The effect of an explicit strategy instructional approach for the treatment of L2 writing difficulties

Nancy W Tarawhiti

A thesis submitted to Auckland University of Technology in fulfilment of the requirements for the degree of Doctor of Philosophy (PhD)

December 2016

School of Language and Culture

Supervisors: Professor John Bitchener, Professor Neil Anderson and Dr. Jay Wood

TABLE OF CONTENTS

LIST OF FIGURES

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.

Nancy W Tarawhiti _____

Date: _____

ACKNOWLEDGEMENTS

ABSTRACT

Writing difficulties (WDs) have been investigated to identify what they are and how they occur, but not necessarily how to address them within a specific genre (Barsturkmen & Randow, 2014; Bitchener & Barsturkmen, 2006; Casanave & Hubard, 1992; Cooley & Lewkowicz, 1995; Hinkel, 2011; Hyland, 2002; Leki, Cumming & Silva, 2008; Ong, 2011; Silva, 1990; Thompson, Morton & Storch, 2013; Zhang, 2000). Because empirical research has shown strategies can help students improve their use of the English language, strategies were considered as one way of addressing specific WDs (Chamot, 2005; Griffiths, 2008; O'Malley & Chamot, 1990; Oxford, 1986, 1990). Before investigating strategies, this thesis investigates approaches to resolving WDs and different perspectives about why WDs may occur in the expository genre. With that information, this thesis investigates the effectiveness of an explicit strategy instructional approach for addressing the identified WDs and for determining whether the knowledge gained from such an approach was retained and used appropriately after a 10-week period.

This research was conducted with 70-second language (L2) students at a large University in the USA. A quasi-experimental study design was employed, including a pre-test / intervention / immediate and delayed post-test methodology to establish whether the instruction was effective. Additionally, a survey was used to investigate students' perceived WDs in relation to their actual WDs.

The first result showed that WDs related to linguistic accuracy (local WDs) were the most problematic and that these were followed by difficulties with writing appropriate propositions (global WDs) and difficulties with supporting them with appropriate examples (global WDs). The second result showed that there was no relationship between students' perceptions of what was difficult for them and the difficulties that their writing revealed. The final result showed that the explicit strategy

instruction was effective for writing appropriate propositions and for examples of

propositions in the immediate post-test. The effectiveness of the explicit strategy

instruction was also '*retained*' over time for a number of students when immediate and

delayed post-test texts were compared. Additionally, there were a few students who

'*improved*' in the delayed post-tests but who had not improved in the immediate post-

test.

CHAPTER ONE

INTRODUCTION

1.0 Background of the issue

Second language (L2) learners, and a number of researchers (Leki et al.,2008; Zamel, 1983, 1985), have reported that writing is the most challenging skill to master when learning English. When L2 students are learning how to write in English, they begin with writing phrases or short sentences and experience problems with linguistic accuracy (Hartshorn, Evans, Merrill, Sudweeks, Strong-Krause, & Anderson; 2010, Hinkel, 2002, 2004; Silva 1993). Then, when they develop in their writing, thus producing larger and more complex pieces of text, they may experience problems at the paragraph and essay level, for example, in developing their ideas (Bitchener & Basturkmen, 2006; Leki, et al., 2008; Zhu, 2001). Therefore, L2 writing, regardless of what stage a student is at can be a challenge. Some learners seek a quick fix for dealing with their difficulties without fully understanding why and how they occurred. Sometimes, they are then unable to prevent those same difficulties from reoccurring in the future. Consequently, some L2 learners, specifically in academic settings, fail to master L2 writing even after years of completing a number of academic writing assignments.

Therefore, this thesis proposes an investigation into using an explicit strategy instructional approach as a means to addressing L2 writing difficulties, hereafter referred to as (WDs), because such an approach has been previously investigated in other skill areas with successful results (Plonsky, 2011). However, there is insufficient strategy based instruction literature with regards to L2 writing, specifically from the perspective of addressing WDs. Thus, it is worth investigating to see if it helps learners' address targeted L2 writing problems.

This issue is important because if students can recognize and understand the skills gained from an approach that helps them address their WDs, then it is more likely that they will be able to transfer those skills to other university writing tasks. This study focused on a timed expository essay to reveal the WDs experienced by L2 students beginning coursework at a large university in the USA. The expository essay focuses on the creation of argument because argumentation is a characteristic that is used in a number of other university writing genres and has been revealed as problematic.

1.1 Writing Difficulties (WDs)

Before investigating how to address WDs, there is a need to understand what WDs are, and the possible reasons they occur as this ensures that an effective approach is used and that it addresses specific WDs immediately and long-term.

The first issue this thesis investigates is the nature of writing difficulties. A WD is defined as any part of L2 writing that is considered challenging or problematic for a student, and that may cause a degree of difficulty for the reader. WDs, in this thesis, are separated into local WDs (section 2.1.1) and global WDs (section 2.1.2). Local WDs are defined as inaccuracies and inappropriate uses of the L2 occurring at the sentence level, in relation to grammar, vocabulary and punctuation (Casanave & Hubbard, 1992). Some examples of local WDs are difficulty with appropriately using verbs, pronouns, articles and prepositions, a lack of appropriate vocabulary and various punctuation errors (James, 1984; Khansir & Shahhoseiny, 2013; Ong, 2011; Zhang 2000). On the other hand, global WDs are problems that are encountered at the discourse level such as task misrepresentation, lack of cohesion, lack of genre knowledge and difficulty with the organization and development of ideas (Alarcon & Morales, 2011; Barsturkmen & Randow, 2014; Belcher, 1994; Bitchener & Basturkmen, 2006; Hyland, 1990; Wingate, 2012; Wolfersberger, 2007).

1.1.1 Explaining why WDs occur from a theoretical perspective

This thesis considers four theories to explain why WDs occur. The theories are the acquisition/learning hypothesis (section 2.2.1), skill acquisition theories (section 2.2.2), self-efficacy theory (section 2.2.3) and genre theory (section 2.3).

The first theory, acquisition/learning hypothesis, is a language specific theory that can explain why local WDs occur. The acquisition/learning hypothesis postulates that *learning* does not convert into *acquisition* because *acquisition* and *learning* are two different processes and therefore are referred to as the non-interface position (Krashen, 1982, 1985). Krashen (1982, 1985) defines *learning* as a conscious process that takes place in classroom settings where the "learner is made to focus on form and learn about the linguistic rules of the target language" and he defines *acquisition* as an unconscious process that is the "result of natural interaction with meaningful communication" (p. 10). Krashen (1982, 1985) claims that there is a significant difference between meaningful communication that takes place in naturalistic settings and meaningful communication that takes place in classroom settings and that this difference makes it difficult and impossible for learning to convert into acquisition. Consequently, we may predict from the main principles of this hypothesis that classroom instruction may not mean that students will be able to use the language learned unconsciously in meaningful written communication. This means that even though students may have learned the rules of how to use certain grammar features, they may not have mastered them enough to use them appropriately in text composition. This may, therefore, explain the occurrence of a number of local WDs.

