?	<i>High</i>	<i>Good</i>	<i>Not good</i>	<i>Good</i>	<i>Not good</i>
	<i>Low</i>	<i>Not good</i>	<i>Good</i>	<i>Not good</i>	<i>Not good</i>
Group work or work alone preference.	<i>High</i>	<i>Group</i>	<i>Group</i>	<i>Alone</i>	<i>Alone</i>
	<i>Low</i>	<i>Group</i>	<i>Alone</i>	<i>Alone</i>	<i>Group</i>
Speaking or writing preference.	<i>High</i>	<i>writing</i>	<i>writing</i>	<i>writing</i>	<i>both</i>
	<i>Low</i>	<i>speaking</i>	<i>writing</i>	<i>writing</i>	<i>neither</i>
Is teacher feedback necessary?	<i>High</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>	<i>Yes</i>
	<i>Low</i>	<i>Yes</i>	<i>Yes</i>	<i>No</i>	<i>Yes</i>
Explicit or implicit feedback preference.	<i>High</i>	<i>Explicit</i>	<i>Explicit</i>	<i>Implicit</i>	<i>Implicit</i>
	<i>Low</i>	<i>Explicit</i>	<i>Implicit</i>	<i>Implicit</i>	<i>Implicit</i>

From Table 17, the students responded to Question 1 differently. Two students out of 4 of FD students considered their English good (one with high proficiency and the other with low proficiency) whereas the others considered their English was not good. One out of 2 FI student with high proficiency considered his English good while the other considered his English was not good. The other couple of FI students with low proficiency considered their English was not good.

Question 2 reflects the learning styles by asking the students' preferences for working alone or in groups. The result was that one out of four students who are FD with low proficiency preferred to work alone. Likewise, one out of four students who are FI with low proficiency preferred to work in groups.

In Question 3, only one student of FD with low proficiency preferred speaking to writing, the other three FD students with high proficiency and one with low proficiency preferred writing to speaking. One out of 2 FI students with high proficiency preferred writing to speaking, and the other preferred both writing and

speaking. Conversely, one out of 2 FI students with low proficiency preferred speaking to writing and the other preferred neither.

Question 4 aimed to examine the students' opinion regarding the necessity of teacher feedback. One FI student with low proficiency considered the teacher feedback unnecessary, while the other seven students needed the teacher feedback.

As for Question 5, one FD student with low proficiency preferred the implicit to explicit feedback whereas the others three FD students with high/low proficiency preferred the explicit to implicit feedback. All four FI students with high/low proficiency preferred the implicit to the explicit feedback.

#### **4.3.4 Findings from recorded interview**

With respect to the semi-structure interview session, the findings of students' opinions were as follows:

1. The students' opinion regarding their English background was not in accordance with their proficiency of English level, which was divided on the basis of the GPA of all grades in their previous courses (English I to IV).
2. The social participation of each FD/ FI styles did not correspond to their learning styles. Nonetheless, the overall results seem to reflect the particular characteristics of each style, FD students preferred to work with other people in groups, whereas FI students preferred to work alone.

4. Both FD/ FI students considered the teacher feedback necessary for the writing process.
5. FD students who possess high level of proficiency preferred explicit feedback to implicit feedback, while FI students with both high and low level of proficiency preferred implicit feedback.

#### **4.4 Summary of Findings**

The following is a summary of findings reported in the study.

1. Overall, the results suggest that there is some relationship between learning styles and explicit feedback. The FD students differently acted on the explicit feedback given more than the implicit feedback significantly (see Table 13,  $p < 0.05$ ). Moreover, the results of further focussed on the students' proficiency indicated the correlation between learning styles and explicit feedback within a group of high-proficiency level students. Likewise, the group of low-proficiency level students shows the correlation between learning styles and implicit feedback (see Table 14).
2. Both qualitative and quantitative data analysis seems to indicate that most students tend to prefer explicit feedback to implicit feedback.
3. The students' behavior and opinions seem to reflect their individual styles. That is, FD students tend to prefer communication while FI students tend to prefer the details of grammar rules in writing. The

findings indicate the validity of the learning style diagnosis tool used, namely the Group Embedded Figure Test (GEFT).

