

The value of direct and indirect written corrective feedback for intermediate ESL
students

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The value of different direct and indirect written corrective feedback for intermediate
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Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:

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Abstract

This study looks at the effectiveness of direct and indirect written corrective feedback (WCF) when using them with 26 intermediate ESL learners' writings. The study also investigates whether giving the learners the type of feedback they preferred or less preferred would influence their actual performance. WCF, a pedagogy that is often used when helping learners improve their written accuracy, has captured researchers' attention in recent decades. Truscott (1996) claimed that WCF is ineffective and suggested teachers should abandon it. Therefore, in the early studies, researchers concentrated on examining the effectiveness of WCF, in order to justify the value of using WCF. In recent studies, researchers have proved that WCF is effective in certain contexts, and they have also investigated the value of using different types of WCF, and the value of using it over time. Moreover, in order to help learners to improve in written accuracy, recent studies in the field have also investigated whether WCF is more effective when used on a certain type of linguistic form/structure. With respect to different types of WCF, researchers in recent decades have also paid some attention to learner preference in WCF. However, the relationship between learner preference and the value of using the type of feedback learners prefer has not yet been investigated.

In essence, the relationship between learner preference and their actual performance when using the type of feedback they preferred was examined in this study. The study also aimed to look at the effectiveness of WCF over time, and to investigate whether direct feedback or indirect feedback helped learners better. Furthermore, the study also aimed to investigate whether there was a certain type of linguistic form that WCF works best with. A quantitative approach was used in this study in order to show the results more clearly, and to provide statistical evidence on each finding. The study involved questionnaires, and three writing tests: pre-test, immediate post-test, and a delayed post-

test. Before the learners did the pre-test, they were asked to complete a questionnaire to select their preferred type of feedback (direct feedback or indirect feedback). Based on their preferences on feedback, they were put into different groups. *Group one* received direct feedback; *group two* received indirect feedback; *group three* received the feedback they preferred (indirect feedback); *group four* received no linguistic feedback, but general commentaries on their writing were given. The participants (twenty-six students who enrolled in a general English program at AUT University) had completed the questionnaire and the three writing tests. Findings from the study revealed that, most of the learners preferred receiving direct feedback. When examining learner performance between those who received the type of feedback they preferred and those who did not, the former did not outperform than others. However, factors like different levels of scaffolding assistance may have affected the results. Other findings from the study revealed that WCF was effective overtime, especially when using it on errors of present simple tense. The study also found that indirect feedback was more effective than direct feedback. A possible factor that appeared to influence learners' performance was identified as learners' motivation in learning. The results of the study contribute to an understanding of the type of feedback that is most suitable for learners at intermediate level, and on which type of linguistic form WCF can work best with. Practical suggestions for pedagogy and further research are also made.

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Chapter 1 Introduction

1.1 Background of the study

In order to help second language learners improve their accuracy in writing, WCF (written corrective feedback) is one of the most frequently used methods by classroom teachers. Whilst most second language teachers use it everyday when responding to learners' writing, Truscott (1996) claimed that WCF is harmful and suggested that teachers should abandon the practice.

Although some researchers (Kepner, 1991; Polio, Fleck & Leder, 1998; Truscott & Hsu, 2008) have found no significant evidence to support WCF, a number of the studies on WCF have found that it is effective over time for certain linguistic form/structures (Ashwell, 2000; Bitchener, 2008; Bitchener & Knoch, 2008a & b; Bitchener & Knoch, 2009; Bitchener, Young and Cameron, 2005; Chandler, 2003; Ellis, Sheen, Murakami, & Tkashima, 2008; Ferris, 1997; Ferris & Roberts, 2001). Among these studies, Bitchener et al. (2005) found that WCF is effective for treating past simple and definite articles with relatively advanced learners. Ellis et al. (2008) also found direct WCF is effective with articles in the same way as Bitchener et al. (2005) found.

Assuming WCF is effective, other researchers (Robb, Ross & Shortreed, 1986; Lalande, 1982; Ferris & Roberts, 2001; Chandler, 2003) investigated the effectiveness of different types of WCF in order to find the most useful feedback to help learners improve their written accuracy. However, the findings of these studies are controversial and inconclusive so further research into the effectiveness of different types of WCF is required.

Although WCF is the method used most often in helping learners improve their written accuracy, other factors such as socio-cultural factors, motivation, self-schema and scaffolding may affect the effectiveness of WCF. Skehan (1989) points out that learner's different motivations may influence their interest and performance in learning and that learners' past learning experiences can sometimes influence their motivation. For example, learners with more successful learning experiences may be more highly motivated than others to learn.

The second factor that may influence the effectiveness of WCF is a learner's self-schema. Markus (1977) identified the concept of self-schema as, the knowledge of one's self, which is self-knowledge derived from experience or our interpretation of experiences. According to Alexander (1997) and Ng & Renshaw (2002), learners are likely to evaluate themselves according to their past learning experiences and how they are doing, and to understand and develop different learning behaviour/style from others. For example, when Brandl (1995) investigated learner preference for different types of WCF, he found differences between learner preferences. Some of the learners preferred direct feedback, but most preferred indirect feedback.

Finally, the level of scaffolding that teachers give learners is also a factor that may influence the effectiveness of WCF. While teachers scaffold learners, it is important to take into consideration their proficiency level. With appropriate scaffolding, learners are likely to maintain interest and confidence in learning while doing tasks (Stuyf, 2002; Benson, 1997). Hendrickson (1980) suggested, for example that learners at different proficiency levels may have different abilities to self-correct, therefore, he suggests using indirect feedback on errors that learners may be able to self-correct, and use direct feedback on errors that learners may not be able to correct by themselves.

1.2 Aim of the study

To date, studies in the field (Ashwell , 2000; Bitchener, Young, and Cameron, 2005; Bitchener, 2008; Bitchener & Knoch, 2008a; Bitchener & Knoch, 2008b; Chandler, 2003; Ferris, 1997; Sheen, 2007, and others) have investigated the effectiveness of WCF, and have provided positive evidence supporting WCF in certain contexts. Among those studies, some (Bitchener, Young, and Cameron, 2005; Bitchener, 2008; Bitchener & Knoch, 2008a; Bitchener & Knoch, 2008b) found that WCF was not only effective right after the learners received it, but it also appeared to be effective over time. However, there were insufficient studies to examine the topic conclusively; therefore, further research may be needed in order to provide more evidence to justify the claim that WCF works over time.

While most of the studies were about the effectiveness of WCF, some (Lalande, 1982; Robb, Ross & Shortreed, 1986; Ferris, 1997; Chandler, 2000, and others) examined the effectiveness of different types of feedback (direct and indirect feedback), and also compared these two types of feedback to identify the more helpful one. Some of the studies showed direct feedback to be more effective (Chandler, 2003), some supported indirect feedback (Laland, 1982; Chandler, 2000), and others found no difference between the two (Robb, Ross & Shortreed, 1986; Ferris & Roberts, 2001). Therefore, the investigation on different types of feedback is still inconclusive, and further research may be needed in order to contribute evidence for helping clarify which type of feedback is more effective.

In recent years, instead of providing corrections on all the errors learners made, some studies used form-focused research to investigate the effectiveness of different types of WCF on different types of linguistic forms. Among the form-focused studies, although

most of them investigated how WCF works on different types of linguistic forms, few of them examined whether there is a certain type of linguistic form WCF works best with. Moreover, there were no studies that investigated the relationship between different linguistic forms and different types of feedback, or that explored whether there is a certain type of feedback that appears to be more effective when correcting a certain kind of linguistic form.

Brandl (1995), Chandler (2003), and Ferris & Roberts (2001) explored second language learners' preferences for types of feedback and found that most of the learners preferred indirect feedback. Brandl (1995) and Chandler (2003) investigated learners' reasons for their preference, and found that most of the learners preferred the type of feedback that they believed could help them the most. In the earlier studies, most of the researchers investigating the effect of WCF, but learner preference have not been investigated much. Therefore, there were not many studies related to this topic. However, it is an important issue that should be investigated, because there is a possibility that learners may improve more in their written accuracy by using the type of feedback they prefer. For this reason, additional research is needed to investigate the relationship between learner preference and their actual performance when receiving the type of feedback they prefer.

Because of these gaps, the following questions were investigated in this study.

1. Does WCF help learners improve their accuracy over time?
2. Does WCF help learners improve their accuracy in using certain linguistic forms/structures over time?
3. Are some types of WCF more effective than others over time?
4. Are some types of WCF more effective than others in targeting certain error categories over time?

5. What types of WCF do learners say that they prefer and why?
6. Is there a relationship between the learners' preferences for a certain type of feedback and their actual performance over time when receiving their preferred or less preferred WCF?

1.3 Organization of the study

This thesis contains six chapters. Chapter 2 reviews theories relevant to the study (information processing theories, debates on the necessity of “output”, socio-cultural perspectives that explain individual learning differences) and reviews the empirical studies on WCF. Gaps in the research are identified and the research questions this study explores are also a part of this chapter. Chapter 3 discusses the methodology used in the study. This study adopted a quantitative approach and two instruments were used: a questionnaire and three writing tasks. In this chapter, information about the participants and the way in which the study was conducted are presented before an outline of the data collection and analytical procedures and processes. Chapter 4 presents the key findings of the study in relation to each research question. Chapter 5 includes a detailed discussion of the findings of the study, with reference to each of the research questions, which are compared to earlier research in the field. Chapter 6 summarizes the important findings of the study and considers the theoretical and pedagogical contribution of the study to the field. Limitations of the study and recommendations for further research are also presented in this chapter.

Chapter 2 Review of Literature

2.0 Introduction

This chapter introduces the theories and empirical studies relating to WCF. In the first part of the chapter, I will look at some theoretical perspectives which relate to WCF. In the first section, discussion is presented on how Information Processing Theories are related to WCF, and how WCF works, based on those theories. In the second section, some socio-cultural theories are discussed in order to identify factors in addition to cognitive factors that may influence the effectiveness of WCF. In the third section, the arguments for and against WCF are discussed.

The second part of this chapter discusses the empirical studies in the field, including research evidence in support and not in support of WCF. Research evidence in support of different types of feedback (direct or indirect feedback) are also considered. This section will also focus on learner preference in WCF. The gaps and the research questions are also identified towards the end of this chapter (section 2.6).

2.1 Theoretical Perspectives

WCF, as a strategy commonly used in second language writing, is believed to play an important role in second language acquisition (SLA). Two broad theoretical perspectives explain how it may contribute to the acquisition process and these include: psycholinguistic, information processing theories and socio-cultural theories that include factors of individual difference in learning (motivation, self-schema and scaffolding).

2.1.1 Psycholinguistic, Information Processing Theories

Cognitive perspectives in SLA explain how the human brain works when processing new information. In explaining the cognitive perspective, this thesis will consider the role of psycholinguistic, information processing theories from input through output, feedback, noticing and uptake in second language acquisition.

The cognitive approach explains how mental activities such as thinking and remembering work. This approach also explains how the brain processes input during the learning/acquisition process. Anderson (1976) defines two types of knowledge in this process: declarative knowledge (Knowing what something is), and procedural knowledge (knowing how to do something). He claims that while people are learning something new, declarative knowledge is what the learner learns first. In other words, learners go through the first stage which is recognition, then they go through the second stage which is procedural and then at that stage they are closer to acquiring the knowledge that they are in the process of learning.

The cognitive perspective in SLA draws upon the rules of language. Chamot & O'Malley (1996) point out that learning is a procedural skill and that learners at first learn rules or steps. After they learn various rules, learners can then reach a level that enables them to use the knowledge automatically through practice. An earlier study by Novish (1973) also mentions that the role of making mistakes is an important step in the cognitive approach because learners learn from their mistakes, and become more aware of the application of the rules that they have learned.

Second language theories, including the role of input, output, feedback and noticing are the essential elements in the cognitive contribution to language learning, and all of these

elements work together in helping a learner reach mastery and control over the use of linguistic forms and structures. This thesis will consider each of these in turn. The next section discusses what comprehensible input is and considers its functions in order to show how learners process input (both oral and written).

2.1.1.1 Input

According to Krashen (1985), learners can improve their language proficiency level by receiving comprehensible input alone, that is, input containing linguistic form/structure a little bit beyond their current level of proficiency. This is referred to as $i+1$ (see also Ellis & He, 1999). Krashen hypothesized that a learner's current stage is 'i', and their next stage is ' $i+1$ '. According to this belief, a learners' language ability will increase as long as they receive comprehensible input. Despite the general agreement that comprehensible input is required for acquisition, the adequacy of Krashen's comprehensible input alone theory has been criticized over recent decades. Rost (1990) and White (1987) claim that understanding the meaning of the input does not mean that learners actually acquire knowledge. This explains that learners may still be confused about how to use or apply the target language. In addition, learners may not have any idea about how to form proper sentences with the target language even though they may comprehend the meaning. Swain (1991) points out that even though learners may be exposed to comprehensible input, their ability and skill in producing the L2 may still "remain far from native-like" (p.98). Schmidt (1983) experimented with a native Japanese speaker for three years to see how his English proficiency grew. The learner started with a very low proficiency level and couldn't communicate with people. During a period of three years while working in the United States, he just spoke with people around him. The study found that although he was able to use English on a daily basis, his proficiency level did not advance as much as the researcher had expected.

As it can be seen, the discussion surrounding input is controversial. While Krashen claims that comprehensible input alone can directly lead to acquisition, the Output Hypothesis (which will be discussed in detail in the next section) proposed by Swain (1985) claims that acquisition will occur after learners keep producing language with the target forms/structures that they have learnt. In other words, receiving input alone is not enough to reach acquisition; it will not happen if learners are not using or practising the target language they have learnt.

2.1.1.2 Output

Compared with input, which is the stage of receiving information in second language learning, output is the stage of producing or practicing language with what learners have received in the input stage. The definition of output according to Swain (2000) is a, “students’ meaningful production of language” (p.99). As Izumi (2003) explains, it is the stage in which learners produce their own expression with the target language they have acquired.

According to Swain (1993, 1995, 1998, 2005), there are four possible functions of output in the learning/acquisition process; fluency, hypothesis testing, noticing/triggering and meta-linguistics. The first function – fluency – provides opportunities for learners to use their knowledge to construct meaningful contexts in order to develop speed in accessing knowledge. Therefore learners become more proficient in linguistic forms if they keep producing in the target language.

The second function is hypothesis testing. This function provides opportunities for learners to test their hypotheses on the target language, and they can judge “the comprehensibility and linguistic correctness of their utterances when it is compared

with feedback obtained from their interlocutors” (Izumi, 2003, p.170). In this case, learners should have opportunities to produce target-like sentences, and with respect to WCF, after learners receive corrective feedback on their writing, they should be able to evaluate how much they have obtained from what they have learnt.

The third function of output is noticing/triggering, and this is the reason output plays an important role in SLA. Learners will discover the gap between what they want to say versus what they can say, and realize what they know versus what they don’t know or know only partially (Swain, 1995). Schmidt & Frota (1986) claim that learners may not notice the correct form while they are using the language, but will notice how other people speak or write the language differently from their inter-language. Similarly Swain (2000) argues that learners will notice things that they do not know how to express the precise meaning of and that they wish to present at the “very moment of attempting to produce it” (p.100). Learners would notice that because it is like a hole in their inter-language, they will try to fix it in order to speak or write to be understood.

The final function of output is the meta-linguistic aspect. While learners are speaking or writing with the target language, the process of output enables learners to be aware of the relationship of the forms, rules, and their functions while revealing how to use the language. The key element of this function in an oral context is to let the student speak freely, and through the process of speaking, learners will realize the use of a particular word or phrase that they do not understand, and try to fix it. For example, if a learner says, “I am drink water”, the verb form in this sentence is incorrect, and then the learner might say or think, “drink” is not right and it should be “drinking”. The same process may occur when learners are writing in the target language. If a learner writes a sentence such as “my brother walk to school everyday”, when the learner reads the

sentence, he/she may become aware that the verb form is incorrect, and realizing the subject of the sentence is third person singular, change it from “walk” to “walks”.

Thus, in contrast to the Input Hypothesis, the Output Hypothesis places more emphasis on practice. It encourages learners to produce utterances or writings with the target language, and through the process of doing so, helps them to realize what they understand, and what they need to understand. Swain believes that as learners go on producing, the experience they will accumulate in using the language will expand their ability in using the language.

Although output is an important learning condition, giving feedback on a learner’s output can also contribute to his/her development. In the following section, the role of feedback (including two different types of feedback that are used in classroom teaching) are discussed.

2.1.1.3 Feedback

The purpose of giving feedback to learners is to help them notice shortcomings in what they have produced. Feedback as defined by Seliger & Long (1983) refers to “language-related responses to learners’ utterances, upon which the learner is focused and which can be used by the learner to validate or invalidate concepts he or she has about the target language” (p.258). Feedback can be given in either a direct or an indirect way and both ways are intended to help learners gain awareness of errors they have made. It can be given in either oral or written form

2.1.1.3.1 Oral Feedback

Oral feedback can be divided into two types of feedback: positive feedback and negative feedback. Positive feedback according to Seliger and Long (1983) and Imai (1989) is that which shows agreement with what the learners have said, such as “un-huh”, or a nodding of the head. Moreover, positive feedback gives learners commentary on what they have said, such as “nice” and “excellent”. By contrast, negative feedback is defined by Schachter (1984) as feedback that includes negative evidence. Negative feedback can be provided in one of three ways; explicit error corrections, confirmation checks and clarification requests. Explicit error corrections refer to corrections such as “this word shouldn’t be used that way”. Confirmation checks confirm what the speaker has said, for example “yes, I heard you say the store opens at 10am”. Finally clarification requests occur when the hearer mishears what has been said, leading to questions such as “pardon me?” or “excuse me, I’m not sure I’ve heard what you said?”

2.1.1.3.2 Written Feedback

Written feedback involves giving comment or giving corrections to what learners have written. WCF is similar to oral CF and can be divided into indirect or direct feedback. Indirect feedback is the type of feedback that simply indicates or insinuates that an error has been made while providing opportunities for learners to self-correct. For example, the teacher will often give feedback by underlining or circling the error. Doing this will benefit learners who possess the ability to self-correct. To do this, the learners should have enough grammatical knowledge and the ability to analyze the error (Brown, 1994; Ferris & Hedgcock, 1998).

Direct feedback, on the other hand, can be given by means of “substitution, insertion, deletion or reformulation to provide correct form or structure to the student writer

(Ferris, 2003, p. 143)”. In other words, the teacher can write the correct form/structure directly on, or beside the errors, so the learners do not need to correct the error by themselves. In addition, direct feedback may benefit those who don’t have ability to “self-correct” as a result of insufficient grammatical knowledge or too low a proficiency level.

Giving feedback to learners should help learners notice their error/s in some way. However, learners will not realize their shortcomings if they are not noticing the feedback given on their errors. Thus, the important role that noticing plays in second language learning should also be discussed, and it will be looked into further in the next section.

2.1.1.4 Noticing

Discussions of Input Hypothesis, Output Hypothesis, and the role of feedback have been presented above and it has been stated that there is a relationship between them and noticing. In order to help learners learn and acquire knowledge, noticing becomes the element that cannot be eliminated. Schmidt (1990) proposed in his “noticing hypothesis”, that an awareness of the target form is necessary for SLA. In this hypothesis, he argues that “noticing requires of the learner a conscious apprehension and awareness of input” (p.26). In other words, input occurs when learners notice the gap between what they have produced (orally or in writing) and a target-like version of an utterance or written statement. Through the use of WCF, learners may be able to notice the gap between what they have written and what the WCF tells them. As Schmidt (2001) further explains, “specific attention paid to linguistic form is the first step toward grammar change” (p.101).