In contrast to the non-interface position, the interface position claims that through practice, and over time, students may be able to proceduralize '*learning'* (i.e.,

declarative knowledge) towards *'acquisition'* (i.e., automatization). Skill acquisition theories provide an explanation about how this may occur.

One such theory is McLaughlin's (1990) Information Processing Model. It shows that information is processed in three stages: 1) declarative stage, 2) procedural stage and 3) automatic stage. At the declarative stage the student learns new knowledge. This requires a significant amount of attention from the learner in order for the knowledge to be understood and retained. Then, with practice opportunities over time, the knowledge may shift from the declarative stage to the procedural stage. The final stage is the automatic stage and this is where the knowledge can be used unconsciously. Thus, if knowledge related to L2 writing is not given appropriate attention at the declarative stage, WDs may continue to occur.

Another theory that can explain why WDs occur is self-efficacy theory. Self-efficacy is a context and task-specific attitude of belief about one's capabilities in an area of work or study (Bandura, 2012). Bandura (2001) maintains that unless people believe that they can produce a desired result, they will have minimal motivation to do so or minimal endurance in the face of difficulties. Bandura (2012) further claims that those with higher self-efficacy are likely to be more successful than those with lower self-efficacy. In the context of the current study, in order for a student to attend to their WDs, it is argued that they need to believe they have the ability to be successful. If learners have low self-efficacy, they may only put forward minimal effort towards the task of addressing WDs, even after a suitable instructional approach has been offered. Therefore, it would seem that if teachers are able to foster high self-efficacy in students, this might potentially motivate them to be successful, especially with regards to addressing their L2 WDs.

The last theory that may provide insight into explaining WDs is genre theory. It explains what characteristics are expected in different writing genres. Genre, in general

terms, is defined as a class of communicative events that are employed by a particular

discourse community whereby the members of the community understand, know and

share the same communicative purposes (Swales, 1990). Therefore, in terms of L2

writing, there is an expectation that various patterns of likeness in terms of content,

structure and style will be present in writing genres. Therefore, when a writing genre

assignment is given, there is an expectation that certain characteristics, or a near

likeness of those characteristics, will be demonstrated. When expected features are

missing, then it can be assumed that something with regards to the genre is problematic

for the student. In most cases, the problem is a lack of genre knowledge or a lack of

skill required to produce the expected characteristics. Consequently, specifications of a

given genre should be considered when investigating an approach to address WDs

because WDs may occur when an expected characteristic is missing. Because a range of

genres are used in academic writing, this thesis has narrowed its focus to the

specifications of expository essay writing.

As can be seen, these theories each provide some form of explanation about why

WDs may occur, and this makes it possible to explore ways to address them. One of

these ways is an explicit strategy instructional approach. However, before exploring

strategies to treat WDs, this thesis first looks at previous approaches used to see what

was successful and not successful in order to inform the development of an effective

strategy approach.

1.1.2 Previous instructional approaches used to address WDs

Some of the previous approaches (section 2.4) that have been employed to treat

WDs are individual feedback from teachers (section 2.4.1) and instruction from English

as a Second Language (ESL) writing courses and workshops (section 2.4.2). The first

approach, individual feedback from writing teachers, has been provided mostly in the

form of direct/indirect written corrective feedback (CF). The written CF approach has been known to help students improve accuracy in the use of specific linguistic forms and structures (local WDs) and also improve the clarity and organization of a writing text (global WDs). Therefore, written CF studies are worth considering in order to understand why some students still have reoccurring errors even after written CF has been given. In addition, written CF studies can signal which WDs occur more often than others. In order to ensure that the literature regarding written CF is relevant to this study, written CF studies covered in the literature review are ones that took place in similar contexts to that of this research. The written CF approach in these studies, however, was not always effective at addressing WDs. Even though this approach pointed out to students what their errors were, they did not necessarily know how to address them.

The second approach, ESL writing courses, workshops and seminars seem to be fairly common at both the undergraduate and postgraduate level. Despite the postgraduate context being outside the scope of this research, we can use knowledge from those studies to gain useful insights when trying to create a new approach for dealing with undergraduates' WDs. For example, by identifying the types of WDs (local and global) that postgraduate students experience and the approaches used to address them, undergraduate writing teachers can focus on addressing those WDs at the undergraduate level so that they do not occur when embarking on postgraduate level study, where the writing is more demanding. However, it is unclear whether the approach of ESL courses, workshops and seminars were effective at addressing WDs because the assessment used in these studies was not sound enough to determine whether these approaches were the key reason for writing improvement. Therefore, this led to an investigation into an explicit strategy instructional approach.

1.2 The investigation of an explicit strategy instructional approach to address WDs

This thesis investigates a strategy instructional approach (section 2.5) to address WDs because strategy-based instruction has previously been found to be successful in other L2 skill areas (e.g. reading, vocabulary, listening and speaking) including writing (Plonsky, 2011). However, strategy-based instruction has not been investigated as a means to attend to WDs for a specific group of L2 learners writing in a particular genre such as the expository essay.

A writing strategy, in the context of this research, is defined as a conscious action(s) taken by a learner to achieve a goal that contributes to improvement in their L2 writing (Cohen & Macaro, 2007). However, students are unsure at times about what writing strategies to perform in order to show improvement in their writing. Therefore, writing strategies are best utilized when they have been explicitly taught to L2 students. They need to understand the purpose of the strategy, its benefits when used appropriately and when to use it in other writing situations. An explicit strategy instructional approach guides students through a sequence of steps with clear statements about the purpose and rationale for learning the strategy, followed by appropriate examples of and practice in using the strategy.

1.2.1 Theoretical explanation of how strategies can address WDs

This thesis uses two theories to explain how strategies work and how they can be utilized to attend to WDs. They are Anderson's (J. R. Anderson, 1983, 1993) Active Control of Thought (ACT) theory (section 2.5.2.1) and Metacognitive theory (section 2.5.2.2).

ACT is another skill acquisition theory that explains the processing of information in a similar way to McLaughin's Information Processing Model. ACT explains that while some types of automatized knowledge are transferable to other

contexts, skills or tasks (e.g., appropriate language that signals the direction of an argument through an advance organizer), some are not because they are highly context and skill specific. ACT also explains that if declarative knowledge is not explicit, students may have trouble putting that knowledge into practice. The amount of practice needed for proceduralization can vary depending on the type of knowledge being proceduralized, with some items requiring only a few practice opportunities.