4. The English proficiency level seems to be one factor really affecting the students' responses to teacher feedback. The statistical analysis showed more correlation between high proficiency and explicit feedback rather than between high proficiency and implicit feedback whereas low proficiency students correlated more to implicit feedback compared with explicit feedback (see Section 4.2.1, Table 14).

To conclude, this section reports the results of the present study. The next chapter will discuss the results as well as offer some explanations.

## **4.5 Discussion of the Results**

The overall results found in this study leads to the discussion, which is related to the research questions (see Chapter 1, Section 1.4). The discussion begins with the relationship of learning styles and teacher feedback, which is the main point of this study. Then, the relationship between English proficiency levels and teacher feedback is discussed in depth.

### **4.5.1 The relationship of learning styles and teacher feedback**

As discussed in the review of the literature (see Chapter 2), learning styles and teacher feedback are two of many factors involved in the achievement of second language learning. The results of the statistical analysis in this present study can be used as evidence to support a relationship between learning style and teacher feedback.

However, a further analysis of the relationship between the specific learning styles and teacher feedback, indicates a significant relationship between learning style and explicit feedback. Particularly the FD students who received explicit feedback had more acted on proportion than those who received implicit feedback (see Chapter 4, Table 13). This result is rather unexpected. The reason might be that students' learning styles could influence students' learning preferences. This study shows that FD students seem to rely on the teacher feedback when it is explicit. This relationship, according to an experienced Thai teacher, could be due to the fact that although the communicative approach is used in learning and teaching, most Thai students still think grammar translation is indispensable in the EFL classroom (personal communication). He stated that most Thai teachers do not seem to be able to teach communicatively, and are likely to teach English by focusing on grammar as in traditional teaching. Furthermore, most English tests in Thailand test grammatical rules at every level. Therefore, explicit feedback that comprises grammatical explanations seems to be focused by most students.

The finding lends further support to Kim and Mathes' (2001) study in that it could provide some further insights of the students' preferences to the explicit feedback. In Kim and Mathes' (2001) study, conducted in order to determine whether explicit or implicit feedback benefited students more. Their results, however, found no significant differences between the group that received explicit feedback and the group that received implicit feedback. Instead, the result of this present study indicates that the students, especially FD students, prefer explicit to implicit feedback.

Implicit feedback, on the contrary, does not show any relationship to field dependence nor field independence. This finding supports Lyster and Ranta's

(1997) view that implicit feedback was ineffective for students to revise or correct their language when compared with other types of feedback. The results of interview with some students in Lyster and Ranta's (1997) study revealed that the students did not learn anything from implicit feedback. They tended to copy the teacher's feedback and make the same mistakes again.

Moreover, further findings from the interview results show that these students needed grammar in order to help them improve their writing. The interview results revealed that most students found the feedback giving grammar rules likely to facilitate their learning. A FD student demonstrated her concern about English grammar in her interview that *"I don't know how to write. I'm not sure about grammar. I don't know which tense it should be. I don't know whether it's 'ed' or 's'. I don't know whether it's active or passive voice. I am not sure about grammar. To write, we need to be good in grammar"*.

Additionally, whether the feedback is explicit or implicit, one thing in common is that the students consider teacher feedback facilitative in their learning process. According to the interview results, FD students welcomed teacher feedback since it can help them correct their errors: *" We sometimes don't know whether it is correct. I need someone who knows more than I do to tell me."* Likewise, FD students viewed teacher feedback as a technique or a tool in their learning process: *"Actually I think this is to teach the technique used for memorize the grammatical rules. For example, when we write something, we've just write it. We thought it was correct, correct grammar. But the teacher corrects it because it is wrong. It has become the technique which has made us stop making the same mistake"*. These findings corroborate Long's Interaction Hypothesis (see Chapter 2, Section 2.2) which

states that teacher feedback given during negotiation work can facilitate second language development.