Schmidt (1994) distinguished four dimensions of noticing. They are *intention*, *attention*, *awareness* and *control*. *Intention* refers to intentional (classroom instruction) or incidental learning (like that which typically occurs in learning one's first language); *attention* refers to the detection of the stimulus (for example, learners may notice some linguistics forms/structures they have learnt before, and start to consider whether or not their way of using it is correct); *awareness* refers to the knowledge and the experiences learners have in detecting the stimulus; *control* is the control that is revealed through output. Therefore, in brief, the four dimensions proposed by Schmidt are like a four stage process in language acquisition. Taking WCF as an example, the *intention* of a learner will be revealed by his/her intention to learn a language. Then, he/she may or may not detect the relationship between the feedback that is given on their errors and the type of errors that have been made. Next, with accumulated experience in receiving feedback on their errors, they should be able to notice the type of error they have made, and be *aware* when they are using a certain type of form/structure, so that finally they will be consistent in producing more target-like output, and, as a result, demonstrate a higher level of acquisition.

2.1.1.5 Uptake

Uptake has a strong relationship with corrective feedback. As Sheen (2004) mentioned, "uptake serves as an indicator of the effectiveness of CF" (p. 266). Uptake is the target-like statements produced by learners after they have received feedback on their errors. According to Sheen, when uptake occurs, it means that the feedback given to the learners is effective. However, giving feedback does not always lead to good uptake. Lyster & Ranta (1997) explained that when learners receive feedback on only some errors instead of all the errors, they are likely to have better uptake. An earlier study on feedback and uptake provides supporting evidence for Lyster & Rantas' argument

(1997). Dekeyser (1993) examined second language high school classes for a full school year. In the study, one of the teachers corrected all the errors students made, and another teacher corrected some of the errors only. At the end of the observation, students who received feedback on only some of the errors performed better than those who received feedback on all of their errors. A similar result was found in Lyster and Ranta (1997), who discovered that teachers who provided feedback on more than half of the total number of errors obtained the least successful results. Therefore, it seems that when giving feedback on certain types of errors instead of all the errors, learners are more likely to produce better, more accurate uptake.

2.1.1.6 Summary

Theoretically, the process of using WCF can be explained with information processing theories. However, only explaining it in this way is not enough to determine its effectiveness. There are still some other possibilities that may influence the result when using WCF, and they are motivation, self-schema and scaffolding three important components in socio-cultural theory.

2.1.2 Socio-cultural Perspectives

In contrasting the information processing theories with the socio-cultural theories of SLA, it becomes obvious that the socio-cultural perspectives are more focused on how people learn differently instead of on the psycholinguistic, mental processes involved in learning. The socio-cultural approach was first proposed by Vygotsky (1929) to explain how children's development and learning is influenced by the social world. These theories explain how second language learners learn through the influence of the social world. However, other factors such as motivation, self-schema and scaffolding, determine individual paths. The following section discusses three important components

of Socio-cultural theory --- motivation, self-schema and scaffolding, and how they influence students differing motivations, capacities and learning capabilities.

2.1.2.1 Motivation

Motivation may determine one's behavior and performance in learning, in other words, learners who are motivated in learning will be more aware of how they are learning and what they are learning than those who are less motivated. Skehan (1989) has pointed out four sources of motivation: (1) The learning activity itself to which learners may be attracted by the classroom or learning situation may or may not hold their interest after they leave. (2) The success experienced by a learner: the motivation comes from learner experience in receiving rewards or encouragement when they succeed or do well in learning. (3) The internal motivation: the internal motivation refers to the goals or expectations that a learner wishes to accomplish. For example, learners who determine to improve their accuracy in writing may be keen to receive feedback on their errors, so that they can reach their goal (improve accuracy in writing). (4) Rewards: rewards to encourage learners to succeed will influence their performance.

Learners' motivations determine how they learn and maintain their passion for learning continuously. For example, if a learner has the motivation (without respect to the kind of source that he/she gains the motivation from) to improve his/her writing, he/she will be more aware of the WCF that has been given on his/her errors, and the feedback he/she receives should encourage and enable him/her to maintain an interest in ongoing learning. The motivation to continue learning may not be able to be maintained on a constant level by learners who lack the proper motivation as compared to the motivation developed by learners' who have had more successful past learning experiences.

Although motivation may determine the level of interest in learning, and a consistent or a non-consistent motivation may influence learner's performance while learning, another component of socio-culture theory, self-schema, may also influence learner performance.

2.1.2.2 Self-schema

Defined by Ng & Renshaw (2002), a self-schema is "student's cognitive generalizations of themselves derived from their past experiences in learning a subject" (p. 56). In other words, learners develop beliefs or ideas about themselves through their past learning experiences, and from that understanding, they form a self-schema about their learning. Garcia & Pintrich (1993, 1994) have identified four complementary dimensions of self-schema. Among the four dimensions, two of them have an important relationship with WCF. They are the *affect dimension* and the *temporal dimension*.

First, the *affect dimension* shows how people's "affective state will be influenced by their current self-understanding" (Ng & Renshaw, 2002, p. 58). In other words, learners have abilities to detect their emotions towards learning, and these emotions will affect their motivation in learning. For example, when learners receive WCF on the errors they have made, they may or may not feel motivated with the feedback they receive. If they are motivated by the feedback, they may have a positive feeling when learning, and may be keen to receive feedback the next time they write.

Second, the *temporal dimension* "distinguishes between the past, present, and future selves" (Ng & Renshaw, 2002, p. 58). Learners will be able to observe themselves from present to future, and maintain their motivation for long-term learning. Learners may be able to value their ability at doing something by observing their past learning experience,

and how they are doing in the present. They are also able to estimate how much they can do in the future, to select a way of learning that they consider to suit them the best. For example, in Brandl's (1995) survey, when learners were selecting the type of WCF they wished to receive, some of the learners considered themselves to be at a proficiency level that enabled them to self-repair; therefore, they said that they preferred indirect feedback on their errors.

Despite the self-schema which has been discussed above, a learner's performance may also be influenced by the way that teachers help them. Therefore, the help or assistance from teachers, referred to as scaffolding, is also an important component in socio-cultural theory in relation to WCF.

2.1.2.3 Scaffolding

In the field of second language learning, scaffolding describes how learners acquire language with the assistance of the teacher or a more able peer. The use of scaffolding in language teaching not only enables learners to complete tasks, but as Stuyf (2002) claims, it also increases learners' interest in the tasks, and with the instructions and hints that are given by the teacher, it can reduce the frustration and risk that learners may face while completing tasks. It provides enough support to allow learners to complete their tasks in a classroom (Benson, 1997).

Vygotsky's (1978) zone of proximal development (ZPD) theory states that there is a difference between what learners can do without help and what learners can do with help. As has been stated in Raymond (2000), "The zone of proximal development is the distance between what children can do for themselves and the next learning that they can be helped to achieve with competent assistance" (p. 176). Scaffolding has a close

relationship with ZPD (Chang, Chen & Sung, 2002) because it gives learners assistance while learning. The activities in scaffolding and the instruction that is given to learners is normally beyond the learners abilities base on what they can do without assistance (Olson & Pratt, 2000). In other words, teachers need to scaffold students according to their proficiency level. For example, Hendrickson (1980) suggests that teachers should give learners feedback based on their proficiency level, they should consider the types of errors learners may be able to fix by themselves, and the type of errors learners may not have the ability to fix without help. Therefore, he suggests teachers give indirect feedback on the errors that learners may have the ability to self-repair, and to give direct feedback on the errors learners may have problem to correct by themselves. However, he does not distinguish between the relative effects of different types of direct feedback.

Tharp and Gillimore (1988) proposed three mechanisms to assist learners through ZPD to learn cognitively. They are modelling, contingency management, and feedback. First, through modelling, teachers can demonstrate how to do or say something, and learners can imitate the behaviour. Next, through contingency management, teachers reward or punish students based on their performance. But unlike modelling, students will not produce a new concept through contingency management. Finally, feedback from teachers allows learners to observe and notice their shortcomings, learners would be able to detect the types of error they have made, and be more careful when using that linguistical forms/structure again.

2.1.2.4 Summary

In referring to the early discussion on information processing theories, WCF is theoretically effective. According to Swain (2000), through consistent output, learners will be in control. After the learners have produced target-like statements, it is important

to give learners feedback on their errors. It is not only to identify the errors they have made, but also to help them notice their errors. Noticing plays an important role here because it provides opportunities to help them to be aware of what type of the error they have made and how they make such errors. Uptake, then, occurs while learners are demonstrating the target-like forms/structures after they receive feedback on their errors. According to Slimani (1992), learners consider uptake as what they have learnt after receiving feedback.

In relation to WCF, some theories from Socio-cultural theory (motivation, self-schema and scaffolding) have explained the reasons that may cause individual difference through the use of WCF. Firstly, motivation may be gained either internally or externally. Internal motivation refers to the motivations which come from one's learning goals, and external motivation refers to the motivation that come from their interest gains by the way of teaching or the activity in class. External motivation may also come from the past successful learning experience learners have. Moreover, reward that has given from teachers is also a part of the external motivation that motivates learners in learning. Next, self-schema refers to the beliefs or ideas learners have about themselves. In relation to WCF, two of the dimensions it has (affect dimension and temporal dimension) may influence one's interest in learning, and also differs the learning style (for example, preference in receiving different types of feedback on their errors). Finally, scaffolding is another component in socio-cultural theory that may influence one's performance. This theory, claims that it is important to scaffold learners based on their proficiency level, the assistance from the teachers should not be higher than their proficiency level.

Although WCF seems effective within both information processing theory and socio-cultural theory, it is important to discuss what research evidence there is to support the theoretical perspectives. Therefore, in the next section, our attention will be directed to a discussion on the debate of the effectiveness of WCF and to the effectiveness of different types of feedback (direct and indirect).

2.1.3 Arguments for and against WCF

2.1.3.1 Introduction

After the discussion on the theories in relation to WCF, it would seem that WCF is theoretically effective. However, these theories are not enough to decide whether or not WCF is effective. This has been very clear from the debate about the effectiveness of WCF between Truscott, Ferris and others. First this thesis will look at a debate on the effectiveness of WCF, which was raised by Truscott (1996) who claimed that WCF is ineffective and is harmful, and should therefore be abandoned. In the same section, a response from Ferris (1999) will also be presented, explaining where she agreed and disagreed with Truscott. Then, studies that have investigated the effectiveness of WCF will be discussed in detail. In the final section, operating on the assumption that WCF is effective, discussion on the effectiveness of different types of WCF will be presented. This will include a comparison of two types of feedback (direct and indirect feedback) in order to find out whether or not one type of feedback is more effective than another.

2.1.3.2 Truscott's Argument

WCF as a kind of pedagogy has been used for decades in language teaching classrooms, and researchers have been investigating the effectiveness of different types of feedback instead of the effectiveness of WCF until Truscott (1996) claimed that WCF has a negative affect on learning. His criticism of WCF and denial of learner improvement in

writing astonished the field of second language writing teachers and researchers.

Further, he advised teachers not to use WCF on students' writing because he considered it ineffective and harmful due to three main reasons:

1. Substantial research shows it is ineffective and not helpful
2. Theoretical and practical issues prove that it is ineffective
3. It has harmful effects on students' writing

Truscott claimed that on the basis of a few empirical studies, there are no significant results supporting WCF. Moreover, he claimed that at the end of the studies, they showed that learners who received corrective feedback did not perform better than those who did not receive any corrective feedback on their errors. Kepner (1991), for instance, who experimented with the two different types of feedback (a group with corrective feedback, and another group with commentary), found no difference between these two groups. Other studies referred to by Truscott (for example, Semke, 1984; Hendrickson, 1980) had similar results to what Kepner found, with no significant difference in performance between learners who received corrective feedback and those who did not receive any corrective feedback on their errors.

From the results of these studies and those investigating feedback in relation to learners' first language learning, Truscott concluded that WCF did not help learners improve their written accuracy in either their second language or first language learning.

Therefore, Truscott considered WCF was ineffective and not helpful.

After the discussion on studies that Truscott claimed showed WCF to be ineffective, he, then, moved to theoretical and practical problems that he claimed occurred when using WCF. First, he identified two problems that may theoretically impact on the

effectiveness of corrective feedback: problems relating to the order of acquisition and the problem of pseudo-learning.

2.1.3.2.1 The Problem in the Order of Acquisition

Truscott mentioned that it is important to follow the natural order of learning, as he explained “learning consists of the gradual development of a system, based in large part on complex learning processes, so one should expect regular patterns of development, independent of what occurs in the classroom” (p. 344). He argued that when giving learners WCF on all of the errors they have made, learners are unable to correct the errors that they are not yet ready for. Thus, he claimed that WCF will not be effective in such cases. He further argued that WCF may cause learner distress when they receive corrections on the errors that they are not ready to receive. Therefore, he concluded that WCF was not following the natural order of acquisition, due to teachers giving corrections on errors that learners are not ready for. Thus, in these situations, he explained that WCF is ineffective.

2.1.3.2.2 The Problem of Pseudo-Learning

Truscott was also concerned with the question of whether or not learners really learned from WCF, or whether they were just performing or producing target-like form/structure superficially, without knowing the rules, which results in short-term knowledge that will not allow them to use the target language in a correct way constantly.

Lightbown (1985) mentioned pseudo-acquisition, which means that learners may seem to have successfully acquired the target language, but then it turns out to be only superficial. Truscott further claimed that tests and observations after learners received

corrective feedback showed that although they may have performed well, and seemed to have acquired the target form/structure, the knowledge or the competence they gained may disappear after a few months; indicating that the use and the instruction of WCF is only creating pseudo-learning, or pseudo-acquisition. Therefore, he concluded that this is another reason to doubt the value of WCF.

The theoretical problems that Truscott was concerned with were mainly to do with acquisition. He also argued that there are some practical problems that may prevent WCF from having positive effects. In the following part of the discussion, this thesis will look at Truscott's point of view on the practical problems involved with the use of WCF.

2.1.3.2.3 Practical Issues

The practical problems referred to by Truscott focused mainly on three points: (a) the teachers' ability in correcting errors, (b) learners' capability in learning, (c) teacher's ability and patience for correcting relevant errors consistently.

First, according to Truscott, when using WCF, it is important that teachers have the ability to recognize an error. However, this may be a challenge to teachers who are both native and non-native speakers. Moreover, even if teachers do recognize the errors, they may not be able to explain them to learners because they do not have enough knowledge or sometimes they do not have enough time to do so.

Another practical problem concerned learners' capability in learning. In relation to what he argued previously (the first practical problem), he mentioned that even if teachers are able to explain the errors to learners, there is still a possibility that they may "fail to

understand the explanation” (p. 350); and even if they do understand the explanation, they may forget it or they may fail to use it in their future writing. Furthermore, he claimed that learners may be anxious in learning and may not be motivated when receiving WCF.

Truscott claimed that focusing WCF on certain types of linguistic form may help learners improve, but in order to do this, some requirements must be fulfilled. First, when reading the learners’ writing, the teachers should realize that an error has been made. However, according to Truscott, even though the teachers may know where an error is, they may not have the competence to identify the error or have enough understanding of the correct form. Moreover, it is difficult for teachers to monitor each learner, because each learner has different problems and different types of errors. In order to focus on different types of error correction that is suitable for each learner, teachers, he claims, would need to spend a lot of time on doing this. Truscott further claimed that if any of the requirements are not addressed, the correction will be considered to be not effective. Therefore, teachers may not be able to do it constantly, because it will take an enormous amount of work.

2.1.3.2.4 The Harmful Effect of WCF

The purpose of WCF is to help learners improve their accuracy in writing. However, Truscott pointed out two problems they may have while using it, and these problems may cause negative effects on learners’ writing. Firstly, Truscott argued that WCF may cause frustration to learners who receive it, especially learners who do not like to be told that they are doing something incorrect. In order not to receive any feedback that is telling them there are errors in their writing, they will try to use simple sentences or try not to use the target form/structure to avoid making mistakes.

Secondly, Truscott claimed that learners who are keen to receive feedback and to correct errors may still make the same mistake in subsequent writing tasks for two possible reasons. They may not understand the cause of the errors, and not have enough understanding of the linguistic forms they are correcting. For these reasons, Truscott considered WCF to be harmful as well as ineffective. He further advised teachers not to use it in classroom teaching. In relation to what Truscott claimed, Ferris (1999) responded with the parts she agreed with and disagreed with in Truscott's argument.

2.1.3.3 Ferris' Argument

Regarding Truscott's argument, Ferris, who has been researching in the field and who strongly believes in WCF, responded to Truscott with her understanding to WCF and her opinions on what Truscott claimed. In this section, a discussion of what Ferris agreed with Truscott on is presented in the first section; this is followed by a discussion of what Ferris disagreed with Truscott on.

2.1.3.3.1 Agreement with Truscott's Arguments

Truscott (1996) mentioned that it is difficult to correct errors in relation to syntactic, morphological and lexical knowledge because these three types of knowledge are acquired in different manners. Ferris agreed with his point, and admitted that it is true based on her experience in teaching. Although she has noticed that many errors are "treatable" (p. 6), errors such as subject-verb agreement, run-ons, comma splices, missing articles and verb form errors, she also explained that most of the errors are untreatable (lexical errors, sentence structure, missing words, unnecessary words and word order).

Ferris not only agreed with the theoretical problem Truscott claimed, she also agreed with the practical problem that Truscott notes. However, she pointed out that effective grammar feedback and instruction should consider learners' first language background, their second language proficiency level, and their previous experience with grammar instruction. Moreover, she also mentioned that a good writing instructor will also raise learners' awareness about the importance of their written accuracy and the importance for them to develop self-correct skill.

Despite agreeing with the theoretical and practical issues that Truscott (1996) identified, there are also some issues that Ferris disagreed with.

2.1.3.3.2 Disagreement with Truscott's Arguments

The disagreement that Ferris had with what Truscott said includes: (a) the various studies that Truscott mentioned are not comparable, (b) the research sample and the teaching strategies are different across the studies, and (c) Truscott overstated negative evidence and ignored the research results that contradicted his review article. These will be discussed in detail as follows.

Ferris pointed out that the studies Truscott used to support his point of view contain different groups. Among the various studies Truscott mentioned, the subjects involved college-level foreign language students in the U.S and also EFL learners. Also in his article (1996) Truscott noted that "the students' origins and L1s varied widely" (p. 334). Therefore, the studies he mentioned were not comparable.

Ferris argued that within the studies Truscott had chosen, the duration of each study varied widely. Some were one semester long, and others were only of a very short

period of time. Also, within the studies Truscott mentioned, some of the studies did not have a control group. For these reasons, she explained that his argument was based on inadequate evidence.

2.1.3.3 Summary

Truscott (1996) proposed WCF is ineffective, based on the evidence from other studies, and the reasons why he found WCF ineffective theoretically and practically. Although Ferris (1999) agreed with the theoretical problems that Truscott mentioned, especially concerning “no single form of correction can be effective” (p.343) for syntactic, morphological, and lexical errors, because they are “acquired in different manners”(p.343), and the limitations of teachers and learners decreasing the effectiveness of WCF (the practical problems), she still insisted that WCF has value in helping learners improve the accuracy of their writing.

In the next part this chapter, based on the debate that has been discussed above, the studies which investigated the effectiveness of WCF will be presented. The questions at this point will be whether or not learners who receive WCF improve more than those who have not received WCF, and is Truscott right about the argument “error correction is harmful”?

2.2 Research Evidence on the Effectiveness of WCF

2.2.1 Introduction

Truscott believes that WCF is not effective and is actually harmful to learners. However, many studies have investigated the effectiveness of WCF over a number of decades and have found some evidence supporting the pedagogy teachers have been using over time. Reviewing a number of empirical studies in the field, it becomes clear that not every

study found evidence that WCF is effective. Some studies (Kepner, 1991; Polio et al., 1998, as shown in Table 1 below) have found no significant evidence supporting WCF, and some studies have found it effective (Ashwell, 2000; Bitchener, 2008; Bitchener & Knoch a&b, 2008, also shown in Table 1 below). In the following section, this thesis will first look at the studies supporting WCF, and this will be followed by the studies that do not support WCF. A short summary of this section will be presented at the end.