The other theory that may explain how strategies work is Metacognitive theory, which follows N. J. Anderson's (2002) model of metacognition. Simply, metacognition is thinking about your thinking (N. J. Anderson, 2002; Flavell, 1979). It is a combination of different thinking and reflective processes that inform how one would go about accomplishing a specific goal. N. J. Anderson's model explains that teachers can help students be more metacognitively aware by 1) preparing and planning for learning, 2) selecting and using learning strategies, 3) monitoring strategy use, 4) orchestrating various strategies, and 5) evaluating strategy use and learning. The importance of metacognition with regards to this research is that if students are metacognitively aware, they may be able to attend to their WDs with less difficulty. For example, students would benefit from having metacognitive knowledge about their WDs in order to know how to best attend to them. Also, a teacher-directed explicit strategy instructional approach could lead to metacognition being raised by the teacher initiating metacognitive moments at different times during the instruction. For example, at the beginning of the strategy instruction the teacher can ask: "What are you trying to accomplish?" This invites them to think of the purpose of using the strategy being taught.

1.2.2 Empirical research for L2 writing strategy instruction

This thesis also reviews empirical research (section 2.5.3) to provide an argument as to why strategy instruction is a suitable approach for addressing WDs. There is a body of research that has been conducted with regards to the instruction of L2 writing strategies (AlHasan & Wood, 2015; Berman, 1994; Ching, 2002; Cresswell, 2000; Panahi, 2013; Rao, 2007; Sengupta, 2000; Wette, 2010). Some of the strategy instruction research has looked at the effects of L2 writing planning strategies (Panahi, 2013; Rao, 2007), L2 writing revising strategies (Ching, 2002; Sengupta, 2000), L2 essay writing strategies (Berman, 1994), and L2 writing formulaic sentence strategies (AlHasan & Wood, 2015). The current study, however, has focused on the effect of L2 WDs strategies. From Plonsky's (2011) meta-analyses, it is clear that strategy-based instruction for L2 writing has been under-researched in comparison to other L2 skill areas (reading, listening, speaking and vocabulary), especially in terms of addressing WDs.

From a comprehensive review of the studies mentioned above, it is evident that there are a number of factors to consider when designing an approach that addresses specific areas of difficulty effectively. For example, some of the studies focused on areas that had not been previously identified as problematic for the targeted population of the study. Despite focusing on noteworthy L2 writing areas like planning, revising, essay writing and forming appropriate sentences, there was no mention of whether these areas had been assessed prior to strategy instruction and were determined to be difficult for participants. Therefore, strategy instruction becomes more purposeful if it targets an area that has been found to be problematic for most of the students receiving the instruction.

Another issue raised from L2 writing strategy instruction studies was that some of the criteria used to measure whether the strategy instruction had been effective or not

were not part of the strategy instruction. The best way to determine whether strategy instruction is effective is through ensuring that the assessment is directly connected to the strategies being taught. For example, if the strategy instruction focused on addressing three global WDs, then the assessment should only be related to the three global WDs targeted in the instruction.

The last important issue to emerge from L2 writing strategy studies is that a number of the strategy instructional approaches took place over a period of more than a month. The issue with this period of time is that influences other than the strategy instruction could have been a cause for improved post-test writing. This brings into question whether the strategy instruction was effective for improvement. To eliminate help from teachers, tutors and friends, it is important to implement a post assessment immediately after the strategy instruction has been given. As a result, a true indication can be reached about whether the instruction was effective and whether any improvement could be directly attributed to the strategy instruction. These considerations contributed to the research questions and design of this study.

1.3 Purpose of the study (Research Questions) and key design features

This section presents the research questions (RQs) and a brief introduction to why and how the RQs were investigated. The thesis investigated the effectiveness of an explicit strategy instructional approach for addressing frequently occurring WDs in expository essay writing. A pre-test, immediate post-test, delayed post-test design was used with 70 students from an intensive English program conducted at a large university in the USA. Students were randomly assigned to five classes and one class functioned as the control group. This study was a controlled study in that the writing tasks were completed in timed conditions with no opportunity for researching sources to generate content.

Research question 1 was, '*what are the writing difficulties that L2 learners experience when writing an expository essay?*' The first part to this question, 'w*hat are the <u>actual</u> writing difficulties?*' had two purposes. The first was to establish what parts of an expository essay were revealed to be most problematic, and the second was to determine what needed to be taught as part of the explicit strategy instruction. Students wrote an essay (pre-test), which was assessed using an Assessment Criteria Framework (See appendix B) to fulfil the purposes of RQ 1a. The second part of research question one was '*what are the <u>perceived</u> writing difficulties?*' The purpose of this question was to determine if students' attitudes and beliefs played a significant role in their WDs and this was investigated using a five-point scale survey (Appendix A). The survey consisted of nine predetermined statements that represented a WD likely to occur when writing expository essays. The final part of research question one was '*to what extent is there a match between perceived and actual writing difficulties?*' The purpose of this question was to identify any relationships that existed between students *actual* and *perceived* WDs, to establish whether students perception influenced there performance and vice versa.

The thesis goes on to investigate the effectiveness of an explicit strategy instructional approach that addresses the most frequently occurring WDs. As a result, research question 2 was '*what are the effects of an explicit strategies instructional approach on treating writing difficulties?*' The first part to this question 'w*hat is the <u>immediate effect</u> of explicit strategy instructional approach?*' was designed to investigate the immediate effect of the strategy instruction. Students' immediate post-test essays were assessed using the Assessment Criteria Framework (Appendix B), but they were only assessed for the criteria targeted as part of the instruction. The second part of research question two, '*what was the <u>long-term</u> effect of the intervention when comparing data from the pre-test, immediate post-test and delayed post-test?*' was

investigated using a delayed post-test to see if the knowledge gained from the explicit

strategy instructional approach had been retained 10 weeks later.

1.5 Organization of the study

  This thesis consists of a further five chapters. Chapter two provides a review of

theoretical and empirical literature on L2 WDs and the instruction of L2 writing

strategies. Chapter three explains the methodological approach used for this study,

followed by a description of instruments, participants, data collection procedures and

data analysis. Chapter four presents the findings and discussion of results for RQ 1a –

1c while chapter five presents the findings and discussion of results for RQ 2a and 2b.

Chapter six ends the thesis with a conclusion.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

There are two main aims of this chapter. The first is to draw attention to the range of WDs occurring in L2 students' writing, and the second is to present an argument for using explicit writing strategies as a means to attend to WDs revealed in L2 students' expository essay writing.