Interestingly, however, field independence showed an unclear relationship to either explicit or implicit feedback. This could stem from the fact that FI students are analytical people who are more inclined to rely on their own points of view and judgments. Neither explicit nor implicit feedback might therefore be required (Clenton, 1996).

#### **4.5.2 English proficiency and teacher feedback**

In the present study, the 2-tailed significant value of the high proficiency students is 0.013, which meant that the high proficiency level students acted on the explicit feedback significantly different from those who acted on the implicit feedback. This finding might be explained by Carroll and Swain's (1993) view that the students who know a lot of vocabulary and grammar may be able to benefit from explicit feedback more than those who do not. The students with high proficiency in this present study, therefore, tend to prefer explicit to implicit feedback

This might be also explained by the fact that the proficiency levels, in this study, were based on students' English grades in the previous courses (English I to IV). It does not mean they are able to complete the writing tasks across the disciplines and cope with the demands of academic English writing. Instead, the high proficiency students in this study refer to those who are likely to possess more grammatical knowledge in general, not specific knowledge in writing. As a result, these high proficiency students tend to prefer explicit feedback, which includes explanations of grammatical rules.

Interestingly, the t-test analysis showed that regarding low proficiency students, there was no significant difference between the group of students who received explicit feedback and those who received implicit feedback even though the point biserial correlation ( $r_{pbi} = 0.500$ ) and the interview results showed that they seemed to favor the implicit feedback. For example, one FD student said *“If the teacher told me what the correct word is, I then can correct it. I will be able to write it correctly. I don’t need to review or search or check the rules more. If the teacher tell me in code, I must find and try to check what the grammatical rule is which it is not easy”*. This could be attributed to some other factors, which may affect the result of the study. These factors will be explained later in Section 5.3 (Chapter 5).

All the main points having been discussed so far in the analysis point to the fact that teacher feedback seems to be an important factor which Thai students rely on in their writing process. Myles (2002) stated that without teacher feedback, there was no opportunity for students to make improvement. In other words, feedback is vital to writing and may affect students’ writing skills positively. Students’ level of proficiency and students’ prior knowledge of the second language, learning styles, and classroom interaction can shape their second language learning (Walqui, 2000).

## CHAPTER 5

### CONCLUSION AND RECOMMENDATIONS

The present study proposes that there is some relationship between the field dependence (FD)/field independence (FI) and teacher feedback types (explicit/implicit). The assumptions behind the hypotheses are that (1) The field dependent students are those students who study holistically and tend to communicate better than those who learn about the details of English grammar, (2) The field independent students are those students who study analytically and tend to learn the details of English grammar better than how to communicate, (3) explicit feedback refers to feedback which indicates the errors and explains grammar rules, and (4) implicit feedback refers to feedback which provides the correct form of an error without indicating where the error is. With respect to these four assumptions, we can draw some conclusions: (1) the field dependent students who tend to be good in communicating might respond to implicit feedback which indicates the form of the errors; (2) the field independent students who tend to learn English grammar well might respond to the explicit feedback which provides grammatical explanations. To my best knowledge, however, there is no study on the relationship between learning styles (FD/FI) and teacher feedback (explicit/implicit). This present study thus aims to investigate the relationship between learning styles and teacher feedback with 2 hypotheses (see Chapter 1, Section 1.3).

The outline of this chapter consists of 4 sections. Section 5.1 summarizes the research questions. Section 5.2 describes some limitations. Section 5.3 explains the implications. Lastly, section 5.4 concludes with suggestions for further research.

## **5.1 Summary of the Research Questions**

In order to find out the answers to the research questions, the quantitative data from the students' assignments were analyzed by using the point biserial correlation and the two independent samples t-test. The qualitative data of students' opinions was obtained from the questionnaire and a semi-structured interview was also used to determine the results.