2.2.2 Research Supporting WCF

As Table 1 shows, different results were found in the studies which investigated the effectiveness of WCF. Although it has been found effective in some studies, many of them contain limitations in the methods researchers used. In the following sections, discussions of the studies with their limitations are presented.

Table 1 Studies Examined the Effectiveness of WCF

Study	Participants	WCF type	Duration	Effective
Ashwell (2000)	50 EFL learners (Japan university)	1. Content comment then indirect feedback 2. Indirect feedback then content comment 3. Mix of 1&2 4. No feedback	1 semester	Yes Group 1-3 improves
Bitchener (2008)	75 (low intermediate) ESL learners	1. Direct WCF + written and oral meta-linguistic explanation	2 months	Yes Group 1-3 gains significant

		2. Direct WCF + written meta-linguistic explanation 3. Direct feedback only 4. No feedback		improvement between pre- test and immediate post-test
Bitchener & Knoch (2008a)	144 ESL students (international students and migrant)	1. Direct error correction+ oral meta-linguistic explanation 2. Direct error correction written meta-linguistic explanation 3. Direct feedback (no meta-linguistic explanation) 4. No corrective feedback	7 weeks	Yes Group 1-3 improved
Btichener & Knoch (2008b)	144 low intermediate learners	1. Direct WCF + written and oral meta-linguistic explanation 2. Direct WCF + written meta-linguistic explanation 3. Direct feedback	2 months	Yes Group 1-3 gains significant improvement between pre- test and immediate post-test

		only 4. No feedback		
Bitchener & Knoch (2009)	52 (low intermediate ESL learners)	1. Direct WCF + written and oral meta-linguistic explanation 2. Direct WCF + written meta- linguistic explanation 3. Direct feedback only 4. Control group	10 months	Yes Group 1-3 improved more than the control group
Chandler (2003)	31 undergraduates	1. Indirect WCF and revision 2. Indirect underline only	14 weeks	Group 1 reduce errors in the last assignment
Ellis, Sheen, Murakami, & Takashim a (2008)	49 general English learners (Japan university)	1.Focused group 2.unfocused group 3.Receive no correction on linguistic errors	10 weeks	Yes Group 1 & 2 has a significant improvement
Ferris (1997)	47 ESL students	Teacher commentary & indirect WCF	1 semester	Yes Improvement

Ferris & Roberts (2001)	72 university ESL students	1. Code on errors 2. Indirect underline 3. No feedback	6 weeks (12 hours)	Yes Group 1 & 2 has significant improvement
Kepner (1991)	60 Spanish learners (intermediate, USA college)	1. Direct WCF 2. Control	1 Semester	No
Polio et al. (1998)	65 ESL learners (USA university)	1. WCF, editing instruction, text revision 2. Control	7 weeks	No
Sheen (2007)	91 intermediate ESL learners (USA college)	1. Direct only correction group 2. Direct + meta-linguistic correction group 3. Control group	2 months	Both treatment group performed better than the control group on the immediate post-tests
Truscott & Hsu (2008)	47 University students (Taiwan University)	1. Indirect underline 2. Control-no feedback	3hrs/w, 18weeks	No difference

Ashwell (2000) investigated the effectiveness of WCF with 50 EFL Japanese learners, and the duration of the study was one semester long. He investigated them in four

groups using two different approaches. The first group received content comment then indirect feedback; the second group received indirect feedback then content comment; the third group received the combined feedback from the first and second group; the last group received no feedback for any tasks. After one semester, he found that all three groups that received feedback improved in the end. Although Ashwell found positive evidence for supporting the effectiveness of WCF, it is important to notice that students who participated in this study were not required to write a new task. They were revising the same task and calculating the accuracy rate between drafts. Thus, this study was about text revision, not about what effect WCF on one text had on the writing of another text.

Chandler (2003) did her investigation with 31 undergraduates students within 14 weeks (two months). The study included two different groups. Group one received indirect feedback and learners were asked to provide a revision after they received feedback; and group two received indirect underline only. The result of this study showed group one performed better in the end. However, this study lacked a control group (which received no feedback), the investigation was only between the same type of feedback and compared whether asking students to revise their writing would help them perform better. Thus, the comparison was not between those who received WCF and those who did not.

Ferris (1997) investigated 47 ESL learners for a duration of 1 semester. The study contained only two groups. Group one received teacher commentary, and group two received indirect feedback on their errors. The study found that the second group improved in the end. Although this study concluded that WCF is effective, it did not

include a control group, so in this respect is similar to Chandler's study. It is not a study that compared the effective of WCF with no WCF.

Ferris & Roberts (2001) investigated 72 ESL learners in a 6 weeks long study (12 hours in total). The correction that was given to the learners contained two different types of feedback. Group one received code on errors; group two received indirect underlining; group three received no feedback. At the end of the study, it was found that group one and group two gained significant improvement. However, as in Ashewell's study, the new task was not measured in this study. Learners who participated in this investigation were only required to revise their writing, but were not asked to do a new task.

Despite the earlier studies which contain some limitations in their research design, recent studies in the field have largely overcome the limitations. Bitchener (2008) investigated with 75 low intermediate ESL learners, and the duration of the research was 2 months. He investigated them in four groups: group one received direct feedback in both written and oral meta-linguistic explanation; group two received direct feedback with only written meta-linguistic explanation; group three received direct feedback without any explanation; and group four received no feedback. At the end of the research, he found all experimental groups gained significant improvement between pre-test and immediate post-test. A similar investigation was done by Bitchener & Knoch (2008a, 2008b) with 144 students. The duration of the study in 2008a was seven weeks, and the one in 2008b was 2 months. The results of these two studies all showed that learners who received WCF outperformed the control group. Another ten-months study by Bitchener & Knoch (2009) also found the same result as Bitchener (2008) and Bitchener & Knoch (2008a, 2008b). A similar result was shown in Ellis, Sheen, Murakami & Takashima (2008), which investigated 49 general English learners in

Japan University for ten weeks. They found that learners who received form-focused feedback and unfocused feedback outperformed than those did not receive any WCF. Sheen (2007) investigated 91 intermediate ELS learners for two months; she also found that both treatment groups performed better than the control group.

Although some of the earlier studies found evidence supporting WCF, the limitations of their research designs decreased the reliability and validity of the studies. Different from the earlier studies which contain limitations, the studies in recent years have overcome those limitations, and perfected their research design, and provided evidence in support of WCF. However, it is important to point out that some studies not support WCF. In the next section, these will be discussed.

2.2.3 Research Not Supporting WCF

Although most of the studies found that WCF is effective, there are some other studies that found no significant evidence supporting corrective feedback. A brief analysis of the studies that did not support WCF are listed as below.

Kepner (1991) investigated the effectiveness of WCF with 60 Spanish intermediate learners for one semester. The study involved two groups, the direct feedback group and a control group which received no feedback. At the end of the investigation, the study found no significant difference between the two groups. It is worth noting that there were some shortcomings in this study. First, it did not limit the journal entry length. Second, it did not require the students to write in-class, all texts were assignments and were written out of class. Thus, the variable between the groups differ.

A similar result to Kepner (1991) was found in Polio et al.'s study (1998). This study investigated 65 ESL learners for seven weeks, and also contained two groups. One group received WCF with editing instruction and text revision, and the other group received no feedback. The result showed no significant difference between the two groups was found in this study. However, it is important to notice that different instruments were used across the tasks. In this study, the two different instruments were the journal entry and the in-class essay, and the variability of different instruments may influence the result.

2.2.4 Research Supporting WCF Over Time

Several studies have investigated the effectiveness of WCF over time. Bitchener (2008) investigated the effectiveness for 2 months with 75 low intermediate international ESL students. The study found that learners who received WCF not only outperformed the control group right after the treatment, but also outperformed them after two months. A similar result was found in Bitchener et al. (2005), which investigated 53 post-intermediate ESOL learners for 12 weeks. The study found that group one (direct feedback with small conference) outperformed other groups at the end, with significant statistical results. Moreover, Bitchener & Knoch (2008a) revealed a similar result demonstrating that WCF helps learners improved over time, and this result has also been endorsed by Bitchener & Knoch (2008b, 2009), and Sheen (2007).

2.2.5 Summary

In reference to the studies above, it is clear that although some studies show that there is no evidence supporting WCF (Kepner, 1991; Polio et al., 1998; Truscott & Hsu, 2008), more of the studies (Ashwell, 2000; Bitchener, 2008; Bitchener & Knoch a&b, 208; Chandler, 2003; Ellis et al., 2008; Ferris, 1997; Ferris & Roberts, 2001) listed above

found WCF effective. However, some of the studies (Chandler, 2003; Ferris, 1997) did not contain a control group, which received no feedback, to compare with their experimental group to check the difference between them. There are also several studies (Ashwell, 2000; Ferris & Roberts, 2001; Kepner, 1991; Polio et al., 1998) that used different types of instruments or did not require the students to write a new text. The variability of different instruments may influence the result of the study. Moreover, if the learners did not write a new text, it would be difficult to know whether or not learners improved.

Assuming WCF is effective, a number of studies have also investigated the effectiveness of different types of feedback. The question being asked here has changed from whether or not learners will improve by receiving WCF, to which type of feedback is considered the most effective one to use.

2.3 Research Evidence on the Effectiveness of WCF on Particular Linguistic Form/Structure

Among the studies that examined the effectiveness of WCF, some have also examined the effectiveness of WCF on a particular linguistic form/structure. Bitchener et al. (2005) investigated different types of direct feedback on three linguistic forms, prepositions, the past simple tense, and the definite article. After 12 weeks of investigation, they found that learners who received direct feedback with an extra small conference outperformed the others on the target structures.

Ellis et al. (2008) investigated direct feedback with definite/indefinite article, and found it to be effective. Similar evidence can be found in Bitchener, 2008; Bitchener & Knoch,

2009; Sheen 2007, which all investigated different types of direct feedback with definite/indefinite articles.

Ferris & Roberts (2001) investigated the effectiveness of WCF, and found that WCF is more effective on rule-based linguistic forms, which includes verbs, noun endings and articles. However, WCF did not seem to be very effective when using it on other linguistic forms/structures which did not follow a rule, such as prepositions or sentence structures.

2.4 Research Evidence on the Effectiveness of Different Types of Feedback

2.4.1 Introduction

Since more of the studies which have been mentioned above show that corrective feedback helps language learners improve their accuracy in writing, It is worth investigating and comparing the effectiveness between different types of corrective feedback.

WCF can be divided into two types of feedback, direct and indirect corrective feedback. As it has been mentioned previously that direct corrective feedback may be defined as giving corrections near or above the linguistic errors (Bitchener, Young, & Cameron, 2005; Bitchener, 2008; Ferris 2003). It may include crossing out unnecessary words, inserting missing words and changing the words given in some way. In some studies, it may also include a written meta-linguistic explanation with rules and examples (for example, at the end of their writing and with references back to the places where the errors were made), or an oral meta-linguistic explanation (for example, when teachers discuss or practise a certain type of grammar rule with students individually, in a small conference, or as a whole class).

On the other hand, giving indirect feedback is to indicate that an error has been made but does not specify the mistake. It is normally indicated by underlining or circling the error, or calculating the number of the errors in each line, and recording the numbers in the margin (Ferris & Roberts, 2001; Robb, Ross, & Shortreed, 1986; Chandler, 2003). When teachers give an indirect feedback on errors, learners are required to explore the correct form by themselves.

In the earlier years, Lalande (1982) investigated the different effects resulting from indirect and direct feedback, and found that indirect feedback is more effective. Robb, Ross, & Shortreeds (1986) examined various types of feedback, and although the result of their study found no difference between different types of feedback, they still suggested that indirect feedback helps learners improve their accuracy more than direct feedback. On the other hand, two recent studies of Bitchener, Young, & Cameron (2005) and Chandler (2003) found direct feedback to be more effective when helping learners to improve their accuracy in writing. In the following discussion, studies related to different types of feedback will be presented.

2.4.2 Research Supporting Direct Feedback

This section presents the studies that support direct written feedback, and contains a brief analysis together with the limitations in their research design. The outline of each study can be found in Table 2.

Table 2 Studies Investigate Different Types of Feedback

Study	Participants	WCF types	Duration	Effectiveness
Lalande (1982)	60 intermediate German FL learners	1. Direct error correction 2.Guided learning and problem solving	10 weeks	Indirect
Robb, Ross & Shortreed (1986)	134 EFL learners Japan college	1. Direct corrections 2. Coded 3. Indirect highlighted 4. Indirect marginal feedback	1 year (34.5 contact hour)	No difference
Ferris (1997)	47 ESL learners USA university	Teacher commentary and selective indirect underlining	1 semester	Improvement
Chandler (2000)	30 ESL learners USA college	1. Indirect underlining and revision 2. Indirect underlining only	1 semester	Group 2 reduced errors in essay 5
Ferris & Roberts (2001)	72 University ESL students	1. Code on errors 2. Indirect underline 3. No feedback	6 weeks (12 hours)	No difference

Chandler (2003)	36 musical majored students (intermediate level)	1. Direct correction near the errors 2. Indirect underline with code 3. Code only 4. Underline only	1 semester	Direct correction outperformed
Bitchener et al. (2005)	53 post- intermediate ESOL (migrant) learners	1. Direct feedback + small conference 2. Direct feedback only 3. No feedback	12 weeks	Group 1 outperformed

Chandler (2003) compared the effectiveness of direct written feedback (code the errors) and indirect written feedback (underline the errors) for one semester, and found direct written feedback to be more effective than the other. However, the study did not contain a control group which received no feedback in his design, so it is unable to know from this study whether direct or indirect feedback is more effective when learners write new texts.

The other study that investigated the effectiveness of different types of feedback, is the one Bichener et al. (2005) did. However, instead of comparing direct and indirect feedback, this study compared different types of direct feedback. At the end of the study, they found that learners who received direct feedback with a small conference

performed better than those who received direct feedback only and those received no feedback.

2.4.3 Research Supporting Indirect Feedback

Getting different results from the studies that supported direct written feedback, Lalande (1982) compared direct correction to indirect written feedback. The study found indirect written feedback to be more effective than direct correction, which was similar to Ferris' (1997) investigation. Ferris' (1997) investigated teacher's commentary with selective indirect underlining, and found that although these studies have found evidence supporting indirect written feedback, they did not contain a control group which received no feedback in their design.

Chandler (2000) has provided evidence supporting indirect written feedback through her study. However, Chandler's study not only lacked a control group, but also did not contain different types of feedback in the research. The investigation was concentrated on indirect underlining, and whether revision would help learners who received indirect feedback to improve.

2.4.4 Research Found No Difference with Both Types of Feedback

Despite the fact that the studies discussed above have shown results supporting a certain type of feedback, results from other studies have shown that the level of effectiveness of the two types of written feedback did not show a difference in learner performance.

In an early study, Robb, Ross & Shortreed (1986), investigated different types of feedback (direct error correction, code, indirect underline, and marginal feedback). Although they adopted various approaches in comparing different types of feedback,

they found no difference between them. A similar result was shown in Ferris & Roberts' study (2001), which compared direct code, indirect underlining and no feedback. They found both the direct and indirect group improved more than the group that received no feedback at the end of their study, however, there was no significant difference between the groups that received different types of feedback. Moreover, Ferris & Roberts' study did not require students to write a new task. The measurement of a new task may show students' improvement after they receive feedback.

2.4.5 Summary

In referring to the studies above, most of the studies did not contain a control group in their design, and some of them did not require students to do a new task, and this may influence the result of the research. In addition to the studies that have been mentioned in the previous sections, Ferris et al. (2000) claimed that by using direct feedback, revisions are made more correctly than when using indirect feedback. However, it does not mean that direct feedback is more effective than indirect feedback. Ferris' study (1999, 2002) pointed out that indirect feedback helps learners more, and mentions that some types of errors are treatable by indirect corrective feedback (which include verb form, punctuation and sentence fragment). However, errors like word choice, missing words or using unnecessary words are less treatable by indirect feedback. In relation to giving suggestion on the type of feedback that may help learners improve more, Hendrickson (1980) claimed that learners at different proficiency levels would have different abilities to self-correct, therefore, therefore, he suggested using indirect feedback on errors that learners may be able to self-correct, and using direct feedback on errors that learners may not be able to correct by themselves. He further claimed that WCF should be more effective when indirect and direct feedback are used together.

In summary of the discussion above, it becomes obvious that the investigation of the most effective type of feedback is still inconclusive. Instead of concentrating on the effectiveness of different types of feedback, some researchers surveyed learner preference on receiving a certain type of feedback. In the next section, the discussion focuses on the studies which relate to the type of feedback learners like to receive.

2.5 Learner Preference

As Table 3 reveals, some studies have investigated the type of feedback that learners say they would like to receive.

Table 3 Studies about Learner Preference

Study	Participants	Preference	Reasons
Brandl (1995)	12 college students (USA University)	Indirect	Learners believe they can improve more
Ferris & Roberts (2001)	72 University ESL students (USA University)	Indirect	The learners in this study were not required to give any reason for their preference
Chandler (2003)	36 Intermediate level students (USA college)	Direct	The learners in this study were not required to give any reason for their preference

Brandl (1995) examined levels of achievement and difficulty of task and found that both high achievement and low achievement groups took indirect feedback as their initial choice. The reason that learners made this choice was because they believed that indirect written feedback can help them improve more than receiving direct written feedback because, they have to try to explore the correct form by themselves. Like Brandl (1995), Ferris & Roberts (2001) also investigated learner preference, and their

results showed that most of the learners preferred indirect feedback (circle the errors and label codes on them). Although it supported what Brandl (1995) had found, Ferris & Roberts' (2001) study did not survey the learners about the reason for their preference.

Chandler's (2003) finding was contrary to Brandl's and Ferris & Roberts' study. She found that most of the learners in the study preferred direct written feedback more than indirect feedback, because they said that they do not need to look for a correct form by themselves, when the correct answers were already there for them.

Since the learners in these three studies were at a similar proficiency level, one possible reason that may cause the difference in learner preference in the three studies may be their motivation in learning. Although Ferris & Roberts (2001) did not ask the learners about their reasoning in making such choices, the reasons discovered by Brandl (1995) and Chandler (2003) showed learner's motivation in learning. In Brandl (1995), learners said they preferred indirect feedback because they believed that looking for the correct answers by themselves can help them learn better, whereas in Chandler (2003), learners preferred direct feedback because it takes less time for them to find the correct answer.

2.6 Identify Gaps and Research Questions

Bichener (2008), investigated the effectiveness of WCF over time, and found that learners who received WCF performed better than those who did not receive any feedback after two months investigation, and similar results can also be found in Bichener & Knoch (2008a, 2008b, 2009). Although there are some studies which have shown evidence supporting WCF, few of them examined the effectiveness of WCF over time. For example, Ashwell (2000) investigated learners who received different types of

feedback and compared them with learners who did not receive feedback, and the study revealed that all learners who received feedback improved. In the study, he did not clarify whether learners improved across all of the tasks (that is, over time), or whether they just improved in certain tasks. The significance of over time is that, WCF should not be only effective right after learners have received feedback on their error, but also overtime. One aim of this study was to investigate the effectiveness of WCF over time. The purpose of investigating it was to provide evidence that WCF was not only effective right after the learners received it, but also could last as long-term increase in knowledge. The positive result of the investigation justifies the value of using WCF.