The main constructs of this study, WDs and strategies, are defined as follows. In broad terms, a WD is any area (e.g., local and global WDs) deemed problematic for a L2 student when writing in English. For the sake of manageability, this thesis separates WDs into two groups: local WDs and global WDs. These groups are explained in further detail in section 2.1 of this chapter. The other construct, a writing strategy, is defined in the context of this research as a conscious action/s taken by a learner to achieve a goal that contributes to improvement in their L2 learning (N. J. Anderson, 2008) and in this case, L2 writing. Strategies were chosen as a means of treating WDs because a number of specialists in the field of L2 strategies (N. J. Anderson, 1991; Chamot, 2004, 2005; Cohen, 2003, 2007; Grenfell & Harris, 1999; Harris, 2004; Macaro, 2006; Oxford, 1990, 2011; Rubin, 1975) have agreed that strategies have the potential to improve learning in the areas that they target.

This chapter begins by describing some of the different WDs that are found in empirical research that reports local WDs (2.1.1) and global WDs (2.1.2) experienced by L2 writers and readers of L2 writing in order to show the extent of L2 WDs. The literature draws on both undergraduate and postgraduate contexts to show the prevalence of the problem (2.1) and is followed by three theoretical explanations (2.2)

as to possible reasons why WDs occur. Understanding the nature of why and how WDs occur, provides valuable insights into the way WDs can be addressed. The three theories, (acquisition learning/hypothesis (2.2.1), skill acquisition theories (2.2.2) and self-efficacy theory (2.2.3)) not only establish possible reasons why WDs occur, but they can also explain why some WDs are easier to treat than others. Following this, genre theory (Hyland, 2008; Swales, 1990) is drawn upon to explain the specific writing genre that will be explored in this thesis (expository essays) and determine what possible WDs are specific to expository writing (2.3). By narrowing WDs to a specific genre, the task of addressing WDs is more manageable. Then, any previous approaches that have been used to address WDs are reviewed in order to explain why they have not been entirely successful and why there is a need for a new approach (2.4). This chapter then leads into a discussion of explicit strategy instructional approaches by firstly presenting the issues in defining a strategy (2.5.1). Then, two theoretical perspectives (2.5.2), skill acquisition theories (J. R. Anderson, 1976, 1983) (2.5.2.1) and metacognitive theory (N. J. Anderson 2002, 2008; Flavell, 1987, 1979) (2.5.2.2) are drawn upon to justify the investigation of an explicit strategy instructional approach as a valid method to address WDs. Empirical research regarding strategy instruction for L2 writing is presented next to show the issues that have been reported with regards to strategy based instruction (2.5.3). Arising from this literature are the gaps and research questions (2.6).

2.1 The range of L2 WDs identified in empirical research

L2 writing is known to be the most challenging of the four skill areas (reading, writing, listening and speaking) in language learning because a large number of L2 students experience a range of WDs (Basturkmen & Randow, 2014; Bitchener & Basturkmen, 2006; Casanave & Hubard, 1992; Cooley & Lewkowicz, 1995; Hinkel,

2011; Hyland, 2002; Leki et al., 2008; Silva, 1990; Thompson, Morton & Storch, 2013; Zhang, 2000). As a result, there is a need to operationalize the construct of 'writing difficulties', and shed light on what WDs are in order to provide insights into how to provide adequate pedagogical support.

Bitchener and Basturkmen (2006) stated that: "specific difficulties at the sentence and paragraph levels need to be categorized separately from those related to the understanding of ideas, concepts, and specific genre functions" (p. 14). As a result, this thesis has divided WDs into two manageable groups: local WDs and global WDs. Local WDs are best described as inaccuracies and inappropriate uses occurring at the sentence level in relation to grammar, vocabulary, and sometimes mechanics (Casanave & Hubbard, 1992). Section 2.1.1 of this chapter presents empirical research that shows examples of local WDs. Local WDs can cause coherence and/or cohesion problems. While coherence most often relates to clear meaning within a single sentence, cohesion relates to coherence between sentences. It is the grammar errors that seem to mostly cause problems with both coherence and cohesion. However, global WDs are errors beyond the single sentence level and are defined as problems that typically occur for L2 students at the discourse level of writing that, in most cases, impact on the reader's ability to clearly follow the writer's ideas and logic (Hinkel, 2011). Some examples of these are poor argumentation and poor development of propositions.

2.1.1 Local WDs

When L2 students first learn how to write in English, their writing problems mostly occur at the sentence level and are usually related to linguistic inaccuracies and inappropriateness of language (Crossley & McNamara, 2012; Ong, 2011; Zhang, 2000). Studies revealing local WDs have spanned more than 30 years and have been conducted with different methodologies and in a variety of contexts. Despite a number of studies

reporting problematic areas at the sentence level (Feng, 2003; Ferris, 2002; Hirano, 2014; James, 1984; Khansir & Shahhoseiny, 2013; Ong, 2011; Qian & Krugly-Smolska, 2008; Zhang, 2000), this section will focus on reviewing studies that show the more '*frequently*' occurring local WDs in order to show the prevalence of the problem.

2.1.1.1 Grammar-related local WDs

L2 learners can have problems with a range of grammatical features in their L2 writing. Some of these problems are in relation to incorrect uses of verb tenses, pronouns, articles, prepositions, modals, comparatives, use of the first and third person, and passive and active voice (Leki et al., 2008). One study used a Grammatical Judgment Test to investigate the problematic grammatical features experienced by 100 EFL pre-university students in Iran (Khansir & Shahhoseiny, 2013). It is unclear from the study the proficiency level of the students. A total of 33% of the students revealed difficulty with tenses and incorrect use of the simple present was revealed as the most frequent verb tense error. Khansir and Shahhoseiny (2013) explained that the occurrence of these WDs was likely due to Iranian students not explicitly knowing the rules and structures of verb tenses in English. They said that if students were unfamiliar with or had limited practice opportunities to use English, then they would be more likely unable to use them appropriately, especially in composition. They added that interference from the students' first language was also a probable cause of these WDs.

Additionally, a case study by James (1984), reported that a PhD student from Brazil at the University of Manchester experienced similar difficulties with verb tenses. James (1984) explained that although his student's verb tense errors were frequent, they, in most cases, were more of a distraction for the reader. However, on the odd occasion they caused a breakdown in meaning. He went on to explain that even though his student competently passed a grammar test, he struggled to use grammar structures

16

correctly when constructing a text because when taking the grammar test, the student was concentrating specifically on grammar rather than on the construction of ideas. Like Khansir and Shahhoseiny (2013), James (1984) attributes the verb tense WDs experienced by his postgraduate student to first language interference and insufficient knowledge and practice in applying verb tense rules correctly.

In addition to difficulties related to verb tenses, L2 learners may struggle with referencing. From 20 EFL students studying in Singapore, Ong (2011) reported that 43% of the students revealed difficulty with reference errors. Reference in this case concerns errors in the use of personal pronouns, demonstratives and comparatives, for establishing a cohesive relation between the item and its antecedent. Ong (2011) noted that the fact that the next highest error types were considerably less than reference errors (conjunctions – 29.3% and lexical cohesive errors – 27.9%) suggested that reference errors were the most difficult for students.