### **Research question 1:**

**Which learning style (field dependence or field independence) is related to explicit feedback?**

Based on the results of the point biserial correlation, there is a correlation between the learning styles and explicit feedback (see Chapter 4, Table 12). The FD students in particular the high proficiency students tend to differently respond to the explicit feedback than the implicit feedback. Similarly, the results of the two independent samples t-test indicated a significant difference among the field dependent students in response to the explicit feedback rather to the implicit feedback (see Chapter 4, Table 13). Thus, the answer to the first research question is that FD students will respond to explicit feedback at a significant level ( $p < 0.05$ ). Likewise, the qualitative data of students' opinions drawn from the results of composition questionnaire and recorded from the semi-structured interviews indicates a

relationship between field dependence and explicit feedback. These findings refute the first hypothesis which proposes that field independent students will show a significant relationship with explicit feedback rather than with implicit feedback.

**Research question 2:**

**Which learning style (field dependence or field independence) is related to implicit feedback?**

Regarding the quantitative data, we found no correlation or significant differences among the groups of FD/FI students in their responses to the implicit feedback (see Chapter 4, Tables 12 and 13 respectively). Neither the point biserial correlation nor the two independent samples t-test shows a relationship between the learning styles and implicit feedback. In other words, no relationship was found between the FD/FI and implicit feedback.

On the contrary, the qualitative data obtained from the questionnaire and the semi-structured interview indicates the difference between students' opinions. The results of the questionnaire show that FI students prefer explicit to implicit feedback whereas the results of the semi-structured interview show that the FI students prefer implicit feedback.

In summary, it cannot be concluded that there is a significant relationship between FI and implicit feedback. These findings also refute the second hypothesis which proposes that FD students would show a significant relationship to implicit feedback rather than to explicit feedback.

## **5.2 Limitations**

There are some limitations as follows:

Firstly, individual differences i.e. students' motivation, students' attitudes, and especially students' proficiency levels seem to affect the study. For example, one student said that she preferred receiving implicit feedback although it could not facilitate her learning. The main reason was that she worried about receiving a good grade for this course.

Secondly, students seemed to be confused by two teachers as shown in the interview results which suggests they did not understand the feedback given. The students, sometimes, did not correct their errors and hence repeated those errors in the second draft.

Finally, this study was conducted for only five weeks within a semester, not the whole semester. According to Yamamoto (2003), the result of teacher feedback within a short period is not sufficient. It can only help students improve their drafts in order to end up with a better final product for their course.

## **5.3 Implications**

Due to the limitations of this study, the implications for the teaching of writing cannot be definitive. First, based on Chapter 4, Section 4.3, the study seems to show the efficacy of explicit feedback. This tends to support some literature (e.g., Carroll & Swain, 1993) which found that students with high proficiency in English seem to favor explicit feedback whereas students with low-proficiency in English tend to favor implicit feedback. High proficiency students consider explicit feedback as a tool

that facilitates the problem-solving process in their learning process as shown in their interview results *“If you gave me codes, I would check in a grammar book. I could review and recognize the rule. If you told me exactly, I would not remember. I could not recognize the rule. I would make the mistake again”*. This finding could be interpreted as evidence which supports Lalande (1982) who found that explicit feedback is preferable for most students since it engages them in guided learning and problem-solving. On the contrary, low proficiency students regarded the implicit feedback as a tool that helps them complete their work more quickly: *“It would be faster if the teacher told me the correct word. It will be correct and then I can finish my writing. I can then do something else. I have a lot of work to do”*.

On the basis of the findings of this study, explicit feedback given with a grammatical code should be recommended for use in a writing classroom because it seems to be more appropriate to Thai teaching and learning styles. Giving the codes, e.g. ‘VE’ for verb errors, ‘NE’ for noun errors (See Chapter 3, Table 6), for the appropriate grammatical rules should solve the problem of time in the writing class. Nonetheless, the teacher should discuss the codes with the students and train them before using the codes in their feedback. Explicit feedback should be given as a part of the writing process with multiple drafts. The teacher should also be careful not to give too much feedback unnecessarily as it could make students become reluctant to use the language and they might lose their motivation for studying English altogether.