While some studies investigated the effectiveness of WCF, other studies (Ferris & Roberts, 2001; Robb et al., 1986; Chandler, 2003; Lalande, 1982) examined different types of feedback. Although Some (Ferris& Roberts, 2001; Robb et al, 1986) revealed no difference in effectiveness between different types of feedback, Chandler (2003) found direct feedback more effective, and Lalande (1982) found indirect feedback more effective. Unfortunately, there was still no conclusive answer in identifying a certain type of feedback to be more effective than other, because the number of the studies that investigated the differences between the two types of feedback were not enough to determine it. Moreover, some of the research designs contain various problems that influence the validity of the results.

In the earlier studies that have been mentioned above, some of them used a form-focused approach, which means learners have only received their feedback on certain kinds of linguistic forms/structures. For example, Ellis et al. (2008) gave WCF on definite articles, and found it is effective when correcting definite article errors (also in Bitchener, 2008; Bichener & Knoch, 2009; Sheen, 2007). Bitchener et al. (2005) found

it is effective with definite articles and past simple tense, when giving WCF on these linguistic forms.

With reference to the studies that have been discussed above, most of them failed to, or did not specify whether WCF was effective right after the learners received feedback on their errors, or if they were able to maintain it after a period of time (except for a few studies investigating the effectiveness of WCF over time). This perhaps means that there is room for further investigation on whether WCF helps learners to improve their accuracy in writing not just once, but will help them to improve overtime.

In relation to the studies that investigated different types of feedback, there were some studies that investigated learner preference on types of feedback. Brandl (1995) and Ferris & Roberts (2001) investigated the topic in this field and found most of the learners preferred receiving indirect feedback to direct feedback. Different from what Brandl (1995) and Ferris & Roberts (2001) found, Chandler's study (2003) revealed that most of the learners preferred direct feedback rather than indirect feedback. Among the studies which investigated learner preference, Brandl (1995) found that most of the learners believed the type of feedback they preferred would help them understand their errors, and would also help them to improve more. Although the studies mentioned above did not investigate the relationship between learner preference and their actual performance when using the types of feedback they preferred, it is perhaps one of the important points in this thesis.

In an attempt to fill the gaps referred to above, the following research questions were chosen for the study to be reported in the following chapters:

1. Does WCF help learners improve their accuracy over time?

2. Does WCF help learners improve their accuracy in using certain linguistic forms/structures over time?
3. Are some types of WCF more effective than others over time?
4. Are some types of WCF more effective than others in targeting certain error categories over time?
5. What types of WCF do learners say that they prefer and why?
6. Is there a relationship between the learners' preferences for a certain type of feedback and their actual performance over time when receiving their preferred or less preferred WCF?

Chapter 3 Methodology and Design of the Study

3.1 Introduction

This chapter introduces and contains a discussion of the methodological approach and research design which was used in this thesis. The chapter reports the detail about of the participants, the instruments that were used, the target forms/structures investigated, the reliability and validity of the data, the data collection procedure and the data analysis. In addition, ethical issues concerning the research process are clarified. Following the ethical issues, a brief summary is presented in the final section in the chapter.

3.2 Methodological Approach: Quantitative Approach

Due to the nature of this study, the quantitative approach was considered the most appropriate approach. According to Hoepfl (1997), quantitative researchers adopt experimental methods and quantitative measures to test their hypotheses, and they also concentrate on analyzing the possible relationships between variables (Denzin & Lincoln, 1998). A quantitative research paradigm as Bogdan & Biklen (1998) pointed out, should have three conditions:

1. It should emphasize the facts and causes of behavior
2. The information collected from the research should be in numerical form, that can be quantified and summarized
3. It should use mathematical processes for analyzing data

Moreover, Charles (1995) has also mentioned that the result of quantitative research is expressed statistically. Referring to the studies that have been discussed previously, which investigated the effectiveness of WCF, the data collected were all analyzed numerically, and the results have all been presented statistically. Following the same method of data analysis of the previous studies (discussed in chapter 2), the data

collected in this thesis has also been transferred into numbers, and presented as numerical data.

3.3 Participants

The participants were a group of adult English learners (n=28, see Appendix H) enrolled in a intermediate level (IELTS score range 4.0 to 4.5) general English program at AUT University in Auckland, New Zealand. 56% of the learners were from Asia (China n=3, Thailand n=1, Iran n=3, Saudi Arabia n=1, Iraq n=1, Korea n=1, Viet Nam n=1, Afghanistan n=1, Myanmar n=3, Japan n=1), 34% from Africa (Ethiopia n=1, Eritrea n=5, Burundi n=2, Sudan n=1), 7% from Europe (Germany n=1, Russia n=1), and 3% from Latin America (Chile n=1). Six were between 26-30 years old, seven between 31-40, one over 55, and the others under 20. The average age of the student group was 30. The majority of the students were female: there were 11 males and 17 females. Although 28 students did the pre-test and the immediate post-test, two withdrew before the final writing task (one student quit from school due to her health problem, and another withdrew from the research because he needed to work on a part-time job everyday after school).

3.4 Design

This study followed the Bitchener (2008), Bitchener and Knoch (2008a, 2008b, 2009) studies using a pre-test, immediate post-test and a delayed post-test method to examine the effects of WCF in writing over time. A pre-test was the first piece of writing that learners were required to do. From this test, all of their errors were identified and measured. The three types of forms that they made most of errors with were taken to be the target forms that were focused on in this study. After the pre-test, learners received feedback on the target forms, and they were required to do an immediate post-test. The

purpose of doing an immediate post-test is to examine whether learners improved their written accuracy after they received feedback. If they improved their written accuracy in the immediate post-test, it may mean that WCF is effective. However, only investigating the effectiveness of WCF is not enough for this study, examining whether or not WCF is effective over time is the most prominent target for investigation. Therefore, the learners were required to do a delayed post-test. The function of the delayed post-test is to examine whether learners improve their written accuracy after they have received feedback for a period of time (for example, learners did their delayed post-test two months after they received feedback). If learners improved in the delayed post-test, this shows the effectiveness of WCF over time.

Because the study was also investigating the effectiveness of different types of WCF, four groups were formed. *Group one* received direct error correction above each error that was made in using the target forms. The type of WCF used with group one is the same as the type of feedback they had chosen as their preference in the questionnaire. Direct error correction involved circling an error and placing the correct use above each of the three target forms. *Group two* was a group of students who preferred to receive indirect feedback. *Group three* received indirect feedback. In order to explore and contrast the difference between using the type of feedback they preferred and the type of feedback they preferred less, learners in this group received the type of feedback they preferred less and their errors were circled with no hints given, as was the case with group two. *Group four* received no grammatical feedback. Learners sometimes received corrections on spelling but no grammatical feedback was given to them. However, instead of giving them grammar correction commentaries were given.

3.5 Instruments

3.5.1 Questionnaires

In order to find out learner preference on types of corrective feedback, a questionnaire was designed to elicit this information. The questionnaire was inspired by a survey by Brandl (1995) which listed different types of feedback for learners to choose their preference. The questions (see Appendix A) in the questionnaire used in this study firstly asked about the background of the participants, for example, their nationality, gender, and age. A list of questions about the types of WCF they usually receive, and the type of WCF they preferred to receive follow in the next section. This data on learner preference informed the groups that the participants were placed in. In order to explore the reasons why they preferred in a certain type of feedback, all participants were asked to do another questionnaire (see Appendix E), which required them to provide their reasoning for their WCF preferences.

3.5.2 Tasks

Three different groups of pictures (see Appendix B, C, and D) were used to elicit narrative writing from the learners. All were taken from Fletcher and Birt (1983): (1) Jogging, (2) Reunion, (3), A Dinner Party. Each group of pictures included eight pictures. All activities in the pictures were easy for participants to understand. The instructions given to the participants were designed to elicit the use of present simple tense. In this study, the participants were required to write a story of about 250 words based on what they perceived when they looked at the pictures. All participants were doing the writing tasks at the same time, and the three different series of pictures were used as three different writing tasks (pre-test, immediate post-test, and delayed post-test).

3.6 Target Structure

In the Bitchener (2008) and Bichener and Knoch (2008a, 2008b, 2009) studies the researchers investigated the effectiveness of WCF for helping learners improve their two functions of use of the definite and indefinite articles. However, the present study focuses on three target structures and were chosen because they were the ones which participants made the most errors in the pre-test.

The three target structures included:

(1) Definite or indefinite “a” / “the”

When a definite/indefinite article is used in a sentence, the function of “a” is referring to the object they mention for the first time, and the function of “the” is referring to the object that they have mentioned before. Learners sometimes confuse the usage of “a” and “the”, and they sometimes drop out “a” or “the” when it is necessary.

Examples from the data of the study:

Correct usage:

“There is a man and he lives with his wife. The man is called Anderson.”

(“a” is used here because “man” is mentioned for the first time, and “the” is used because “man” has been mentioned previously.)

Incorrect usage:

- “When he gets off the plane, he runs into the woman. The woman is his daughter.” (“a” is needed to refer to nouns or objects that are mentioned for the first time.)

- “A cat is hiding under the table and trying to steal a fish. A man comes, and a cat runs away quickly.” (“the” is needed to refer to nouns or objects that are mentioned for the second time.)

(2) Singular/plural Nouns

Most of the learners chose to put an “s” at the end of the noun when they were trying to indicate the plural form of the noun, however, not every noun in English can be transferred from singular to plural by simply adding an “s” at the end, for example:

Correct usage:

“He invites his parents to visit him in the weekend.” (An “s” is added after parent as it is more than one person)

“There are two women in the kitchen.” (instead of adding an “s” after “woman”, it changes its form to “women” when it refers to more than one woman)

Incorrect usage:

- “He receives two ticket to Canada.” (An “s” is needed after ticket as it is more than one ticket)
- “A men is talking to a women.” (The singular form for these two should be “man” and “woman”)

(3) Present Simple Tense

In most of the participants’ texts, the “s” for present simple for third person was often omitted, and sometimes they put a “s” after a verb when an infinitive was required (for example: verb after “to”).

Correct usage:

“He has to leave now.” (The verb “leave” has to be an infinitive verb because

it is after “to”, “to + infinitive” is always the rule)

“He runs away quickly.” (An “s” is required after “run” because the verb is for third person singular)

Incorrect usage:

- “The dog bite his arm.” (An “s” is needed after bite as the dog is third person singular)
- “His granddaughter wants him to visits her next month.” (An “s” after visit should be omitted because the verb after “to” should be an infinitive.)

3.7 Data Collection

Data collection occurred over a period of 2 months and the study had two parts (see Table 4).

Table 4 Two Parts of Data Collection

Part 1	Part 2
Questionnaire	1. Pre-test 2. Immediate Post-test 3. Delayed Post-test

In order to find out each learner’s preference regarding WCF, a questionnaire (see Appendix A) was given to each learner. In order to classify the students into different groups, the questionnaire also required them to select the type of WCF they would like to receive. While the learners worked on the questionnaire, the researcher explained vocabulary they didn’t know and also clarified any confusions they had while they were looking at the questions.

After the collection of the questionnaire, the first writing task was held in the same week (see Table 5). The tasks used in the study were a group of pictures (Fletcher & Birt, 1983) that showed the story order in numbers (see APPENDIX B,C,D). On top of the pictures, instructions were given such as “Look at the picture and write a story about what the people are doing in the picture. (Required length: 250 words)” Learners were required to write a short story based on what they saw in each picture.

There was a break of two weeks between the first and second writing task, and they were not required to do any homework or anything related to the study during the break. Once they returned from the break, and before writing the second text, learners received feedback on their first writing task and they were asked to read through their feedback for five minutes without looking at anyone else's or without talking to their classmates. They were asked to only concentrate on their own writing. When they finished reading their feedback, they started on the second writing task.

Learners had four weeks break from the project after they finished their second writing task. The third writing task was held after they returned from the break. Another questionnaire (see APPENDIX E) that asked them to provide a reason for their preferences was given and collected that same week.

Table 5: Timetable

Weeks	Subjects
Week 1	1. Questionnaire 2. First writing task
Week 2	Students back to class
Week 3	
Week 4	Second writing task
Week 5	Students back to class
Week 6	
Week 7	
Week 8	
Week 9	1. Final task 2. The second questionnaire

During the data collection, learners were in a quiet classroom so they could concentrate well. Each writing task averaged between thirty and forty minutes, and each questionnaire took between ten and fifteen minutes to finish. The total time learners spent for all the tasks was three hours.

3.8 Data Analysis

All data was processed through SPSS. As Chaudron (1977) points out “the main immediate measurement of effectiveness of any type of corrective reaction would be a frequency-of-count of the students’ correct responses following each type” (p.44). In each written text that the participants finished, the target error categories were marked according to whether they were correct or incorrect in order to measure the accuracy rate. The accuracy rate from all the tests was calculated as a percentage of correct usage of the target error categories. For example, if any of the participants had four incorrect

usages of the target error category out of 10, the accuracy rate of the writing was marked as 40%. The accuracy rate from the three tests was calculated by means and compared in order to seek the difference between the initial and the final accuracy rate, and also to evaluate the effectiveness of the type of WCF they preferred.

All the information from the questionnaires was coded by the choices they had made, and all the reasons of their preferences were classified into different categories. Their preferences and the different categories of their reasoning were all calculated, and compared with each other in percentage terms.

3.9 Data Reliability and Validity

According to Seliger and Shohamy (1989), data validity and reliability are “the two most important criteria for assuring the quality of the data collection procedures” (p. 184). In the following sections, discussions on reliability and validity are presented.

3.9.1 Reliability

Reliability as Seliger & Shohamy (1989) mentioned provides information about whether the data collection procedure is accurate and consistent. Another definition has been defined by Joppe (2000): “if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable” (p. 1).

Kirk & Miller (1986, p. 41-42) defined three types of reliability:

1. The degree to which a measurement, given repeatedly, remains the same.
2. The stability of a measurement over time.
3. The similarity of measurements within a given time period.

In order to achieve reliability, in this study, a pilot study was done to determine the reliability of data collection procedure.

Glesne & Peshkin (1992) have mentioned that the purpose of a pilot study is to learn about the research process, and to get a sense of the nature of the research setting.

The items that the pilot study of this research examined were:

- The surveys of learner preferences in feedback types. (See Appendix A)
- The pictures that were used for writing tasks, whether or not learners can understand them and produce texts when looking at them, also whether or not the pictures were able to elicit the texts that this study needed. (See Appendix B, C, and D)
- The testing time most participants needed for finishing a writing task, and to test whether or not they can reach about 250 words.

Among the categories that have been examined, some learners failed to produce texts based on the series of pictures that were used in this pilot study. This indicated that the pictures were too complicated for learners to understand. In order to solve this problem, a second pilot study was done to test a new series of pictures. Learners in the second pilot study were able to understand the meaning of the pictures and produce texts with about 250 words in 30 minutes.

3.9.2 Validity

Joppe (2000) explained that, “validity determines whether the research truly measures that which it was intended to measure or how truthful the research result are” (p.1). In other words, does the research instrument allow the researcher to get the data that will enable him to get appropriate answers to the research questions. Wainer & Braun (1998) described validity in quantitative research as construct validity. Construct, which refer to the initial question or hypothesis, determines which data to be collected and how is it to be collected. In reference to construct validity, Golafshani (2003) pointed out that, quantitative researchers “actively cause or affect the interplay between construct and

data in order to validate their investigation, usually by the application of a test or other process” (p. 599), and this involvement of the researchers in the research process may reduce the validity of the investigation. In this thesis, the treatment, tasks, group setting, and data collection procedure followed the pattern in other studies which have been discussed in the previous chapter. For example, the use of pre-test, immediate post-test, and delayed post-test appeared in Bitchener et al. (2005; 2008a; 2008b; 2009); the method of giving writing tasks was inspired by Bitchener et al.’s study (2009); the questionnaire used in this study was inspired by Brandl’s study (1995). All items (tasks, questionnaire, and so on) were used in the pilot study in order to examine the quality the questionnaire, and the instruments that used in the study to strengthen the data validity in this thesis.

3.10 Ethical Issues

In accordance with the ethical guidelines issued by Auckland University of Technology Ethics Committee (AUTEC), privacy and confidentiality were respected throughout the research process.

The participants were met a week before the study commenced, and the aim of the research and the nature of the study were clearly explained to them, and they had opportunities to clarify any information and ask questions at anytime. The participants were provided with copies of Participant Information Sheets (Appendix F) and Consent Forms (Appendix G) on the same day, and were encouraged to take the forms away with them to think about the study.

The participants were required to sign a consent form if they agreed to participant in the study. All participants were informed and assured that their writing would be

confidential, and were assured that there would be no negative influence on their study, particularly if they had to withdraw for any reason. Furthermore, all participants were informed of their right to withdraw from the study at any time during the research.

3.11 Summary

This chapter outlined the methodology and design best suited to this study. In order to fit the needs of the study, a quantitative approach was used. The study involved 26 participants from various countries, and they were put into different groups based on the questionnaire they completed. The questionnaires and the writing tasks that were used in the study have been explained, and forms that the study targeted have been identified. All the data was collected in class after the participants finished writing, and was analyzed statistically. The issue of reliability and validity was discussed. Following the discussion, ethical considerations were presented because of the fact that this research contained human participants.

Chapter 4 Findings

4.1 Introduction

An analysis of research data gathered during the three testing periods (pre-test, immediate and delayed post-test) is presented in this chapter, and the research questions presented earlier will be addressed and answered. All the key findings will be presented both statistically and in figures in order to clearly explain the findings.

4.2 Research Question 1

This research question examined the effectiveness of WCF over time (two months). First, when looking at the mean accuracy score of each group across the three writing tasks (in Table 6), it can be seen that the mean accuracy score of the WCF group increased between pre-test (53.86%) and immediate post-test (59.57%), and also between immediate post-test and delayed post-test (67.71%). On the other hand, it is clear that the mean accuracy score of the control group remained almost the same. It only decreased slightly between the pre-test (69.40%) and the immediate post-test (65.80%), and it increased in the delayed post-test (68%) to a mean accuracy score which is similar with the one in the beginning.

Table 6 Overall Mean Performance Score

Feedback Type	Pre-test		Immediate Post-test		Delayed Post-test	
	Mean	S. D	Mean	S. D	Mean	S. D
WCF	53.86	20.730	59.57	14.169	67.71	12.248
Control	69.40	14.433	65.80	22.863	68.00	12.410
Total	56.85	20.399	60.77	15.827	67.77	12.028

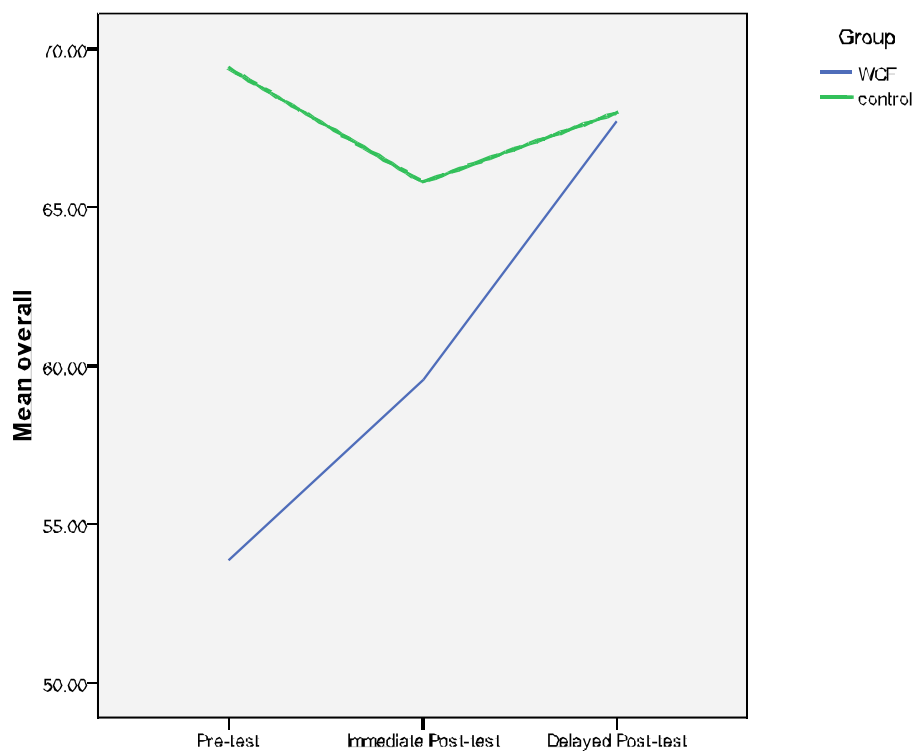
**Figure 1 Overall Performance**

Figure 1 above provides a visual representation of the mean percentages for the three testing periods for each group. Although the mean accuracy score seems to be very

different in the pre-test, Independent Group T-Test shows no significance between the WCF group and control group, which means that learners are considered to be at a similar level with regard to their mastery of the targeted error categories. Independent Group T-Test according to Coakes & Steed (1999) is a way of examining whether or not the mean accuracy score is significant between two different groups of participants who are in two different conditions, WCF group and the control group. Because the significance was $> .05$ ($p = .81$), it means that there is no statistically significant difference between the two groups.