Among the different types of reference errors that students made, Ong (2011) found that an incorrect use of the definite article was the most problematic: 48% of the students in her study did not use the definite article correctly. They either added a definite article unnecessarily or they misused the definite article as exemplified in the following examples. Example 1 shows, in bold, an unnecessary addition of the definite article.

> Example 1
> First, I think we can learn a lot of knowledge to serve our country, adapt the changing nation and live a good life. Through education, we can arm ourseeves with a lot of knowledge that cannot be brought by money. Then we can devote ourselves to the country's contribution to give our little strength. Everyone a little helps a lot. Also, the world is changing rapidly, and **the [to omit]** competition is very fierce (Ong, 2011, p. 51).

Using "the" in the last sentence leads the reader to think that the item (competition) had been mentioned before. However, as can be seen, the item is not mentioned in the preceding sentences. Thus, the reader does not know what "the

competition" refers to.

The next example shows, in bold, a misuse of the definite article.

Example 2
First, people can build up there career easily if they have a good education. Take the former story for example, because they didn't even finish **the [their]** nine-year education, they could only work as a waiter or waitress with low salary (Ong, 2011, p. 52).

The definite article is used in the middle of the second sentence when clearly a pronominal "their" is more appropriate because the student is referring to "they" or "the drop outs" mentioned in the previous text. These grammatical errors are more likely to distract the reader than cause a breakdown in meaning (Cooley & Lewkowicz, 1995, 1997; James, 1984).

Ong (2011) and Zhang (2000) both agreed that an incorrect use of definite articles was most likely the result of students' L1 interference, which, in this case, was Chinese. Zhang (2000) believed that students found it hard to use articles correctly and consistently in English because there are no articles in Chinese. Additionally, Kansir and Shahhoseiny (2013) reported that Iranian students (38%) also showed difficulties in the correct use of definite and indefinite articles by omitting the article (definite and indefinite) when one was clearly needed. Kansir and Shahhoseiny (2013), however, attributed inappropriate use of definite and indefinite articles to Iranian students who had yet to master the grammar rules correctly when composing, even though they were familiar with grammar rules and used them.

There were a number of other reference errors that students made at the sentence level including the incorrect use of pronominals. Ong (2011) explained that her students showed difficulty with pronominals by using referents that were not easy to identify, causing confusion for the reader. In addition, plural pronominals were often used to refer to singular pronominals, and this caused a lack of clarity in students' writing (Feng, 2003; Ong, 2011; Zhang, 2000). Furthermore, James (1984) stated that his

student often made pronoun errors by referencing things that had been implied previously but not explicitly stated. This, in most cases, led to a breakdown in meaning. James (1984) added that his student remained weak in this area until the end of his thesis writing.

In addition to errors related to specific grammatical items, L2 students also struggle with the perception that their sentences are unclear and/or sometimes difficult to understand. This is important to know because at times students may feel that what they have written is adequate or appropriate when in fact it is not. Qian and Krugly-Smoska, (2008) found that at a university in Canada, three of the four L2 participants in their study said they had the most difficulty with constructing sentences that were clear for the reader to understand. Due to their EFL learning experience in China, all three students most likely believed that grammatically correct sentences determined whether their writing was of good quality or not because of the emphasis on learning grammar and grammar related activities in that context. However, such a belief can lead students to concentrate so much on what is required at the sentence level that they pay minimal attention to what is required at the discourse level (Wang, 2007). One student reported difficulty with sentence structure while the other two students explained that they often wrote a number of sentences to present one idea when one effective sentence would have been sufficient. The quotation below from a semi-structured interview revealed the student's experience:

> I can express myself clearly, but I found the native speakers can express ideas more skillfully, in more details and more specifically. Same idea, I found I wrote a lot of sentences to make it clear. Maybe it's not clear enough for them. That's the writing skill. Maybe sometimes I feel my language is clear enough, but after I read others, I find "no, no." (Qian & Krugly-Smolska, 2008, p. 77)

The supervisor advised this student to use simple words and sentence structures because it was easy for him to make grammatical mistakes when he tried to write long, complex sentences. James (1984) provided similar advice to his student,

19

as his sentences became so long and complex that there was, at times, a significant breakdown in meaning.

Another part of L2 writing that can cause some difficulty for the reader and can be connected to grammar errors is misspellings. While a well-written text can provide the reader with the writer's clear intention, there are times when misspellings may cause a breakdown in meaning. James (1984) describes such an experience with his PhD student where the student wrote the sentence *"He was brought to low."* At first, James (1984) thought his student meant to write, *"He was brought very low"* with the intended meaning that he was humbled, but in fact the student's intended meaning was, *"He was brought to law".* If the misspelling had been of *"brought,"* the intended meaning would still have been conveyed; however, in this case, the misspelling meant that the writer's intended meaning was not clear. James (1984) credited this difficulty to the student's L1. "The student did not make a distinction between his L1 speech /əʊ/ as in *low* and /ɔ:/ as in *law*, employing the first of these two vowel phonemes for the pronunciation of both words" (James, 1984, p. 104). Apart from special cases like this, most spelling errors are more distracting than confusing for the reader.

Similar writing problems occurred for seven refugees who were studying at a small private liberal arts college in the Southeast of the United States (Hirano, 2014). Hirano's (2014) interviews and focus group observations of the refugees from Burma, Afghanistan, Rwanda and Liberia reported that students found L2 writing assignments difficult to understand because they were not quite proficient enough for undergraduate study at an English speaking university. The collected data found that each of the refugees showed mistakes in spelling and punctuation but that the texts were still comprehensible. One student illustrated this in a response to a short answer question on a test as outlined below:

"Durkheim discoverd social facts in his study of suicide rate in France. He experiment which social group commet suicide the most, the moms, college student, or unemployee person. his discovery is related to the focuse of sociology."(Hirano, 2014, p. 43)

Despite a number of grammar and spelling errors, the comprehensibility, for the most part, was still apparent even though the errors were distracting. Sometimes professors overlooked this difficulty if they could still understand the main idea of the text. Nevertheless, this did not help students correct their errors and consequently they continued to make the same spelling errors.