#### **5.4 Suggestions for Further Study**

Due to the fact that studying English in Thailand is largely restricted to the classroom setting where grammar is taught explicitly, Thai students generally have some knowledge of the rules of English. Nonetheless, English as a foreign language implies the lack of sufficient exposure to promote English learning, therefore teacher feedback seems to be particularly necessary for Thai students. However, the provision of teacher feedback may fail because the students have only a limited knowledge of grammar. In order to give feedback effectively, teachers should assess students' proficiency level, students' learning styles, and also select the appropriate form of teacher feedback. As indicated by Mackey and Phillip (1998), instruction that is too far beyond the students' stage of language development is not useful.

Hence, though the results of this study might not be generalizable to all writing courses, the findings suggest that future research needs to look more closely at the affective factors in feedback situations. Further research using a longitudinal study taking into account the above of limitations, on particular learning styles with a larger number of English major students and explicit feedback would benefit the teacher in effectively correcting students' written errors. Moreover, a discussion by students and the teacher regarding the types of teacher feedback and also student's prior knowledge should also be helpful in writing classes.

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## APPENDIX A

### LANGUAGE BACKGROUND QUESTIONNAIRE

1. In the English classes you have taken before, have you learnt any English grammar rules? Cross (X) only one answer.

(a) A lot                      (b) Sometimes      (c) Very little              (d) None

2. In your own opinion, what problems do you have with using English grammar in your writing? Make an (X) at all problems that you think you have.

None	Noun-plural endings	Articles
Verb tenses	Sentence structure	Verb forms
Subject-verb agreement		Word choice

3. What is your grade in the previous courses taken? Make (X) the received grades.

English I	A	B+	B	C+	C	D	F
English II	A	B+	B	C+	C	D	F
English III	A	B+	B	C+	C	D	F
English IV	A	B+	B	C+	C	D	F

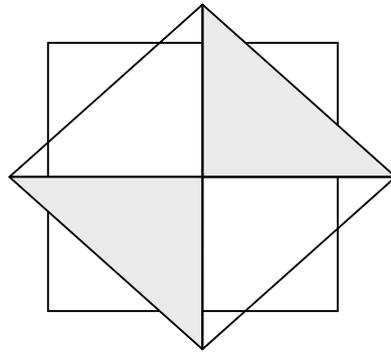
Adapted from Ferris & Roberts' study (2001)

**APPENDIX B**  
**GROUP EMBEDDED FIGURE TEST**

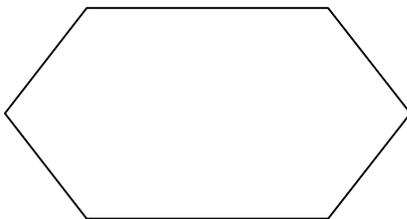
Example 1. Find simple form "G"



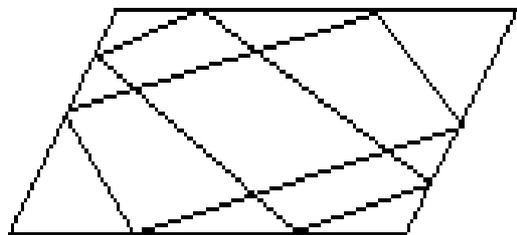
Form "G"



Example 2. Find simple form "A"



Form "A"



## APPENDIX C

### COMPOSITION QUESTIONNAIRE

Thank you very much for your help with my research on how students respond to teacher feedback. Please answer the following questions before you leave.