As the first step of data analysis, a one-way ANOVA (the Analysis of Variance) helps to show the differences that may have occurred between each task with different groups. For the control group, ANOVA revealed no significant difference between the three writing tasks, and it also showed no difference between the pre-test and immediate post-test scores ($p = .924$), and between the immediate post-test and the delayed post-test ($p = .978$).

Although the result showed that there was no significant difference in the control group across the three tasks, the result for the WCF revealed a significant difference between the two periods of testing. For the WCF group, ANOVA revealed no significant difference between the pre-test and the immediate post-test ($p = .145$), however, the difference between the immediate post-test and the delayed post-test was significant ($p = .011$), and this was also the case between the pre-test and the delayed post-test ($p = .002$).

In accordance with the result above, comparing the control group where the mean accuracy score remained almost the same during all periods of testing, the mean

accuracy score of the WCF group showed that although learners did not increased their level of accuracy in the immediate post-test, they have improved when they were doing the delayed post-test. Thus, it can be concluded that WCF helped learners improve the accuracy with which they used the targeted linguistic forms over time.

4.3 Research Question 2

This question investigated whether or not WCF is more effective in treating certain types of linguistic forms. Table 7 below provides the mean accuracy score of each linguistic form across the three writing tasks. The number after each linguistic form signifies a different period of testing (present simple 1 indicates the mean accuracy score of present simple in the pre-test, present simple 2 indicates the mean accuracy score in immediate post-test, and present simple 3 indicates the mean accuracy score in delayed post-test). As can be seen, the mean accuracy score of the present simple in the pre-test increased from 41.86% to 45.29% for the immediate post-test, and it finally increased to 73.52% for the delayed post-test. The mean accuracy score of the use of the definite article and plural nouns did not show as much change.

**Table 7 Overall Mean Accuracy Score between Different Types of
Forms/Structures**

	Mean	Std. Deviation
	WCF	WCF
Present simple1	41.86	25.769
Present simple2	45.29	25.118
Present simple3	73.52	17.770
Definite article1	60.24	26.752
Definite article2	65.29	21.439
Definite article3	64.52	20.503
Plural noun1	72.62	24.099
Plural noun2	83.76	14.035
Plural noun3	80.43	22.029

4.3.1 Present Simple

Figure 2 below provides a visual presentation of the mean accuracy score for the present simple over the three testing periods. As can be seen, the mean accuracy score reveals a linear increase. Although ANOVA revealed no significant difference between the pre-test and the immediate post-test ($p = .569$), there was a significant difference between the immediate post-test and delayed post-test ($p = .000$), and also between the pre-test and the delayed post-test ($p = .000$). Therefore, this means that, because WCF has a positive effect on the use of present simple from pre-test to delayed post-test, it can be concluded that WCF helped learners improve the accuracy with which they used the present simple tense over time.

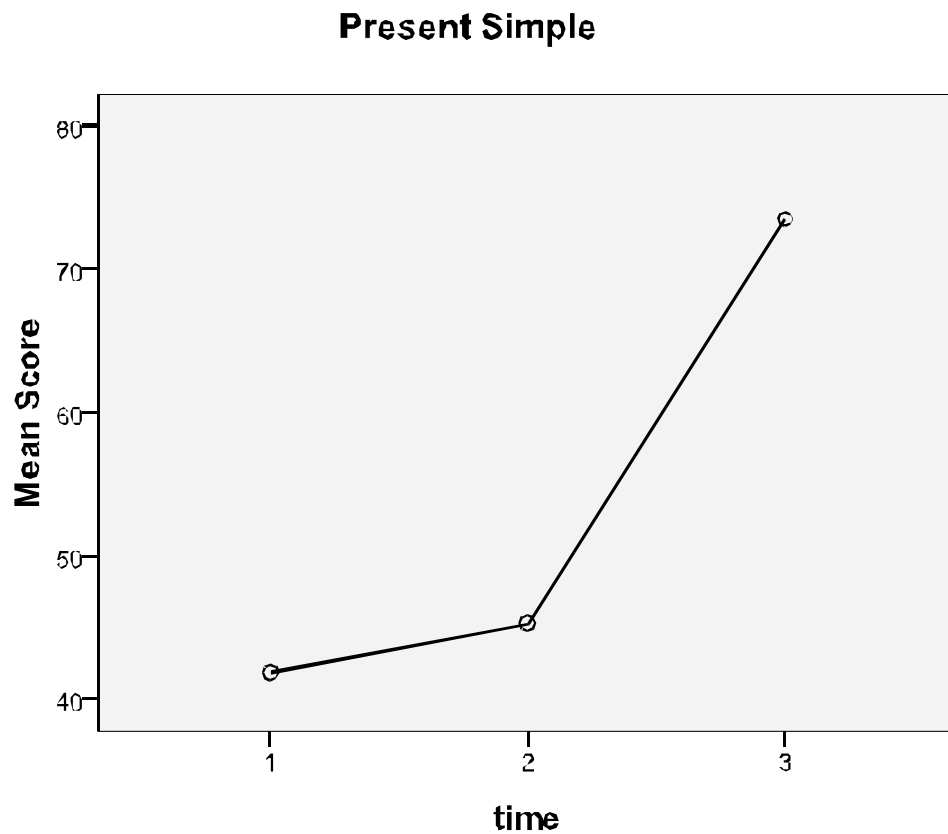


Figure 2 Overall Performance for Present Simple

4.3.2 Definite Article

As can be seen in Table 7 above, it is clear that the mean accuracy score of definite article almost remained the same during the whole time. The mean accuracy score increased from 60.24 to 65.29 between the pre-test and the immediate post-test, and it dropped slightly to 64.25 in the delayed post-test. Figure 3 is the visual presentation of the mean accuracy score for the three testing period for definite articles. Although the figure showed that there was a huge linear increase between the first two tasks, the result from ANOVA showed no significant difference between pre-test and the immediate post-test ($p = .369$), it also showed no significant difference between the immediate post-test and the delayed post-test ($p = .847$), or between the pre-test and

delayed post-test ($p = .449$). In this case, it would seem that WCF does not work well when helping learners with definite articles.

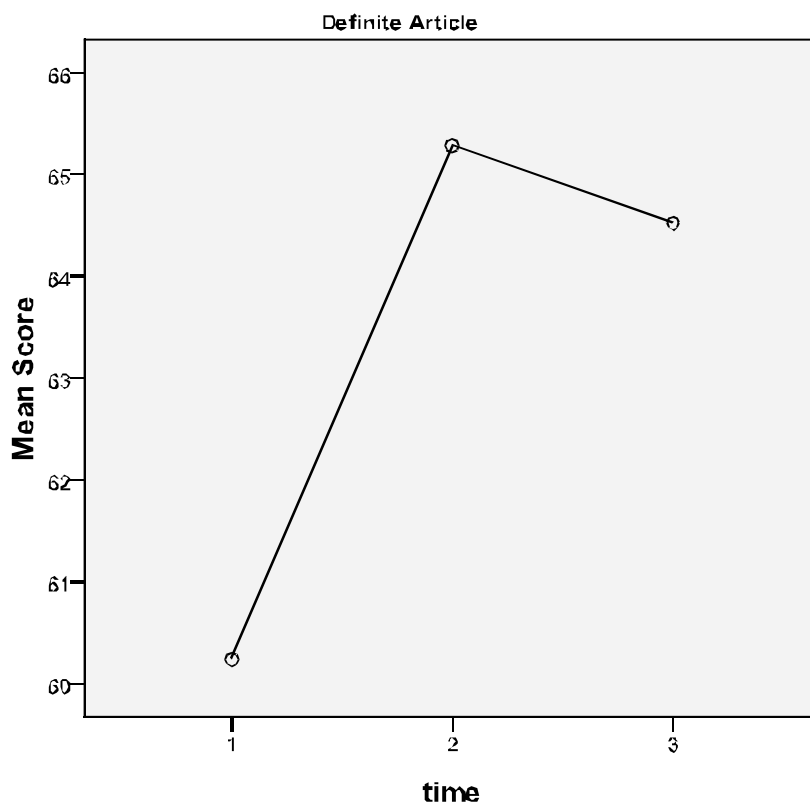


Figure 3 Overall Performance for Definite Article

4.3.3 Plural Noun

In Table 7 above, the mean accuracy score of plural noun increased from 72.62 to 83.76 between the pre-test and the immediate post-test, and dropped slightly to 80.43 in the delayed post-test. Figure 4 is the visual presentation of the mean accuracy score during the three testing period of plural noun. As can be seen that although it showed an increase between the first two tasks, the analysis from ANOVA revealed no significant difference between the pre-test and the immediate post-test ($p = .090$), there was also no significant difference between the immediate post-test and the delayed post-test ($p = .544$), or between the pre-test and the delayed post-test ($p = .151$). Therefore,

according to the analysis above, it would seem that WCF does not work well with plural nouns.

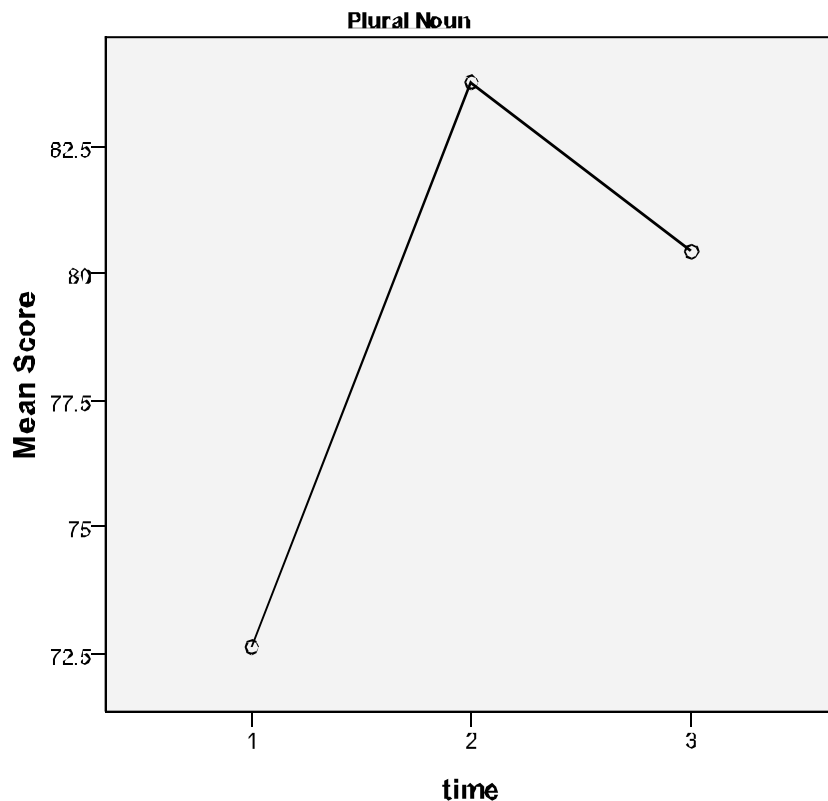


Figure 4 Overall Performance for Plural Noun

In accordance with the analysis above, it is clear that present simple was the linguistic form which showed significant difference across the three tasks, and with this result, this thesis may be possible to conclude that WCF can help to improve the using of present simple over time, but not so much on definite articles and plural nouns.

4.4 Research Question 3

This question investigated the effectiveness of different types of feedback. In other words, it compared the effectiveness of one type of direct feedback (give correction directly beside the errors) and one type of indirect feedback (circle the errors only), and tended to identify one of the types of feedback to be the most effective type. Table 8

presented the mean accuracy score of each type of feedback across the three writing tasks. As can be seen, the mean accuracy score in both the direct and indirect group increased from pre-test through delayed post-test. The Mean increased in the direct group from 53.57 to 58.43 between pre-test and immediate post-test, and also increased from 58.43 to 64.14 between immediate post-test and delayed post-test.

According to the table, the mean accuracy score not only increased in the direct group, but also increased from 54.00 to 60.14 between the pre-test and immediate post-test, and from 60.14 to 69.50 between immediate post-test and delayed post-test in the indirect group.

Table 8 Mean Accuracy Score between Different Types of Feedback

	Mean			Std. Deviation		
	Direct	Indirect	Total	Direct	Indirect	Total
Pretests	53.57	54.00	53.86	29.743	15.899	20.730
Immediate post-test	58.43	60.14	59.57	15.747	13.905	14.169
Delayed post-test	64.14	69.50	67.71	16.668	9.606	12.248

Figure 5 is the visual presentation of the mean accuracy score for three testing periods of different types of feedback. As can be seen, although the mean accuracy score of both types of feedback increased across the three tasks, indirect feedback achieved a higher mean accuracy score than direct feedback in the immediate post-test and the delayed post-test.

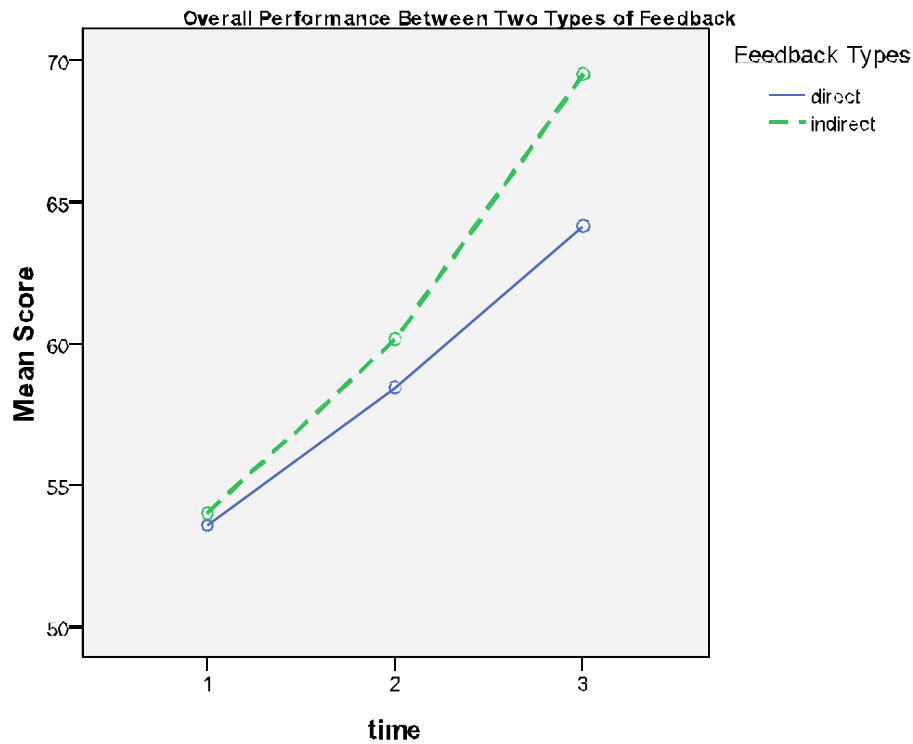


Figure 5 Overall Performance Between Two Types of Feedback

The statistical results of direct feedback from ANOVA, revealed no significant difference between the pre-test and the immediate post-test ($p = .576$), also no significant difference between the immediate post-test and delayed post-test ($p = .255$), and between pre-test and delayed post-test ($p = .174$).

Unlike the results in direct feedback, the statistical results of indirect feedback showed no significance between pre-test and immediate post-test ($p = .161$), the ANOVA showed a significant difference between the mean accuracy score of immediate post-test and delayed post-test ($p = .030$), and also between pre-test and delayed post-test ($p = .006$).

With regard to the analysis above, comparing the result of direct feedback and indirect feedback, it appeared that indirect feedback did not only gain a higher mean accuracy

score than the direct feedback in the immediate post-test and delayed post-test, but ANOVA also showed that the increasing mean accuracy scores were significant. Therefore, on the basis of the results of this study, it would seem that indirect feedback is more effective than direct feedback over time.

4.5 Research Question 4

This question examined whether direct feedback or indirect feedback was more effective in targeting certain error categories overtime. The discussion will be divided into three parts in this section, each part will be focused on one of the linguistic forms/structures that have been targeted in this thesis. This thesis will first look at the mean accuracy score in each group, followed by the statistical analysis which was done by ANOVA to determine whether or not the difference between each tasks is significant.

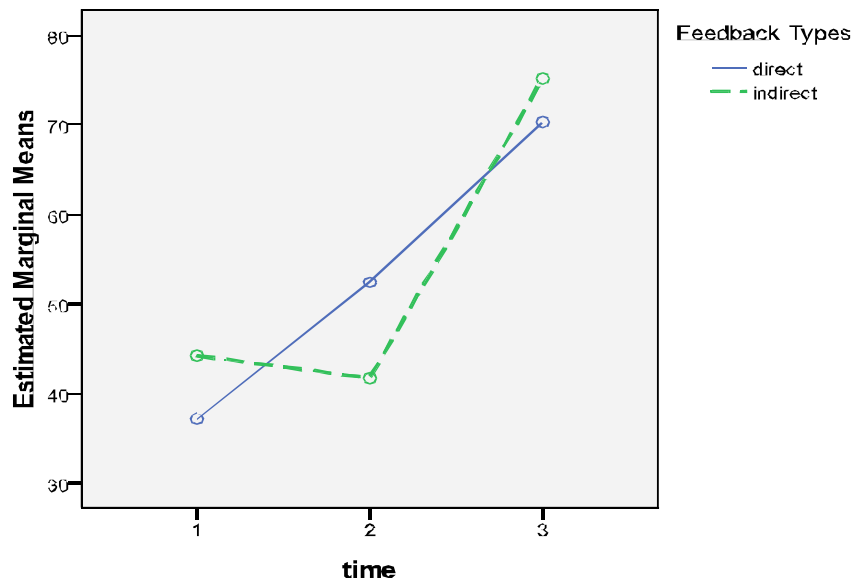
4.5.1 Present Simple

Table 9 shows the mean accuracy score that each group has gained during the three writing tasks when using present simple. As can be seen, the mean accuracy score in the direct group increased from 37.14 to 52.43 between the pre-test and the immediate post-test, and also further increased to 70.29 in the delayed post-test. The mean accuracy score in the indirect group first dropped slightly from 44.21 to 41.71 between the pre-test and the immediate post-test, however, it increased to 75.14 in the delayed post-test. Although both direct and indirect groups increased to a mean accuracy score that was much higher than the one in the pre-test, it is still inconclusive in determining which type of feedback is more effective to help learners to improve their accuracy when using present simple.