2.1.1.2 Vocabulary-related local WDs

Lexical difficulties are another type of local WD revealed in some studies (James, 1984; Ong, 2011; Qian & Krugly Smolska, 2008; Zhang, 2000). Some of these difficulties were: limited vocabulary, repetition of the same words, errors in lexical choice and misuse of collocations. Ong (2011) and Zhang (2000) both found that limited vocabulary often resulted in writers' texts being boring to read because the same phrases and vocabulary were repeatedly used instead of a range of possible synonyms. Even though producing boring texts did not cause a breakdown in meaning, the problem of limited vocabulary has been known to be difficult for L2 writers. For example, James (1984) reported that his student showed a lack of verbs required at the postgraduate level to communicate exactly what he needed or wanted to say or to report the literature and argue a case from it. Some examples of these verbs and phrases were: contend, maintain, declare, illustrate, draw attention to, focus on, emphasize, imply and present (a case for). This meant he struggled at times to clearly articulate points he was trying to make in relation to the findings of other research.

Zhang (2000) gives one explanation as to why Chinese students may make inappropriate lexical choices. She explains that Chinese instructors mainly teach vocabulary words and phrases in isolation, and that this results in students having

minimal context within which to position their lexical knowledge. This

decontextualization leaves the student more prone to inappropriateness or misuse of the

lexicon. The table below, from Zhang (2000), shows four examples of misuse of

collocations and errors in lexical choices along with examples of improved versions.

Table 2.1

Sample of misuse in collocation and lexical choice (Zhang, 2000, p. 84)

Examples of students' scripts	Improved Version
At noon, we should eat some **flesh** and vegetables	… meat …
… overfat and overthin …	… overweight and underweight …
Besides, sports can also **sharpen** our appetite and **increase** our digestion	… maintain our appetite and improve (help in) our digestion …
Regular medical examine is also necessary and helpful to people **to find the starting illness and keep it from being worse.**	A regular medical examination is also necessary and helpful to people to discover illnesses early and keep them from getting worse.

Three of the four participants from Qian and Krugly-Smoska's (2008) study,

also revealed vocabulary related problems, stating that it was not easy for them to use

appropriate vocabulary to express their ideas clearly. One student said that even though

he had no difficulty with genre specific terminology, he found it challenging to choose

the appropriate verb that specifically suited his purpose and he found that he was using

the same word repetitively. He states the following:

> Last sentence, I used this work. Maybe for the native speaker, the next sentence
> they used another word, but the same meaning. But for me, it is difficult to find
> the equivalent. But it feels very worse if you use the same so many times. (Qian
> & Krugly-Smolska, 2008, p. 76)

Qian and Krugly-Smolska (2008) suggested that these vocabulary problems

might have stemmed from the fact that students did not have effective strategies for

improving their English vocabulary learning. They also state that this problem is caused

by rote memorization of lengthy vocabulary lists, similar to what was previously stated

by Zhang (2000). It is maintained that this learning technique does not necessarily provide Chinese students with the knowledge or ability to use the vocabulary correctly in a sentence (Gu, 2002). A person's knowledge of a vocabulary item requires more than just knowing the word and one possible definition; it also requires the ability to use the word in different contexts (Schmitt & McCarthy, 1997).

To help attend to vocabulary issues, Qian and Krugly-Smolska (2008) proposed that students take a more contextual approach to learning vocabulary in order to achieve a larger repertoire of lexicon that can be used when writing. In addition, seeking help with genre specific vocabulary may also improve lexical choices and use for L2 learners. This can be done by reading previously written texts from the genre students need to write in to be aware of commonly used phrases and vocabulary that are expected (Casanave & Hubbard, 1992).

2.1.1.3 Insights gained from local WDs research

There were two main insights gained from reviewing the literature on local WDs. First, it can be seen that there are different types of local WDs that L2 learners may experience, which makes it difficult to choose a few to focus attention on when considering an appropriate treatment. For instance, some of the WDs were referencing errors, verb tense errors and errors related to constructing well-written sentences; and a lot of these errors had different ways in which they were manifested. For example, referencing errors were further demonstrated as misuse of articles, misuse of pronominals and misuse of comparatives. Each of these subcategories was additionally revealed in different ways like the omission of an article, incorrect article use and overuse of articles. Consequently, attempting to attend to referencing errors could prove challenging because every possible reference error that could be committed may also need to be addressed. Likewise, this could be the case for other local WDs like verbs

tense errors, which would be shown as errors with subject verb agreement and errors with using the incorrect tense.

The second insight gained was that despite L2 students having had previous instruction in English grammar rules and functions, in some cases for more than five years, a number of L2 learners did not necessarily know how to appropriately use the grammar feature they had learned when composing a text. In other words, previous grammar learning for a lot of the learners in the aforementioned studies did not necessarily translate into good quality of writing, indicating that they might not have mastered grammar rules even though they may have had a number of practice opportunities. Also, some students may have learned grammar in a decontextualized manner that did not necessarily enable them to use the grammar correctly in new composition.

It can be seen from these insights, that addressing local WDs may require extensive instruction because a local WD (e.g., inappropriate use of a verb) may mean that a number of further WDs need to be considered (e.g., verb tenses, subject verb agreement, verb choice) to address it appropriately. Along with these issues related to local WDs, L2 learners also have difficulty with global WDs.

It should also be acknowledged at this point that some of the reported literature in this section had small samples sizes. One implication of this is that some results may not be able to be generalized over a wider population. Another implication is that small study samples lack the statistical power to have an effective impact on their results. In other words, the results may be attributed to chance.

2.1.2 Global WDs

As previously stated, global WDs are problems encountered by L2 learners at the discourse level. Some examples of global WDs are: writing off the topic (2.1.2.1), a

lack of argument (2.1.2.2) and a lack of cohesion between pieces of information

(2.1.2.3) (Alarcon & Morales, 2011; Bacha, 2010; Basturkmen & Randow, 2014;

Bitchener & Basturkmen, 2006; Casanave & Hubbard, 1992; Cooley & Lewkowicz,

1995, 1997; Hirano, 2014; Hirose, 2003; Kamel, 2000; McNamara, Crossley &

McCarthy, 2010; Wingate, 2010 Wolfersberger, 2007). Another prominent global WD,

a lack of genre knowledge, will be discussed further in section 2.3 in relation to genre

theory. Similar to the section on local WDs (2.1.1), the aim of this section is to provide

an understanding of different types of global WDs as reported in empirical research.

2.1.2.1 Writing off the topic

One reason why L2 students may experience problems with writing off the topic

when given academic writing assignments is because they may lack the knowledge and

expertise to write academic texts and the experience needed in order to perform the

writing task (Lea & Street, 1998; Wolfersberger, 2007). Capable writers usually acquire

there writing skills from previous writing instruction and experience. However, if L2

students are lacking in writing experience or apply writing skills incorrectly, this can

cause them to write off the topic. A student who produces a well-written text with

proficient language and clear structure, but not in accordance with the specifications of

the assignment, will likely receive a low grade even though he/she possessed the

writing skills and the content knowledge required to receive a high grade, because they

misrepresented the task (Hamp-Lyons, 1991).