1.	<p>How much of each composition do you read over again when your instructor returns it to you?</p> <p><input type="checkbox"/> All of it      <input type="checkbox"/> Most of it      <input type="checkbox"/> Some of it      <input type="checkbox"/> None of it</p>
2.	<p>How many of the comments and corrections do you receive?</p> <p><input type="checkbox"/> A lot      <input type="checkbox"/> Some      <input type="checkbox"/> A little      <input type="checkbox"/> None</p>
3.	<p>If you pay attention to what your instructor wrote, how much attention do you pay to the comments and correction given.</p> <p><input type="checkbox"/> A lot      <input type="checkbox"/> Some      <input type="checkbox"/> A little      <input type="checkbox"/> None</p>
4.	<p>Describe what you do after you read your instructor's comments and correction.</p> <p><input type="checkbox"/> Ask teacher for help      <input type="checkbox"/> Make corrections myself</p> <p><input type="checkbox"/> Ask friends for help      <input type="checkbox"/> Think about/ remember mistakes</p> <p><input type="checkbox"/> Check grammar book      <input type="checkbox"/> Check dictionary</p> <p><input type="checkbox"/> Search from web site      <input type="checkbox"/> Do nothing</p>
5.	<p>Are there ever any comments or corrections that you do not understand? If so, can you give any examples?</p> <p><input type="checkbox"/> Yes, no example givens      <input type="checkbox"/> Can't read teacher's handwriting</p> <p><input type="checkbox"/> Understand nothing.      <input type="checkbox"/> Understand but sometimes disagree</p> <p><input type="checkbox"/> Understand, but cannot apply</p>

6.	<p>What do you do about those comments or corrections that you do not understand?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ask instructor to explain them</li> <li><input type="checkbox"/> Ask friends for help</li> <li><input type="checkbox"/> Try to fix it myself</li> <li><input type="checkbox"/> Look corrections up in a grammar book or dictionary</li> <li><input type="checkbox"/> None</li> </ul>
7.	<p>In general, when you make a mistake in your use of English, how would you like to be corrected by an instructor?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> I want my instructor to tell me that I made a mistake and to give me an examination of how to write correctly.</li> <li><input type="checkbox"/> I want my instructor to tell me that I made a mistake and to just advise the correct word.</li> <li><input type="checkbox"/> I don't want my instructor to correct me</li> </ul>
8.	<p>In general, when you make a mistake in your use of English, what do you think is the best way an instructor can correct you?</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> An instructor should tell me that I made a mistake and should give me an examination of how to write correctly.</li> <li><input type="checkbox"/> An instructor should tell me that I made a mistake and should just advise the correct word.</li> <li><input type="checkbox"/> An instructor should not correct me</li> </ul>

Adapted from Ferris (1995) and Kim & Mathes (2001)