Table 9 Mean Accuracy Score of Present Simple

	Mean			Std. Deviation		
	Direct	Indirect	Total	Direct	Indirect	Total
Present simple1	37.14	44.21	41.86	32.555	22.682	25.769
Present simple2	52.43	41.71	45.29	27.073	24.313	25.118
Present simple3	70.29	75.14	73.52	19.585	17.329	17.770

Figure 6 provides a visual representation of the mean percentages for the three testing periods for each group. As can be seen, although the direct feedback group was increasing, the indirect feedback group gained a higher mean accuracy score than the direct feedback group at the delayed post-test.

**Figure 6 Overall Performance of Different Types of Feedback**

Although the mean accuracy score of the direct feedback group showed that there were some changes between each tasks, the result from ANOVA revealed no significant difference across the three writing tasks. The increasing of the mean accuracy score

between pre-test and immediate post-test was not significant ($p = .205$), and it also did not reveal a significant difference between the immediate post-test and delayed post-test ($p = .173$), or between pre-test and delayed post-test ($p = .059$).

While the ANOVA analysis showed no significant difference across the three tasks in the direct feedback group, the statistics of the indirect feedback group showed that, although there was no significant difference between the pre-test and the immediate post-test ($p = .718$), there were significant differences between the immediate post-test and delayed post-test ($p = .000$), and also between pre-test and delayed post-test ($p = .001$). In conclusion, the indirect feedback group gained a higher mean accuracy score than the direct feedback group at the delayed post-test, and it also showed a significant difference between immediate post-test and the delayed post-test, therefore, it should be considered more effective in correcting present simple errors.

4.5.2 Definite Article

Table 10 Mean accuracy score of Definite Article

	Mean			Std. Deviation		
	Direct	Indirect	Total	Direct	Indirect	Total
Definite article1	64.57	58.07	60.24	32.736	24.317	26.752
Definite article2	54.86	70.50	65.29	22.431	19.673	21.439
Definite article3	62.29	65.64	64.52	16.740	22.657	20.503

Table 10 shows the mean accuracy score that each group gained across the three writing tasks when using definite articles. According to the table, the direct feedback group dropped slightly from 64.57 to 54.86 between pre-test and immediate post-test, and

increased slightly back to 62.29 in the delayed post-test. The direct feedback group did not gain a mean accuracy score that is higher than the one in pre-test at the end. However, in the indirect feedback group, although it first increased from 58.07 to 70.50 between pre-test and immediate post-test, and dropped slightly to 65.64 in the delayed post-test, the final mean accuracy score it gained is higher than pre-test (it is also shown in figure 7).

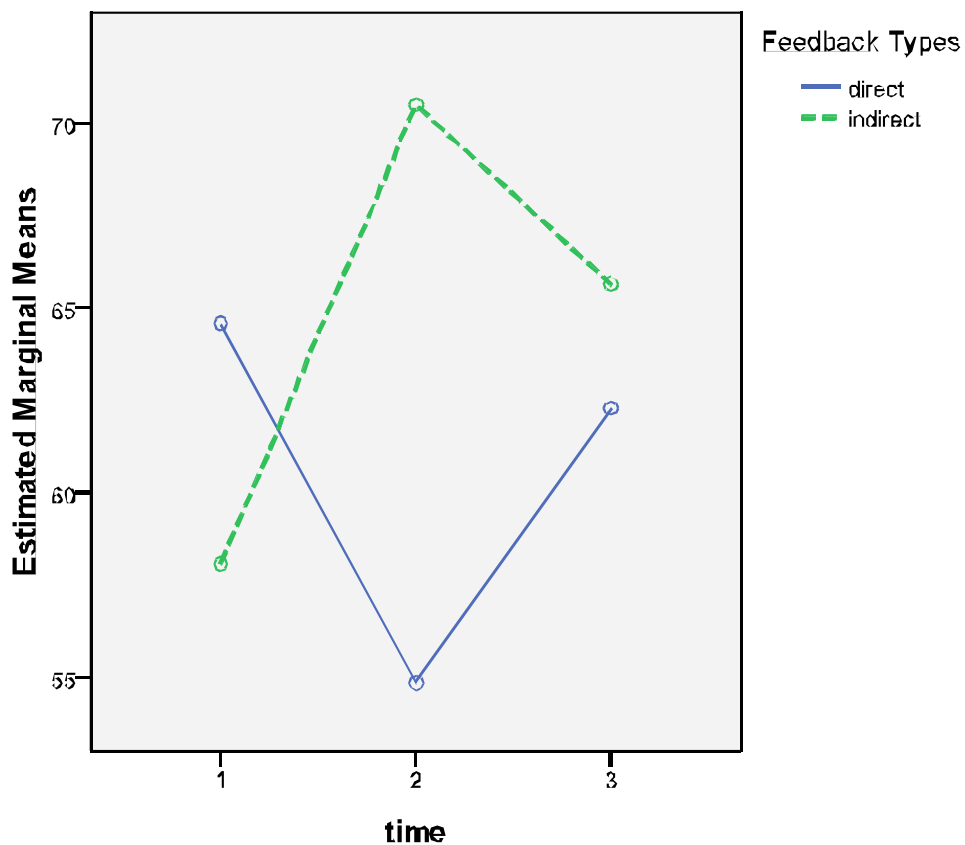


Figure 7 Mean Accuracy Score of Different Types of Feedback

According to the result shown in the ANOVA test, there was no significant difference between all tests in either the direct or indirect feedback group. The difference between pre-test and immediate post-test in direct feedback group is more than .05 ($p = .188$), also the difference between immediate post-test and delayed post-test, and between pre-test and delayed post-test showed a the similar situation ($p = .333$, $p = .776$).

The mean difference between pre-test and immediate post-test in the indirect feedback group was also not significant ($p = .093$). ANOVA also showed that there was no significant difference between immediate post-test and delayed post-test ($p = .292$), between the pre-test and immediate post-test ($p = .325$).

According to the analysis above, it becomes obvious that direct feedback is not helpful when correcting definite articles. Although the ANOVA showed no significant difference across the three writing tasks in the indirect feedback group, the mean accuracy score and the figure showed that it helped learners to improve their accuracy in writing when using definite articles between the pre-test and immediate post-test, but not between the immediate post-test and delayed post-test. Therefore, it perhaps can be concluded that direct feedback is not helpful when correcting definite article errors, and indirect feedback is more effective, but could not maintain the effectiveness overtime.

4.5.3 Plural Noun

Table 10 shows the mean accuracy score of each group across the three writing tasks when using plural nouns. As can be seen, although the mean accuracy score of the direct feedback group increased from 76.14 to 79.43 between the pre-test and the immediate post-test, and dropped slightly to 74.00 at the final task (delayed post-test), the mean accuracy score almost remained the same during all tasks. However, it was not only the direct feedback group that remained almost the same, the change of the mean accuracy score in indirect feedback group also was not much. It first increased from 70.86 to 85.93 between pre-test and immediate post-test, and then dropped to 83.64 in the delayed post-test.

Table 11 Mean accuracy score of Different Types of Feedback on Plural Noun

	Mean			Std. Deviation		
	Direct	Indirect	Total	Direct	Indirect	Total
Plural noun1	76.14	70.86	72.62	20.416	26.288	24.099
Plural noun2	79.43	85.93	83.76	11.660	15.005	14.035
Plural noun3	74.00	83.64	80.43	30.676	16.699	22.029

Figure 8 provides a visual presentation of the changes in the mean accuracy score during the three writing tasks for each group when using plural noun. It is obvious that both groups increased slightly between the pre-test and the immediate post-test, and dropped slightly between the immediate post-test and delayed post-test. However, as can be seen in the figure, the mean accuracy score of the delayed post-test in the direct feedback group did not score higher than the mean accuracy score of pre-test, which means that learners did not perform better at the end when comparing with their initial score. On the other hand, indirect feedback group gained a mean accuracy score that was higher than the one they gained in the pre-test, although the mean accuracy score was slightly lower than the one in the immediate post-test, this still means that the indirect feedback group performed better than at the beginning.

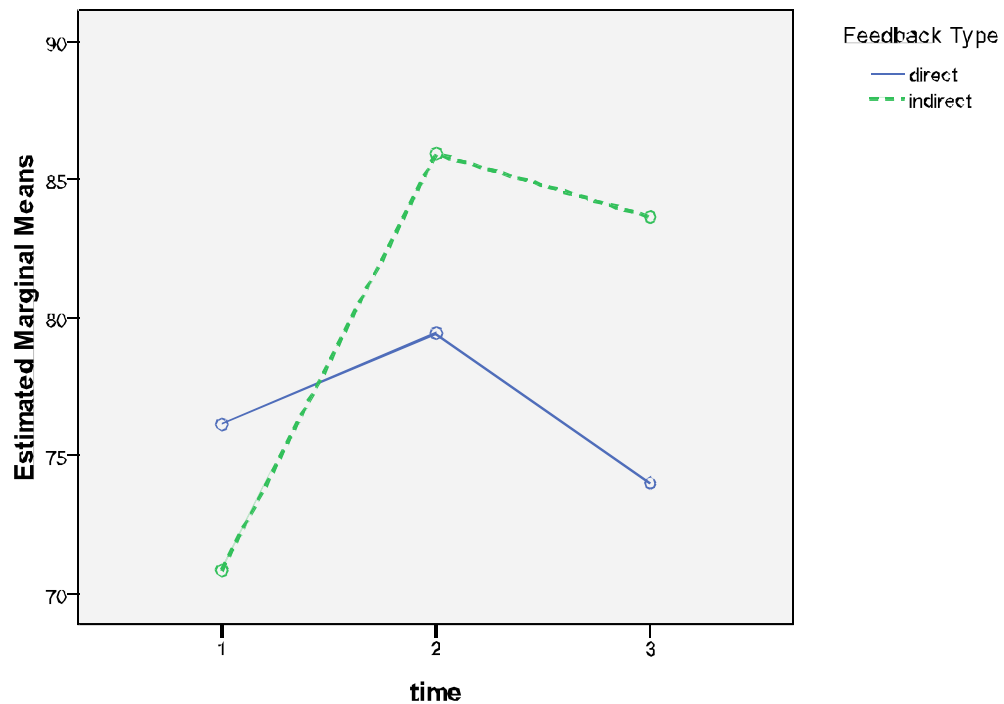


Figure 8 Performance of Different Types of Feedback on Plural Noun

The ANOVA test showed a statistical result on the direct feedback group and revealed no significant difference between pre-test and immediate post-test ($p = .680$), and also no significant difference between the immediate post-test and delayed post-test ($p = .618$), or between the pre-test and delayed post-test ($p = .741$). Although indirect feedback seemed to be more effective than direct feedback when looking at the figure above, ANOVA still showed no significant difference between pre-test and immediate post-test ($p = .103$), between immediate post-test and delayed post-test ($p = .731$), or between pre-test and delayed post-test ($p = .090$).

According to the discussion above, although ANOVA showed no significant differences across the three writing tasks in both direct and indirect feedback groups, based on the mean accuracy score and the figure, it perhaps can be considered that both direct and

indirect feedback are helpful when correcting plural noun errors, and among the two types of feedback, indirect may be more effective because it gained a higher mean accuracy score in the immediate post-test and delayed-post test than direct feedback. However, none of the types of feedback enable learners to maintain the improvement over time.

4.6 Research Question 5

In order to examine and compare learner performance in using the type of feedback they preferred, this question led to an investigation of learner preference for feedback type, and also the reasons they prefer a particular type of feedback. Table 12 showed the percentage of learners who preferred each one of the two types of feedback. As can be seen, 69.2% of the learners preferred direct feedback, and 30.8% of the learners preferred in indirect feedback.

Table 12 Learner Preferences

Learner Preferences					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Direct	18	69.2	69.2	69.2
	Indirect	8	30.8	30.8	100.0
	Total	26	100.0	100.0	

Table 13 presented the reasons learners preferred each type of feedback. Among the 69.2% of learners who preferred direct feedback, 22.2% of them were choosing such feedback because when receiving direct feedback, they said that it saves time from figuring out the correct usage by themselves. Moreover, 44.4% of learners chose it because they believe that direct feedback can help them to understand their errors more

easily. Furthermore, 33.3 % of learners feel that they do not have enough knowledge to find out the correct usage by themselves, so they preferred to receive direct feedback.

Table 13 Reasons for Choosing a Certain Type of Feedback

		Learner preference			
		Direct		Indirect	
		Count	% within learner preference	Count	% within learner preference
Reasons for choosing a certain type of feedback	Saving time from figure out the correct usage by myself	4	22.2%	0	.0%
	Help me to understand the type of error I made easier	8	44.4%	0	.0%
	I think I don't have enough knowledge to figure out the correct usage by myself	6	33.3%	0	.0%
	I like to find out what type of mistake I made and to figure it out by myself	0	.0%	5	62.5%
	It helps me to learn more if I can try to figure it out by myself first	0	.0%	3	37.5%
Total		18	100.0%	8	100.0%

As can be seen in Table 13, there were 62.5 % of learners within the group who preferred indirect feedback because they said it made them think about the type of error they had made, and solve it by themselves. However, 37.5% of learners preferred

indirect feedback because they believed it can help them to improve their accuracy in writing while they are trying to find out the correct usage of a linguistic form/structure.

4.7 Research Question 6

This question investigated the relationship between the type of WCF that learners say they prefer and their actual performance over time. Table 14 below shows the mean accuracy score of each group across the three writing tasks. As can be seen, the mean accuracy score of the learner preference group increased from 52.86% to 61.57% between the pre-test and the immediate post-test, and also increased from 61.57% to 68.71% between the immediate post-test and the delayed post-test.

Table 14 Mean Performance across All Tasks

	Mean			Std. Deviation		
	Preference	Not preferred	Total	Preference	Not preferred	Total
Pretests	54.36	52.86	53.86	24.203	12.707	20.730
Immediate post-test	58.57	61.57	59.57	12.519	17.962	14.169
Delayed post-test	67.21	68.71	67.71	13.051	11.368	12.248

Not only did the mean accuracy score of the learner preference group increase for all tasks, the mean accuracy score of the not preferred group also increased across the three writing tasks. The mean accuracy score increased from 55.14% to 58.71% between pre-test and immediate post-test, and the mean accuracy score reached a higher level, 70.29%, in the delayed post-test.

Figure 9 provides a visual presentation of the mean accuracy score gained from each group during the three testing periods. As can be seen, although the learner preference

group had a linear increase during the three writing tasks, the group with the feedback that the learner preferred less, gained a high mean accuracy score at the end (delayed post-test).

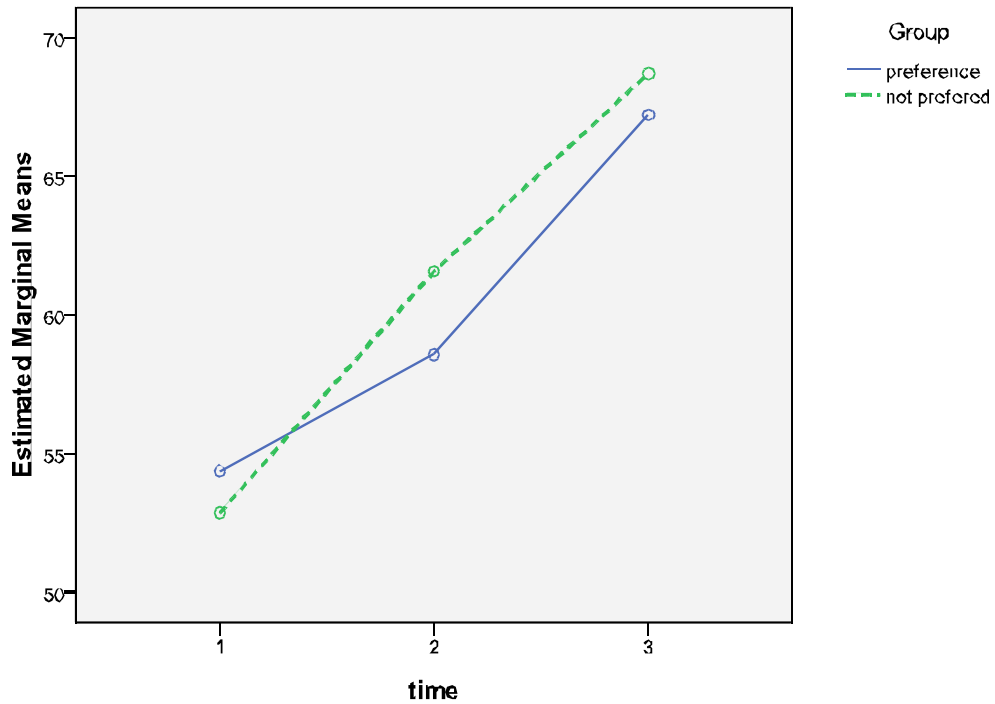


Figure 9 Performance of The Type of Feedback Learners Preferred and Less Preferred

The ANOVA test showed the statistic of each group, and found no significant difference between the three writing tasks of the feedback group and the less preferred group. The difference between pre-test and immediate post-test was more than .05 ($p = .559$), and also the difference between the immediate post-test and the delayed post-test, and between the pre-test and the delayed post-test are all more than .05 ($p = .073$, $p = .137$). Although ANOVA showed no significant difference between the pre-test and the immediate post-test ($p = .210$) in the learner preference group, and between

immediate post-test and delayed post-test ($p = .263$), the difference between pre-test and delayed post-test was significant ($p = .011$).

According to the mean accuracy score, the figure and the result from ANOVA, in comparing the two indirect groups (one was the type of feedback preferred by learners, and the other was less preferred), although both groups improved between the three writing tasks, there differences between each task was not significant..

4.8 Summary

This chapter focused mainly on reporting the key findings and on answering the research questions of the thesis. The descriptive statistics, figures and ANOVA analysis were carried out in order to:

1. Understand the changes of mean accuracy score, which can help to explain the effectiveness of WCF more clearly.
2. To compare the result of each tasks with different groups more easily.
3. To examine closely and to determine the significance of the changes between the mean accuracy score of different groups across the three tasks.

Table 15 below shows a summary of the key findings which has been presented in this chapter.

Table 15 Summary of the Key Findings

Research Question	Key Findings
1. Does WCF help learners improve their accuracy over time?	Yes, the treatment groups outperformed the control group
2. Does WCF help learners improve their accuracy in using certain linguistic forms/structures over time?	It seemed to be most effective in correcting present simple tense
3. Are some types of WCF more effective than others over time?	Indirect feedback groups outperformed direct feedback group
4. Are some types of WCF more effective than others in targeting certain error categories over time?	Both direct feedback and indirect feedback worked as well as one another in correcting present simple tense
5. What types of WCF do learners say that they prefer and why?	Most of the learners preferred direct feedback
6. Is there a relationship between the type of WCF that learners say they prefer and their actual performance over time?	Receiving the type of WCF they preferred seemed to make no difference

In the next chapter (chapter five), discussions on the key findings and some studies in relation to those findings will be presented. Some limitations of the research will be discussed in chapter six.

Chapter 5 Discussion

5.1 Introduction

This chapter provides a detailed analysis of the key research findings which are presented in chapter 4. The results of the study are also discussed in relation to the previous research studies. The first section (Section 5.2) compared the findings of this study with Truscott's (1996) point of view on WCF. Section 5.3 discusses the effectiveness of WCF when correcting different types of linguistic forms/structures, and also identified which type of the linguistic form/structure they are, WCF can be more effective. In the next section (Section 5.4), a comparison of different types of WCF (direct feedback and indirect feedback) is presented to find which type of feedback is more effective than the other. A comparison of their effectiveness in correcting different types of linguistic forms/structures can be found in Section 5.5. Section 5.6 discusses learner preference for different types of feedback. The discussion on their performance in using the type of feedback they preferred or like less can be found in Section 5.7. The last section (Section 5.8) is a brief summary of the chapter.