Another reason why L2 students may write off they topic is they misrepresent

what the writing task is asking them to do (Lea & Street, 1998; Wolfersberger, 2007).

There are different factors that can contribute to task misrepresentation. Task

misrepresentation is the process whereby the writer can misinterpret the intention or

purpose of the topic, or misunderstand the overall meaning of the topic of the writing

assignment (Flower, 1990). L2 academic students are more likely to create a task representation rather than select from a list of pre-assembled task representations. Therefore, they need to draw upon their past writing experiences and knowledge to create an accurate representation of what is required of the task and how to successfully accomplish the task. Because task representation occurs as a result of L2 students' background experiences and abilities, there can be some variation among the task representations of writers trying to accomplish the same task (Yang & Shi, 2003).

Empirical research provides an understanding of probable causes as to why students experience task misrepresentation. After conducting a qualitative study with four undergraduate L2 learners at an academic institution in New Zealand, Wolfersberger (2007) found that it was the individual learning differences and effort put into the assignment of each learner that caused them to write off topic and misrepresent the task. For example, because those individual differences determined the amount of time, effort and depth given to each writing assignment, it was clear that those who gave more effort into gathering information and reformulating drafts formed a better overall understanding of the assignment. Wolfersberger (2007) explained that the two students who did not put in the effort, not only wrote off topic but showed large amounts of plagiarism. Therefore, students need to have adequate and appropriate academic writing capability in order to understand how to write according to the task. In another study, Hirano's (2014) interviews and focus group observations of seven refugees found L2 writing assignments difficult to understand because they were still developing their L2 language proficiency. With the range of writing assignments that they were given (e.g., essays, reflection papers, performance critiques and lab reports) and their language still developing, it was understandable that correctly interpreting a writing assignment would be problematic.

2.1.2.2 Argument creation

A particular area of global WDs experienced by L2 students is creating the type of argument appropriate to different genres (Wingate, 2012, Kamel, 2000). Although argumentation is an important part of many genres that undergraduate students should be familiar with, it is also one that students encounter much difficulty with when writing in an L2. Wingate (2012) gathered survey responses from 117 first year undergraduate students from a university in the United Kingdom. The details of students' linguistic background and proficiency levels were not given in this study. Students' difficulties with argumentation were investigated through the analyses of 60 students written texts and tutor comments. Wingate (2012) found that from the low scoring essays (N=40), 38 of the students (95%) demonstrated that they did not know how an argument should be structured. Interestingly, amongst the higher scoring essays (N=20), 14 them (70%) also did not know how to structure an argument. Despite survey results showing that most of the students knew various characteristics of argumentation (e.g., argument requires providing evidence, has two sides, etc.), text analysis showed that the students did not know how to organize those characteristics in their writing. Wingate (2012) suggests that such challenges stem from shortcomings in previous L2 writing instruction, especially in EFL contexts that generally do not include genre-based instruction.

It may be particularly difficult for students to create an argument when the organization required is different from the way they were taught in their L1 context. For example, although native English speakers typically follow a rhetorical pattern in argumentative writing by providing a thesis statement and a brief summary of the context in the introduction (Hinds, 1983, 1984), Japanese students tend to be taught that the thesis statement is placed in the conclusion paragraph and that the introduction does not necessarily provide insight into the content of the paper (Hinds, 1983, 1984;

Fujieda, 2006). Furthermore, among L1 Arabic speaking students, English argumentation has been known to be challenging because the key claim of an argument for Arabic speakers is usually at the end of the text as well, which is in contrast to where it is usually placed in English writing (Al-Abed Al Haq & Ahmed, 1994; Kamel, 2000; Swales, 1984). Kamel (2000) explains that Arabic writers struggle to grasp the organization and features of argumentation because they are trained more to focus on language accuracy than on discourse features like organizing an argument. This suggests that discourse features may need a more prominent focus in L2 writing instruction. If students have been taught a specific way to write an argument, then they will continue to write in that way until they are instructed differently. Changing the behaviour of students' rhetorical processing requires a conscious change such as explicit instruction can provide (Cohen & Macaro, 2007). Simply identifying that a WD exists in this regard is probably unlikely to promote a change in their writing when their rhetorical thinking also has to change.

2.1.2.3 A Lack of cohesion

Maintaining cohesion is another global WD and has also been known to be a challenge for L2 writers. Cohesion refers to the creation and development of an argument with one sentence adding cohesively to the next sentence, in order to produce a coherent argument (Basturkmen & Randow, 2014). Difficulties in maintaining cohesion over a piece of text have been reported in a number of studies (Alarcon & Morales, 2011; Basturkmen & Randow, 2014; McNamara, Crossley & McCarthy, 2010). In particular, they have reported that students have difficulty with understanding the purpose of different cohesive devices that may connect information together appropriately and therefore have difficulty using them appropriately. For example, after a qualitative analysis of 64 undergraduate argumentative essays, Alarcon and Morales

(2011) found that students mostly used a cohesive device inappropriately (e.g., but, however, yet) to establish a position in their essay. This suggested that perhaps students lacked knowledge about how to use cohesive devices correctly.

Basturkmen and Randow (2014) found similar results after analysing L2 writing samples from students at the University of Auckland. Samples were scored on (1) sentence structure and vocabulary, (2) content, and (3) coherence and cohesion, and the three scores were added together to give an overall score. Texts were also analysed for the different types of cohesive devices used and whether they were used appropriately. The two devices used the most from both higher scored essays and lower scored essays were illocutionary markers (e.g., This article identifies) and code glosses (e.g. for instance, such as). Further text analysis showed that the higher scored essays used these devices better than the lower scored essays. The two examples below are from a high scoring student and a low scoring student for code glosses. Code glosses enable the reader to "understand which arguments in the preceding text were being explained" (Barsturkmen & Randow, 2014, p. 19) especially when writing about several ideas.

> **High scoring student**: Special assistance can be built into the school curriculum. <u>For instance</u>, many schools contain classes specifically populated and catered to gifted children, <u>such as</u> acceleration classes for mathematics, science and art.

> **Low scoring student**: People have spent their lives taking care of their families. First, by being involved in their education. <u>For example</u>, the payment of tuition fees, as well they helped their children for their studies.

From the high scoring student sample, a code gloss introduces an example of how special assistance can be built into the school curriculum and another code gloss introduces examples of the type of classes that can cater to gifted children. The example from the low scoring student, however, may cause difficulty for understanding. The low scoring sample is not as clear, as the payment of tuition fees could be understood as an example of family involvement with education, or as an example of taking care of family or possibly both.