## APPENDIX C

### COMPOSITION QUESTIONNAIRE

กรุณาตอบคำถามข้างล่างดังต่อไปนี้

1.	<p>ท่านอ่านเรียงความของท่านที่อาจารย์ส่งคืนมาให้มากน้อยเพียงไหน</p> <p><input type="checkbox"/> ทั้งหมด      <input type="checkbox"/> ส่วนใหญ่แต่ไม่หมด      <input type="checkbox"/> บ้างเล็กน้อย      <input type="checkbox"/> ไม่อ่านเลย</p>
2.	<p>ได้รับการแก้ไขและคำแนะนำจากอาจารย์มากหรือไม่</p> <p><input type="checkbox"/> ทั้งหมด      <input type="checkbox"/> บ้างเล็กน้อย      <input type="checkbox"/> น้อยมาก      <input type="checkbox"/> ไม่มีเลย</p>
3.	<p>ถ้าท่านอ่านประโยชน์ที่อาจารย์แก้ไข ท่านจะนำไปใช้ประโยชน์มากหรือไม่</p> <p><input type="checkbox"/> มาก      <input type="checkbox"/> บ้างเล็กน้อย      <input type="checkbox"/> น้อยมาก      <input type="checkbox"/> ไม่มีเลย</p>
4.	<p>กรุณาเลือกว่าท่านปฏิบัติอย่างไรหลังจากอ่านประโยชน์หรือข้อความที่อาจารย์แก้ไขและส่งคืน</p> <p><input type="checkbox"/> ถามอาจารย์เพิ่มเติม      <input type="checkbox"/> แก้ไขคำหรือประโยคที่ผิดด้วยตนเอง</p> <p><input type="checkbox"/> ถามเพื่อนเพิ่มเติม      <input type="checkbox"/> คิด และจำสิ่งที่ผิดไว้</p> <p><input type="checkbox"/> หาข้อมูลจากหนังสือไวยากรณ์      <input type="checkbox"/> ตรวจสอบในดิกชันนารี</p> <p><input type="checkbox"/> หาข้อมูลจากเว็บไซต์      <input type="checkbox"/> ไม่ทำอะไรเลย</p>
5.	<p>มีการแก้ไขใดที่ท่านไม่เข้าใจหรือไม่? ถ้ามี สามารถยกตัวอย่างได้หรือไม่</p> <p><input type="checkbox"/> มี แต่ไม่มีตัวอย่าง      <input type="checkbox"/> อ่านลายมืออาจารย์ไม่ออก</p> <p><input type="checkbox"/> เข้าใจ แต่ไม่เห็นด้วยกับอาจารย์      <input type="checkbox"/> เข้าใจ แต่ประยุกต์ใช้ไม่ได้</p> <p><input type="checkbox"/> ไม่เข้าใจอะไรเลย</p>

6.	<p>ท่านทำอย่างไรกับการแก้ไขคำหรือข้อความของอาจารย์ที่ท่านไม่เข้าใจ</p> <p><input type="checkbox"/> ขอให้อาจารย์อธิบายซ้ำ                      <input type="checkbox"/> ถามจากเพื่อน                      <input type="checkbox"/> ไม่ทำอะไรเลย</p> <p><input type="checkbox"/> พยายามแก้ไขด้วยตนเอง                      <input type="checkbox"/> หาข้อมูลจากหนังสือไวยากรณ์หรือดิคชันนารี</p>
7.	<p>ถ้าท่านพูดหรือเขียนภาษาอังกฤษไม่ถูกต้อง ท่านต้องการให้อาจารย์แก้ไขให้อย่างไร?</p> <p><input type="checkbox"/> ต้องการให้อาจารย์บอก และอธิบายโดยละเอียด</p> <p><input type="checkbox"/> ต้องการให้อาจารย์บอกคำที่ถูกต้อง แต่ไม่ต้องอธิบายโดยละเอียด</p> <p><input type="checkbox"/> ไม่ต้องการให้อาจารย์แก้ไขให้</p>
8.	<p>ถ้าท่านพูดหรือเขียนภาษาอังกฤษไม่ถูกต้อง ท่านคิดว่าอาจารย์ควรจะใช้วิธีใดในการแก้ไขสิ่งผิดนั้น</p> <p><input type="checkbox"/> อาจารย์ควรชี้จุดผิด และอธิบายการใช้คำหรือประโยคที่ถูกต้อง.</p> <p><input type="checkbox"/> อาจารย์ควรชี้จุดผิด และบอกคำศัพท์ที่ถูกต้อง</p> <p><input type="checkbox"/> อาจารย์ไม่จำเป็นต้องแก้ไขให้</p>

ดัดแปลงจาก Ferris (1995) and Kim & Mathes (2001)

## APPENDIX D

### QUESTIONS FOR SEMI-STRUCTURE INTERVIEW

**Purpose:** To obtain the reflections of the students responding to the teacher feedback in particular learning styles (field dependence/independence).

1. Personal background.

Main questions:

- Where did you study at the secondary level?
- How was your English learning?

2. Preference which reflect the learning style.

Main questions:

- Would you prefer to working alone or with other people in group?
- Would you prefer to speak or write English?

3. Preference regarding the teacher feedback.

Main questions:

- Would you prefer to receive the teacher feedback?
- Which of explicit or implicit would you prefer to?