5.2 Research Question One: Does WCF help learners improve their accuracy over time?

According to the research outcome from the previous chapter, it has been found that WCF helped learners to improve their accuracy in writing overtime. This result not only supports the argument that WCF is effective (Ashwell, 2000; Bitchener, 2008; Bitchener & Knoch a&b; 2008; Ferris, 1996, and others.), but also contradicts Truscott's (1996) argument that that WCF is harmful to learners' writing, and the theoretical problems he was concerned about such as WCF only producing the pseudo-learning.

Truscott (1996) claimed that WCF is not only ineffective, but also harmful to learner's writing. He pointed out two reasons that WCF is harmful. First, because some learners do not like to be told that they are doing something incorrect, learners would feel frustrated when receiving it. Second, learners who take WCF extremely seriously would spend most of their time in correcting or rewriting their work, and if they cannot understand the reason for the corrections, they may end up with an incorrect conclusion, and they will make the same mistakes again in their subsequent writing. In concluding these two points above, he advised teachers not to use it when teaching.

According to his point of view, WCF can be a barrier for learners when they are trying to improve their writing, and learners who received it do not perform better than those who do not receive any corrective feedback. In order to test this point of view, studies in the field (Ashwell, 2000; Bitchener, 2008; Bitchener & Knoch a&b; 2008, and others) have shown positive evidence of the effectiveness of WCF. Moreover, in this study, learner accuracy in the delayed post-test reached a higher mean accuracy score than that of the pre-test. This means, that after learners received WCF on their errors, they read through the feedback that they had been given, and, having noticed the correct way of using the target forms/structures, were able to use them more accurately in new pieces of writing. This result supports the earlier studies of Bitchener, Ellis, Sheen and colleagues, which demonstrated for the effectiveness of WCF in certain contexts, and also shows that it not only helps learners improve their accuracy in writing immediately, but it also helps them to improve overtime. This is clearly more than pseudo-learning.

Lightbown (1985) explained pseudo-learning/acquisition as the situation where learners may seem to have totally acquired the target forms/structures, but finally it appears to be superficial. When using WCF for treating learners' errors, Truscott (1996) was

concerned that the knowledge that learners gained from WCF might only be short-term knowledge. In this situation, where learners were only producing target forms/structures like sentences, they may not have understood the rules of the target language, and this short-term knowledge will not allow them to use the target forms/structures in a correct way over time. With regard to this concern, WCF was assumed ineffective. However, the result of this study has shown that WCF not only helped learners improve their accuracy in writing in the immediate post-test, but also helped them to improve in the delayed post-test, which was setup a month after the immediate post-test. Therefore, it appears that when learners receive WCF on their errors, the knowledge they learnt is not a short-term knowledge, and the acquisition is not a pseudo-learning/acquisition. The question now is to find out whether or not there is a certain type of linguistic form/structure that WCF can be more effective with.

5.3 Research Question Two: Does WCF help learners improve their accuracy in using certain linguistic forms/structures over time?

Ferris (1999) defined a treatable category when using WCF, and this category involved errors with verbs, noun endings and articles. Assuming WFC may have different levels of effectiveness when used on different types of linguistic forms/structures, this study examined three kinds of linguistic form: present simple tense, definite article, and plural nouns. According to Bitchener et al. (2005) who examined past simple, definite article, and prepositions, WCF works better with the types of linguistic error which have a set of rules, such as verb forms, and definite articles.

Among the three kinds of linguistic forms that were investigated in this research, all three types of linguistic forms are rule-governed. For example, present simple follows the rules that when its subject is a third person (singular), the verb need a suffix 's', but

it does not need the 's' when the subject is a first person (singular) verb or second person (singular) verb; the definite article follows the rule that uses 'a' for things which are mentioned for the first time, and uses 'the' for things that have already been mentioned; Plural nouns follow two types of rules: (a) when a noun is plural, it needs a suffix 's' that follows the noun, or (b) some plural nouns have different forms when it changes from a singular noun to a plural noun, such as "women" is the plural form of "woman". However, the results show different levels of effectiveness for WCF when applied to these forms. In reference to chapter 4 (Table 5), although there was improvement on all the three linguistic forms, it is interesting to notice that WCF was more effective when treating with present simple tense errors than errors in the other two types of linguistic forms/structures. Learners improved between pre-test and immediate post-test on definite article and plural noun, but did not improve between the immediate post-test and the delayed post-test. Unlike the result for definite article and plural noun, the mean accuracy score for present simple tense shows that the learner performed better during all tasks, from pre-test to delayed post-test.

One possible factor may be that learners have different abilities to master the three target languages. Ellis & Barkhuizen (2005) claimed that when a learner has more experiences on a certain field, he or she would have more knowledge or better skill on that field. As it can be seen in Table 7 the mean score of present simple is lower than the other two target forms, this may mean that it is possible the learners can master definite articles and plural nouns better than present simple at the beginning. In other words, there was more room for improvement with present simple than other target forms.

Another possible factor may be the use of different type of feedback. In this study, two different types of feedback were used, and they are direct feedback and indirect feedback. According to Olson & Pratt (2000) teachers should scaffold learners with instructions that are slightly beyond their proficiency level. Learners may have higher capacity when dealing with a certain type of linguistic form/structure, but may not have enough ability when correcting other types of form/structure. Therefore, when using different types of feedback on different types of linguistic error which the learner may or may not have the ability to deal with, the use of WCF may cause different levels of effectiveness on different types of linguistic forms/structures. This will be discussed fully in a later section (section 5.4).

The effectiveness of direct feedback and indirect feedback is also one of the questions that this study is interested in, therefore, in the next section, a discussion of the effectiveness of the two different types of feedback will be presented.

5.4 Research Question Three: Are some types of WCF more effective than others over time?

In the previous discussion, it was clear that WCF is effective overtime, and one of the potential reasons that may influence the effectiveness of WCF when using it on different types of linguistic forms/structures may be due to being different types of feedback (direct feedback and indirect feedback). This section presents a discussion on the effectiveness of the two different types of feedback, and considers whether direct feedback is more effective than indirect feedback.

According to the research outcome in chapter 4, the performance of both types of feedback group improved. However, only indirect feedback groups with a statistically

difference between the immediate post-test and delayed post-test, also between pre-test and delayed post-test was significant. With reference to that, learners who received indirect feedback performed better than those who received direct feedback. This result supported Lalande (1982), who investigated 60 intermediate German FL learners. He compared two different types of feedback: the control group received direct error correction; and the experimental group received instructional feedback, which, he marked the errors in code, and the students were required to determine the correct forms. After 10 weeks, he found the experimental group outperformed the control group. When considering the possible factor that causes indirect feedback to be more effective than direct feedback, motivation may be the most significant reason for this. Skehan (1989) mentioned that learners may have the motivation to do something when they are attracted by what is happening in a classroom. When learners receive direct feedback, they can immediately know the types of error they made, and sometimes they even do not need to find out the correct usage by themselves. However, when learners receive indirect feedback, they may not know what type of error they have made. They need to find out a possible correction by themselves, which compared with direct feedback is a more challenging way of learning. Learners may be motivated when they have to face some challenge like this. Although they may not keep the same passion or motivation after they leave the classroom, the process of correcting their errors by themselves may help them have a deeper impression of the type of error they have made, so they can avoid making the same mistake twice.

In this study, using indirect feedback has a better result than direct feedback, however, it does not mean that giving direct feedback is not a good way to help learners to improve. The type of indirect feedback that has been used in this research is to circle the errors, and the type of direct feedback that was to give them the corrections beside where the

errors were made. Other ways of giving direct or indirect feedback may lead to different results. Moreover, when giving learners feedback, it is also important to give them the type of feedback that suits their proficiency level. Learners at a higher proficiency level should have more knowledge about the correct forms of their errors and be able to notice why they made such errors. Therefore, indirect feedback should be more suitable for learners at a higher proficiency level. In contrast, learners at a low proficiency level may not have the ability to self-correct, or to notice why they are using a form incorrectly, therefore, direct feedback may be more suitable than indirect feedback for them.

In this section, although the difference in effectiveness between two types of feedback was compared, the effectiveness of different types of linguistic forms/structures has not been clarified. In the next section, discussion will focus on the effectiveness of the two types of feedback when used on the three target forms/structures (present simple, definite article, and plural noun).

5.5 Research Question Four: Are some types of WCF more effective than others in targeting certain error categories over time?

From the previous discussion it appears that using indirect feedback (circle the error) will lead to a better result than using direct feedback (give correction beside where the errors were made). In this section, the discussion will focus on the effectiveness of both types of feedback when using them on different types of linguistic errors.

As has been mentioned previously, the target forms that this study examined are all in the same group which Ferris & Roberts (2001) defined as the “treatable group”.

However, learner performance with these three types of forms was different. According

to the research outcome chapter, both direct feedback and indirect feedback improved from the pre-test to the delayed post-test. Moreover, when learners received feedback on their present simple errors, their performance outperformed receiving it on other types of linguistic forms (definite article errors and plural noun errors).

It is interesting that both of the types of feedback seemed to be most effective when dealing with errors in present simple tense. As it has been mentioned by Bitchener et al. (2005) WCF should be more effective when correcting the type of linguistic errors that are based on a set of rules. However, in the three target forms/structures which were targeted in this study, learners only performed better when they received WCF on present simple tense. Based on the results of this study, this thesis may conclude that by using correction directly on the errors (direct feedback) and circling the errors (indirect feedback), WCF may only help learners to notice the type of errors they made in present simple tense, and could reduce the number of the errors related to it. Other types of errors, for example, errors in definite articles or plural nouns may not be noticed and learners may not be able to understand the reasons for making such errors. One possible reason that learners did not improve much when using plural nouns is because even though plural nouns are rule based linguistic forms, it may be difficult for learners to follow this rule when form-changing is required (for example, change “woman” to “women”). Learners may be confused or may not have enough knowledge to change it to the correct form.

This study also discovered that, when comparing learners’ mean performance in present simple tense, they did not improve much on definite/indefinite articles. One possible reason for this may be that their proficiency level was not high enough to understand why they made such errors. If the learners did not know about the rules of

definite/indefinite articles, it may have caused confusion when they were using articles. Present simple tense or plural nouns are the type of linguistic forms that learners can decide a certain form to use by checking the subject (for example, if the subject is third person singular, learners will know that they need to put an “s” after the verb, or know immediately it was a singular noun or plural noun they were about to write). But when using articles, learners needed to trace back to where the sentence began, and sometimes they needed to trace back to where the paragraph starts, to identify whether the object they were about to write had been mentioned before or not. Therefore, definite/indefinite articles were much more difficult than present simple tense or plural nouns to correct it. When correcting errors of definite/indefinite articles, perhaps other types of feedback that would give learners clues or hints may lead to a different result.

It is interesting to notice that in this study, learners who received direct feedback did not perform well, whereas in an earlier study (Chandler, 2003), direct feedback seemed to be more effective. There were two possible reasons that may have caused this outcome. First, the sample size of this research was relatively small, and the number of learners in each group was less than ten people. Therefore, each learner’s performance played an important roll when measuring the accuracy rate. This means, if some of the learners’ proficiency levels were lower than others, there would be a possibility that the mean score of the overall performance would be lower. Second, according to their reasoning for their preference of WCF type, some had low motivation when receiving feedback. In contrast with other learners, their attitude towards receiving feedback and their desire to improve their written accuracy was less strong which could have influenced the result.

Despite the effectiveness of different types of feedback on different kinds of errors that this study is interested in, learner preference and their actual performance when using

the type of feedback they would like to received is also the purposes of this study. In the next section, a discussion on learner preferences for different types of feedback is presented.

5.6 Research Question Five: What types of WCF do learners say that they prefer and why?

In order to examine whether or not using the type of feedback learner preferred is more effective than using the type of feedback learner preferred less, a questionnaire was given to all learners to choose the type of feedback they would like to receive.

Interestingly, as Chandler (1995) found out, most learners preferred to receive direct feedback rather than indirect feedback. In this study, more than half of the learners would prefer to receive direct feedback based on three reasons. First, when receiving direct feedback, it saves time in correcting their errors, they do not need to find the correction by themselves; second, direct feedback would help them to understand and absorb knowledge from the correction more easily; third, some of them are worried that if they receive indirect feedback, they may not have enough knowledge or ability to correct the errors by themselves.

Although most of the learners preferred receiving direct feedback, some of the learners wish to receive indirect feedback on their errors. In this study, the reasons that learners gave for choosing indirect feedback can be classified into two categories. First, they believe that in receiving indirect feedback, the process of correcting the errors by themselves will help them to acquire the knowledge, so they will not make the same mistake in their subsequent writing; second, they feel challenged and they enjoy the process of finding out the correct usage of a form/structure by themselves. Some of the reasons above supports what Brandl (1995) found: that most of the learners would

prefer receiving the type of feedback that they believed would help them to improve more.

According to the reasons mentioned above, it becomes obvious that self-schema and motivation plays an important role in second language learning. Among all the reasons that learners gave, some learners preferred direct feedback because they believed that their knowledge and ability was not enough to correct their errors by them selves.

According to Ng & Renshaw (2002) learners may develop beliefs or ideas about themselves through their past learning experiences, and they will form a self-schema about their learning base on that understanding. It is possible that some learners may experience failure in correcting their errors, and were frustrated when they found they did it wrong again. Therefore, some learners who preferred direct feedback are given confidence because they feel safe when receiving this type of feedback.

On the other hand, motivation is another factor that determines their preference. As has been mentioned in the previous chapter, motivation may determine one's behavior and performance in learning. Learners who are highly motivated to learn would choose the type of feedback that they believed would help them the most, for example, some learners prefer indirect feedback because they believed that the procedure of correcting errors by themselves can help them acquire the knowledge. In contrast learners who preferred direct feedback do so because it would save them the time of finding out the correct usage. It may be that learners in this category to have a lower level of motivation for learning.

Although some learners believe that they will learn more if they receive the type of feedback they prefer, it is not yet known whether this is the case. Therefore, in the next

section, a discussion on whether or not their actual performance would be better if using the type of feedback they preferred is presented.

5.7 Research Question Six: Is there a relationship between the learners' preferences for a certain type of feedback and their actual performance over time when receiving their preferred or less preferred WCF?

One of the purposes of this study was to examine whether or not using the type of feedback learners preferred is more effective than using the type of feedback learners preferred less. It was assumed that the former should work better than the latter, because when using the type of feedback learners preferred, learners should be more motivated to learn and improve their accuracy in writing. However, in the result (as shown in chapter 4, Table 12, figure 9) it appears that there was no statistical difference across the three writing tasks in both groups, which means that there was no significant difference between using the type of feedback learners preferred or liked less. When considering the reasons that may influence this result, the level of accuracy when they self-correct, or different types of scaffolding assistance they receive from the teacher may be possible factors that cannot be neglected.

When using the type of feedback learners preferred, they appeared to be motivated to think about or to try to correct their errors. Therefore, they could avoid making the same mistake in their subsequent writing. However, only having the motivation to correct their errors did not seem to be enough. As Truscott (1996) claimed, learners may sometimes have a wrong understanding of their errors, and end up with an incorrect conclusion. In this case, it will lead to a similar result with learners who are motivated less by the feedback they receive.

Another possible factor that can influence the result may be scaffolding. When giving corrective feedback to help learners to improve their accuracy in writing, the role of WCF should help learners to notice their errors, and, based on the types of feedback they receive to correct them (Stuyf, 2002). The method which was used in this study to circle the place where the errors were made. Learners needed to find out the correction by themselves, and there were no other instructions or written/oral meta-linguistic explanations given after they received the feedback. In this case, learners did not have any clues or hints to help them to correct their errors. Therefore, when giving feedback with an extra written/oral meta-linguistic explanation after their self-correct, the outcome may be different.

In conclusion, there was no difference between the actual performances of learners who received the type of feedback they preferred and when they received the type they like less in this study. However, it does not mean that there is no possibility to help learners to improve with the type of feedback they prefer. Further research would need to be done to find out if learners who received extra help (for example, written or oral meta-linguistic explanation) after they received feedback, were able to produce different results to these found in their study.

5.8 Summary

This chapter summarized the findings of this study, and discussed them with reference to each of the research questions. The results have also been considered in relation to relevant previous studies and possible factors that have led to such results.

In relation to the effectiveness of WCF, the result of this study contradicts Truscott's (1996) view that WCF is ineffective and harmful, and it supports previous recent studies

on WCF that claim it helps learners to improve their accuracy in certain contexts overtime. Despite confirming that WCF is effective and that it can help learners to improve overtime, it also found that WCF is more effective when correcting a certain type of linguist form/structure. Among the three target forms/structures that are classified as the 'treatable category' by Ferris & Roberts (2001), WCF seems to be most effective when correcting errors in present simple than it is in definite articles and plural nouns.

This thesis has also examined the effectiveness of the two different types of feedback, the direct feedback and indirect feedback. When comparing effectiveness of the two types of feedback, it supports the finding of Lalande (1982), that indirect feedback is more effective than direct feedback. However, these two types of feedback did not work well with all kinds of linguistic forms in this study. They are only considered to be effective when dealing with errors in present simple tense. Therefore, it is suggested direct or indirect feedback should be used when the errors are about present simple tenses. Other linguistic errors, such as errors with definite articles or plural nouns, may need to have the type of feedback that would give the learners clues or hints to help them understand why their errors were made.

As well as the comparison between the direct feedback and indirect feedback, it is also important to notice the type of feedback learners preferred, and their actual performance by using the type of feedback they believe can help them improve. Therefore, this study has also examined the type of feedback learners preferred, and their performance when using the feedback they wished to receive. It was assumed that learners may perform better when they received the type of feedback they like. However, the research outcome was not as expected. Learners who received the type of feedback they

preferred did not perform better than those who received the feedback they like less.

When considering the potential causes of it, the correctness of their self-correct, and the way of giving feedback may be two important reasons that led to this result. Therefore, further research is needed to examine whether or not learners who receive the type of feedback they prefer produced better results.

Chapter 6 Conclusion

6.1 Introduction

This chapter presents the conclusions of this study. First, a summary of the key findings of this research will be presented in section 6.2, followed by the pedagogical implications for teachers or the institution. The implications for further research are discussed in section 6.4, and some limitations of this study are identified in section 6.5. Finally, a brief summary is presented in the last section of this chapter (section 6.6).

6.2 Summary of Key Findings

This study involved 26 English learners at AUT University. A quantitative approach was used in order to measure and compare the accuracy rate of the target forms in each text. According to the investigation completed in this study, this thesis was not only provided with positive evidence in support of WCF, but also found that WCF was effective over time. Moreover, the results of learner performance across the three tasks, which emerged in the research findings chapter (chapter 4), appeared to show that learners who received WCF were gaining a higher accuracy rate in the final text (two months after they received WCF).

This study has also investigated whether direct or indirect WCF work better with a certain type of linguist form. Three target forms were selected for the research, and they were present simple tense, plural nouns, and definite/indefinite articles. At the end of the research, this study revealed that present simple tense seemed to be the type of linguistic form that WCF works the best with. Regarding the other two target forms (plural nouns and the articles), although the mean score of learner performance increased when using plural noun across the three tasks, the differences in the mean was not statistically significant. The same situation occurred when looking at the learner

performance of using definite/indefinite articles. Discussions on possible factors that lead to this result can be found in chapter 5 (section 5.3).

Another purpose of this study was to investigate whether direct or indirect feedback is more effective over time. Although an earlier study (Chandler, 2003) found direct feedback to be more effective, this thesis showed otherwise. According to the research findings chapter, it should be noticed that the mean score for both direct and indirect feedback increased across the three tasks. However, the differences of the three mean scores of direct WCF were not statistically significant, whereas it was statistically significant for the mean score of indirect WCF. The other aim this thesis had in this study was to investigate whether direct or indirect WCF works better on a certain type of linguistic form. This study found that both direct and indirect feedback worked best with present simple tense, and in line with the results found in comparing the effectiveness of direct and indirect WCF, learners who received indirect feedback performed better than those who received direct feedback. Several factors have been identified in the discussion chapter regarding the outcome of this result.