## APPENDIX E

### One student's assignment with explicit feedback

#### First draft: Why is English important to you?

The world is many languages<sup>SS</sup>. The languages are difference and characteristic<sup>SS</sup>. They are important for<sup>WW</sup> the communication. The domestic<sup>WW</sup> uses local language. So, The communication uses international language. This language is English language. It's help<sup>VE</sup> people in the others. First, It uses<sup>VE</sup> the conversation among country to country. Second, It uses<sup>VE</sup> about the information such as television, radio and internet. Finally, The English language uses<sup>VE</sup> in relation to education and knowledge. For example, It uses<sup>VE</sup> in books and journals.

The English language is important to the people in the world. Because It uses<sup>VE</sup> about conversation, information, education and knowledge.

#### Second draft: Why is English important to you?

The world have many languages<sup>SS</sup>. The languages are different and characteristic<sup>SS</sup>. They are important to the communication. The insidecountry<sup>WW</sup> uses local language So, the communication uses international language. This language is English language. It is helped<sup>VE</sup> people in the other. First, It is used<sup>WW</sup> the conversation among country to country. Second, It is used about the information such as television, radio and internet. Finally, the English language is used in relation to education and knowledge. For example, it is used in books and journals.

The English language is important to the people in the world. Because It is used about<sup>WW</sup> conversation, information, education and knowledge.

#### Final product: Why is English important to you?

The world have many languages. The languages are different. They are important to the communication. The each country uses local language So, the communication uses international language. This language is English language. It help to people in the other. First, It is used to the conversation among country to country. Second, It is used about the information such as television, radio and internet. Finally, the English language is used in relation to education and knowledge. For example, it is used in books and journals.

The English language is important to the people in the world. Because It is used to conversation, information, education and knowledge.

## APPENDIX F

One student's assignment with implicit feedback

### First draft: Why is English important to you?

First of all, English language is an international language that people all over the world use to communicate with foreigners. It helps people in different countries to understand each other. So, it can reduce argument for people in any areas. Such as, ASIA, EUROPE, AMERICA, AFRICA and other.

Secondly, Most of printed material and mass medias in the world use English language. Such as, news, text\_books, magazines, movies and advertising. So information about documentaries, entertainment stories, technologies and cultures are transferred from country to country by English language.

Finally, English language helps to support each of country to govern themselves and keep relations between country pass political, economy, society and culture.

All above reasons is the result that why English is important to me.

### Second draft: Why is English important to you?

First of all, English language is an international language that people all over the world use to communicate with foreigners. It helps people in different countries understand each other. So, it can reduce argument for people in any areas. Such as, ASIA, EUROPE, AMERICA, AFRICA and other.

Secondly, Most of printed material and mass media in the world use English, such as, news, text\_books, magazines, movies and advertising. So information about documentaries, entertainment stories, technologies and cultures are transferred from country to country in English.

Finally, English helps to support each of country to govern themselves and keep relations between country pass political, economy, society and culture.

For All the above reasons is the reason that why English is important to me.

### Final product: Why is English important to you?

First of all, English is an international language that people all over the world use to communicate with foreigners. It helps people in different countries understand each other. So, it can reduce argument for people in any areas. Such as, ASIA, EUROPE, AMERICA, AFRICA and other.

Secondly, Most printed material and mass media in the world use English, such as, news, text-books, magazines, movies and advertising. So information about documentaries, entertainment stories, technologies and cultures are transferred from country to country in English.

Finally, English helps to support each of country to govern themselves and keep relations between country pass political, economy, society and culture.

For all the above reasons why English is important to me.

## **CURRICULUM VITAE**

Mrs. Pornsawan Manorat was born on February, 1962. She graduated from Kasetsart University, Agriculture Faculty since 1974. After graduated, she has gained many years of experiences in Quality control function from many manufacturing companies, such as Rangsit Polymer, Co., Ltd., ECCO (Thailand), Co., Ltd., and Lear Thailand.