Learner preference was another topic this study was interested in, and this thesis found that most of the participants preferred direct feedback (69.2%) to indirect feedback (30.8%). The learners were required to provide reasoning for their preference, and most of them preferred specific feedback because they believed this type of feedback would help them make less mistakes in their subsequent writings. In relation to this finding, another investigation was done to examine whether there was a relationship between their performance and their preference in WCF. The result showed that there was no relationship between their preference and their performance; however, several possible factors such as learner's motivation and differences in feedback given may have

influenced the result. Detailed discussions on the factors that may have influenced the finding were presented in chapter 5.

6.3 Contribution to the theory

This study revealed results that supported the studies (Ashwell, 2000; Bitchener, 2008; Bitchener et al., 2008a, 2008b, 2009; Chandler, 2003; Ellis et al., 2008; Ferris, 1997; Ferris et al., 2001; Sheen, 2007) that found WCF was effective. Moreover, the results also showed evidence that supported studies (Bitchener, 2008; Bitchener et al., 2008a, 2008b, 2009; Sheen, 2007) which revealed that learners who received WCF improved over time. As a form-focused study, in the same pattern of the earlier studies (Bitchener, 2008; Bitchener et al., 2005; Bitchener & Knoch, 2009; Sheen, 2007), this study revealed that WCF worked best on the present simple errors. One possible reason was that the rule that present simple followed was not as difficult as the rules for the other target form (definite/indefinite articles and plural nouns). Learners may have enough knowledge to notice their mistakes and avoid making errors in using the present simple tense in their subsequent writing.

Another finding this study revealed was that, learners who received indirect feedback performed better than those who received direct feedback, and the results supported what Lalande (1982) found. Moreover, the results also showed that both direct and indirect feedback worked best on present simple errors, particularly for learners who received indirect feedback. The learners who received indirect feedback on present simple errors outperformed others. Therefore, this suggests it could be important to give more scaffolding assistance to learners, when correcting errors of other linguistic forms (for example, errors of definite articles or plural nouns).

The finding related to learner preference on different types of feedback revealed in this study supported Chandler (2003) in that most of the learners preferred receiving direct feedback. The reasons collected from the learners could be classified into two categories. First, they show students' motivation in learning. For example, learners who preferred direct feedback because they could save the time of self-correcting (unmotivated learner), and learners who believed direct feedback would help them improved (motivated learner). Second, learners who lacked confidence in self-correct. Some learners were concerned that they may not have enough knowledge to correct their errors by themselves, so they preferred receiving direct feedback which gave them the correct form directly instead of looked for the correct form by themselves. On the other hand, learners who preferred indirect feedback could also be classified into two categories. First, they believed that it would help them improve, and second, the considered self-correction as a challenging task that they would want to overcome. With respect to the finding of learner preference, unfortunately the study did not find any relationship between learner preferences of feedback and their actual performance when using it.

6.4 Pedagogical Implications

The results of this study showed that there should be no hesitation in using WCF for helping learners improve their written accuracy. Considering the learners' proficiency level and giving them WCF on only some selected types of linguistic errors (for example, the target forms for this study were present simple tense, plural nouns, and definite/indefinite articles), will not only enable them to improve right after they receive it, but will also help them improve overtime.

In relation to giving WCF to learners, it is suggested that teachers give indirect feedback to Intermediate level learners in preference to direct feedback. Learners at this level should have some ability to self-correct, and they may have the ability to realize some of their errors and avoid making the same mistake in their subsequent writings.

Participants in this study were all at Intermediate level, and it was found in the research outcomes that learners who received indirect feedback performed better than those who received direct feedback. This proved that learners have the ability to self-correct at this proficiency level.

Another suggestion is that when giving WCF to Intermediate level learners, teachers should give correction only on the types of errors, which learners have enough knowledge to deal with, for example, errors in present simple tense. According to this study, although learners had the ability to self-correct and made fewer mistakes in their final writings, they were not able to realize the reasons why they made such mistake on all target forms. The mean of the learner performance showed that learners who received WCF performed the best when they were dealing with errors in present simple tense. However, they did not performed well when they were working with plural nouns or definite/indefinite articles.

One aim of this study was to investigate whether learners could perform better when using the type of feedback they preferred. The result showed that learners who received the type of feedback they preferred did not perform better than those who did not receive it. Although the study failed to find out whether learners could perform better when receiving the type of feedback they preferred, it is still suggested to use the type of feedback learners preferred, because learners should be more motivated in learning when receiving it.

6.5 Limitations and Implications for Further Research

The sample size of this study was relatively small (n=26) however, and further research with a larger sample may provide different results for the same research questions.

Therefore, further research with a larger size sample is needed to investigate more conclusively whether there is a relationship between providing the types of feedback learners preferred and their actual performance.

One of the aims of this study was to investigate whether there was a relationship between being given the type of feedback the learners preferred and their actual performance. Although the result showed that there was no relationship between the two, some factors that may have influence the finding were discussed in chapter five. For example, giving more assistance such as written/oral meta-linguistic explanation along with the feedback they preferred may help them improve written accuracy, because it may help them avoid making other mistakes when reading their feedback, or when they are trying to self-correct.

6.6 Conclusion

The study revealed that WCF was effective over time, especially when using it on present simple errors, and it reduced the number of errors when learners did their subsequent writings. The most useful finding in this study could be that learners who received indirect feedback improved their written accuracy more than those who received direct feedback. Particularly when they were using present simple tense, the number of errors decreased more than those the learners who received direct feedback. Therefore, it is suggested that teachers should help learners by provide indirect feedback, and using it on the types of linguistic error that learners should have enough knowledge to be able to self-correct (present simple tense, for instance). Errors in other linguistic

forms, such as plural nouns and definite/indefinite articles may need further assistance such as written/oral meta-linguistic explanation to help them improve.

The study also investigated learner preference on types of WCF, and found that most of the learners were more likely to want direct feedback. The reasons that the learners gave could be identified as: their motivation in learning, lack of confidence to self-correct, and their wiliness to self-correct. The main purpose of this study with respect to the finding was to investigate whether there was a relationship between using the type of feedback learners preferred and their actual performance in improving their accuracy in writing. The main purpose of this study with respect to the finding was to investigate whether there was a relationship between using the type of feedback learners preferred and their actual performance in improving their accuracy in writing. This thesis found that there was no relationship between them in this study, further research that gives learner WCF and extra assistance (oral or written meta-linguistic explanation) is needed.

Appendices

APPENDIX A

Questionnaire



Student ID:

Nationality:

Gender:

Age:

Level:

Introduction:

This questionnaire asks you about the written corrective feedback you receive from your teacher(s). In each question, there are 2 choices. When answering each question, please circle your choice.

1. In your written assignments (essays), what kind of written corrective feedback do you normally receive from the teacher(s)?

- a. Direct feedback (The teacher gives you the correct answer beside/above the error you made)
- b. Indirect feedback (The teacher marks your errors but doesn't give you the correct answers, so that you have to correct the errors by yourself)

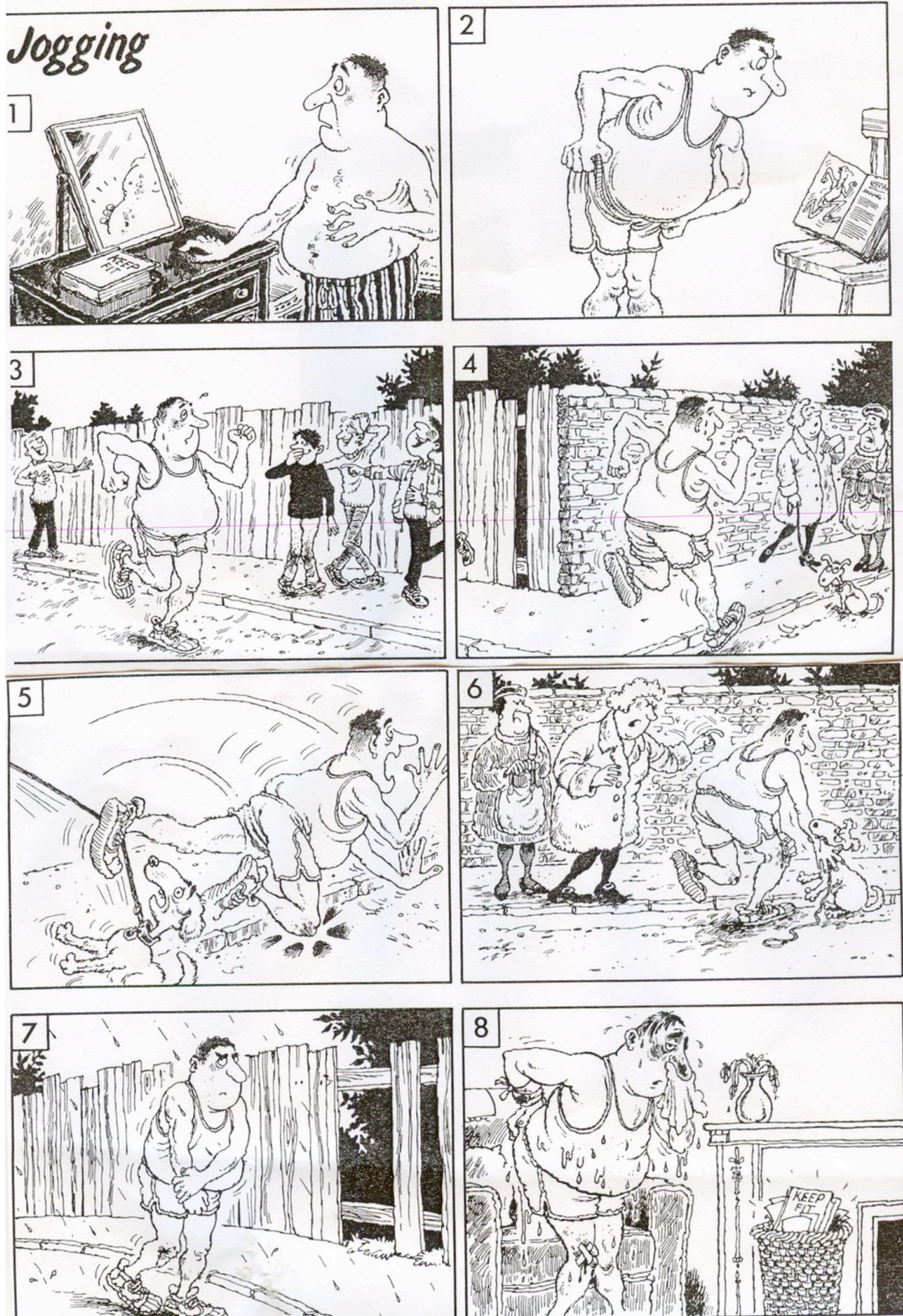
2. Which type of feedback do you prefer the most?

- a. Direct feedback (The teacher gives you the correct answer beside/above the error you made)
- b. Indirect feedback (The teacher marks your errors but doesn't give you the correct answers, so that you have to correct the errors by yourself)

APPENDIX B

Instruction:

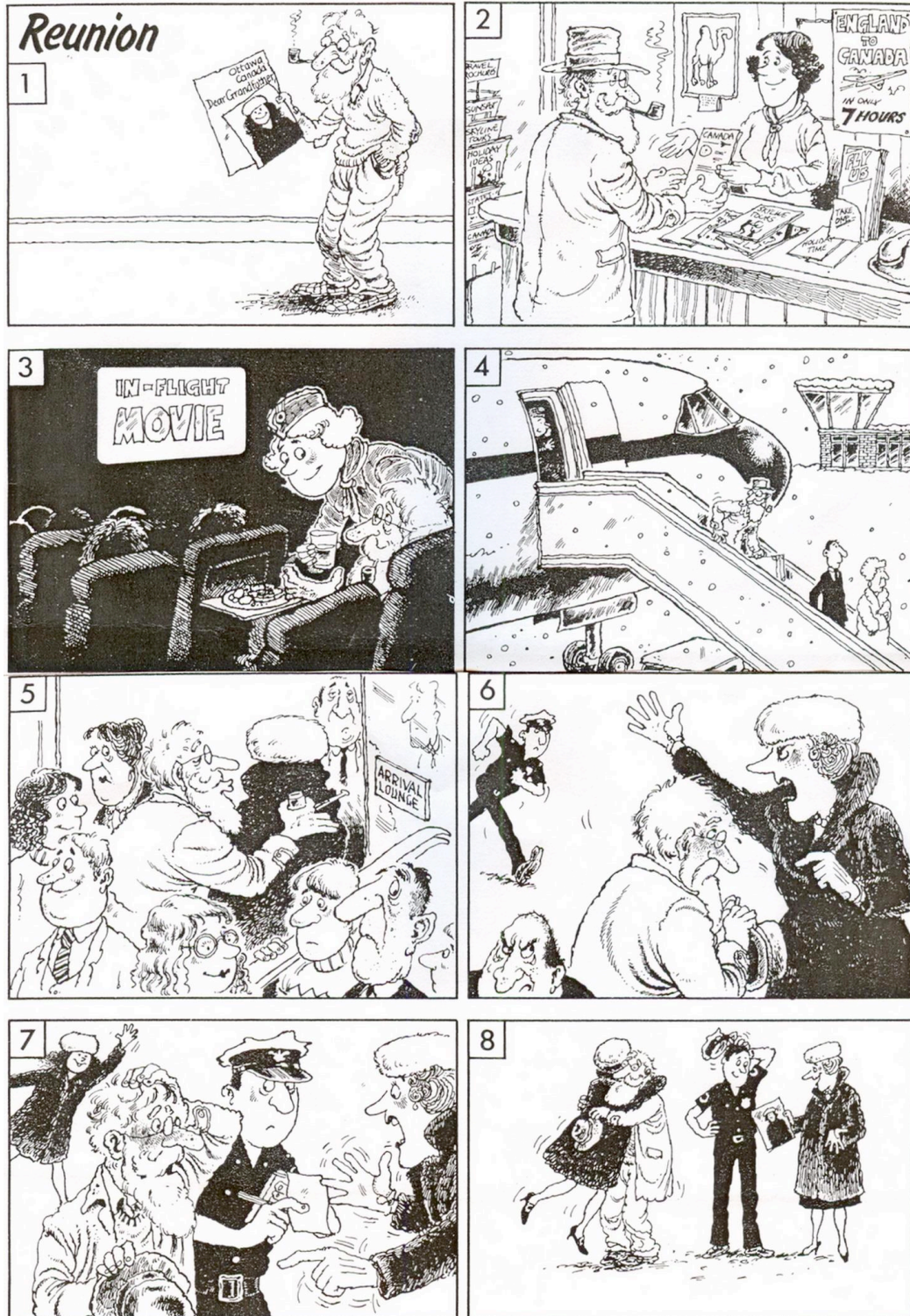
Look at the picture and write a story about what the people are doing in the picture. (Length: 250 words)



APPENDIX C

Instruction:

Look at the picture and write a story about what the people are doing in the picture. (Length: 250 words)



APPENDIX D

Instruction:

Look at the picture and write a story about what the people are doing in the picture. (Length: 250 words)



APPENDIX E

Feedback Preference Questionnaire

1. In the first questionnaire you have done, there was a question asking about your preference on grammar correction feedback (direct feedback: the type of feedback that gives you the correct answer of the error you made; or indirect feedback: the type of feedback that only circles or underlines your errors). Which type of feedback did you prefer?
2. Why do you prefer this type of feedback?

APPENDIX F

Participant Information Sheet


Date Information Sheet Produced:

28, July 2008

Project Title

Student's Preference For Written Corrective Feedback Type & Effectiveness by using the preferred type of feedback

An Invitation

As an Intermediate proficiency level student, you have been selected to take part in this research.

My name is Yang Lu and I am a Masters student at AUT University. For my Master's thesis I will examine the effectiveness of written corrective feedback and the relationship of the effectiveness between written corrective feedback type and learners' preferred type of feedback in this research. I would like to invite you to take part in my research study.

What is the purpose of this research?

The purpose of this research is to investigate whether language learners improve more by using the type of written corrective feedback they prefer.

How are people chosen to be asked to be part of this research?

All participants are chosen from the Intermediate level in this language school, and are currently studying full time at the language school.

What will happen in this research?

There are two parts in the study. In the first part of the study, you will receive a questionnaire which asks about the type of written corrective feedback you normally receive and the type that you would like to receive. In the second part of the study there will be several writing tasks, and different type of feedback will be given according to the answers you give in the first part of the study.

What are the benefits?

All participants will benefit from extra English writing opportunities. Moreover, the result of this research could also benefit language learners and teachers in future English study by investigating the relationship of effectiveness between written corrective feedback type and the type that the learners prefer.

How will my privacy be protected?

This research is anonymous, and your name will not appear during the data collection or in any published results. The consent form with your name will be kept in a locked cabinet in my supervisor's office (Professor John Bitchener in WT1003).

What are the costs of participating in this research?

You will spend approximately 2 hours in total in this research. Each task in this research will take you about half an hour to complete. Your participation in this study will not affect the regular classes, and there is no cost to take part in this research.

What opportunity do I have to consider this invitation?

You have 24 hours to consider this invitation to participate. This research will only take place with your consent and you can choose to stop the participation anytime you want without affecting your regular class results. The information collected in this research will remain confidential and your name will not appear anywhere on any data or results.

How do I agree to participate in this research?

You can ask any question you want after you have read this, and if you are happy to join the research, please sign the consent form over the next two days and return it to your class teacher.

Will I receive feedback on the results of this research?

The result of this research will be available after June 2009. If you are interested in receiving a copy of the results of this research, please tick the appropriate circle on the Consent Form.

What do I do if I have concerns about this research?

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Professor John Bitchener, john.bitchener@aut.ac.nz, ph: 9219999 ext 7830.

Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEK, Madeline Banda, madeline.banda@aut.ac.nz, 921 9999 ext 8044.

Whom do I contact for further information about this research?

Researcher Contact Details:

Yang Lu, for yangonly@gmail.com, 0210594791

Project Supervisor Contact Details:

Professor John Bitchener, john.bitchener@aut.ac.nz, ph: 9219999 ext 7830

APPENDIX G

<h1>Consent Form</h1>	 <p>AUT UNIVERSITY TE WĀNANGA ARONUI O TAMAKI MAKAU RAU</p>
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Project title: Student's Preference For Written Corrective Feedback Type
& Effectiveness by using the preferred type of feedback

Project Supervisor: Professor John Bitchener

Researcher: Yang Lu

- ☐ I have read and understood the information provided about this research project in the Information Sheet dated 28 July 2008.
- ☐ I have had an opportunity to ask questions and to have them answered.
- ☐ I understand that my identity will be kept confidential at all times.
- ☐ I understand that I may withdraw myself or any information that I have provided for this project at any time prior to completion of data collection, without being disadvantaged in any way.
- ☐ I agree to take part in this research.
- ☐ I wish to receive a copy of the report from the research (please tick one): Yes ☐ No ☐

Participant's signature:.....

Participant's name:.....

Participant's Contact Details (if appropriate):

.....

.....

Date:

Appendix H Participant Nationalities and Gender

Nationality	Gender (Female)	Male
China	2	1
Chile	1	0
Thailand	1	0
Ethiopia	1	0
Iran	2	1
Saudi Arabia	1	0
Iraqi	1	0
Korea	1	0
Viet Nam	0	1
German	0	1
Eritrea	2	3
Afghanistan	0	1
Burundi	1	1
Myanmar	1	2
Russia	1	0
Japan	1	0
Sudan	1	0

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