On the other hand, McNamara, Crossley and McCarthy (2010) found no indication that higher scoring essays were more cohesive than lower scoring essays from postgraduate students. Scores were determined by expert raters who used a standardized rubric and then the writing was further evaluated by a computational tool that distinguished the differences between the essays that were rated as high and those rated as low. McNamara, Crossley and McCarthy (2010) said there is a natural perception that better writing (e.g., a higher scored essay) is more coherent. However, the categorisation for cohesion used in this study found no differences between higher and lower scored essays. Both types of essays showed, at times, appropriate and inappropriate uses of cohesive devices.

2.1.2.4 Insight gained from global WDs research

The main insight gained from reviewing the literature on global WDs is that they seem to be more manageable to address (Bacha, 2010, Wingate, 2012). For example, in order to address the global WD of 'writing off the topic', students would need to be taught how to write according to the specifications of the assignment because that is most likely the reason for writing off the topic. However, in order to address the local WD of 'inappropriate verb use', students would need to be taught how to use verbs tenses, subject verb agreement, verb choice, regular and/or irregular verbs correctly because they are all possible reasons for inappropriate verb use. Thus, addressing global WDs may seem more manageable than addressing local WDs.

2.2 Explaining theoretically why writing difficulties occur

This section focuses on a discussion of three theories, from different perspectives, that best explain why WDs occur: 1) acquisition/learning hypothesis

(2.2.1); 2) two skill acquisition theories (information processing model (2.2.2) and adaptive control of thought (2.5.2.1) and 3) self-efficacy theory (2.2.3).

2.2.1 The acquisition/learning hypothesis

The first theory looks at explaining why language-related WDs may occur. Krashen's (1982, 1985) acquisition/learning hypothesis claims that *acquisition* and *learning* are two different processes, and that learning cannot develop into acquisition. This is known in the second language acquisition (SLA) literature as the non-interface position. Krashen defines *learning* as a conscious process that takes place in classroom settings where the "learner is made to focus on form and learn about the linguistic rules of the target language" (Krashen, 1982, p. 10) and develop explicit knowledge of what has been taught. He defines *acquisition* as an unconscious process that is the "result of natural interaction with meaningful communication" (Krashen, 1982, p. 10) and argues that this draws upon implicit knowledge. Krashen (1982, 1985) claims that there is a significant difference between meaningful communication taking place in naturalistic settings and meaningful communication taking place in classroom settings, which makes it difficult for *learning* to turn into natural unconscious *acquisition*. For example, meaningful communication that takes place in naturalistic settings is not scripted for a particular learning task. Therefore, it cannot be acquired naturally through the learning of formal scripted sentences like the type of communication taught in a classroom setting.

Additionally, Krashen (1985, 1994, 2003) argues that because the two types of knowledge are located in separate parts of the brain (short term memory and long term memory), explicit knowledge (resulting from learning) cannot be converted to implicit knowledge (resulting from acquisition). This is the non-interface position and it predicts that even after large amounts of classroom instruction, a student may not be able to use

certain features of the second language unconsciously in meaningful communication. As a result, this theory suggests that an intervention, especially for linguistic accuracy-related WDs (local WDs) may not be effective because the conscious learning of rules and information related to the WD may not be converted to implicit knowledge.

The interface position, on the other hand, claims that conversion is possible over time and that explicit knowledge can be converted to implicit knowledge as a result of appropriately contextualized practice (DeKeyser, 2003). Despite the claim that conversion is possible, it must be acknowledged that there are limitations on how and when the conversion can occur and this is explained further in the next section, skill acquisition theories (J. R. Anderson, 1982, 1983).

2.2.2 Skill Acquisition Theories

The second group of theories also explains why WDs occur. This research focuses on two skill acquisition theories: McLaughlin's (1987, 1990) information process model, which is discussed in this section, and J R Anderson's (1982, 1983) active control of thought (ACT), which is discussed in section 2.5.2.1. The information processing model (IPM) (McLaughlin, 1987, 1990) is discussed in this section because it focuses more on the cognitive processing of language and is closely related to the discussion of WDs in section 2.2. On the other hand, active control of thought (J. R. Anderson, 1982, 1983) is about general skill development (e.g. declarative knowledge to procedural knowledge), which is more closely related to the discussion of strategies in section 2.6.2. It has been proposed, for both theories, that information is processed in three main stages: 1) *declarative* stage, 2) *procedural* stage, and 3) *automatic* stage (Anderson, 1982, 1983; Altarriba & Basnight-Brown, 2009; Byrne, 1986; McLaughlin, 1987, 1990; McLaughlin & Heredia, 1996; Shiffrin & Schneider, 1977).

The *declarative* stage is where the learner learns new *explicit* knowledge consciously from a teacher. At this stage, the knowledge will most likely include a description or explanation with clear examples of the new knowledge and is stored in the learner's short-term memory. One example of declarative (explicit) knowledge is when forming the regular past tense: an 'ed' is required at the end of a regular verb, for example 'jumped'.

The *procedural* stage is where the knowledge gained at the declarative stage is put into action and performed. Referring to the example above, the regular verb with the 'ed' on the end is practised in writing or speaking. During this stage, the knowledge can also be susceptible to restructuring as learners encounter difficulties with the knowledge gained at the declarative stage. For instance, when L2 students learn new knowledge through practice, errors will often be made and this can lead them to have difficulty with proceduralization.

The final stage is the automatic stage. Before procedural knowledge can be used unconsciously, (*automatic* stage), repeated practice needs to occur in order to reduce the error rate, decrease how long it will take to perform the skill, and reduce the amount of attention that is needed. However, it should be noted that when L2 learners' are trying to automatize, they are still susceptible to making errors.

McLaughlin's (1978, 1987, 1990) information processing model (IPM) is an example that shows how the conversion of declarative knowledge to procedural knowledge takes place over time in a similar way to the stages previously explained. McLaughlin's model also explains how learners develop from a controlled, cognitive processing of explicit/declarative knowledge of the target language to an automatic use of implicit/procedural knowledge of the target language. In the beginning, a significant amount of attentional control is required when input is first received and there are likely to be limitations to the amount of information that can be processed in the learner's

working memory. The model then explains how forms and structures first produced by controlled processing can, as a result of practice, become automatic over time. It goes on to explain how implicit/procedural knowledge is then stored in the learner's long term memory and is made available very rapidly whenever the situation requires it with minimal attentional control by the learner.

Skill acquisition theories such as McLaughlin's IPM, therefore, account for a number of second language acquisition (SLA) phenomena that are relevant to this study. First, skill acquisition theories explain why some grammatical structures never seem to enter the students' language learning at all, because at the declarative stage the knowledge has not been given accurately and reliably or because the knowledge given at the declarative stage may have been too complex, abstract or non-salient for the learner (DeKeyser, 2005). Second, L2 learners may not have had many opportunities to make use of the explicit knowledge on subsequent occasions and for that reason it may take longer for them to convert explicit knowledge to implicit knowledge. Third, skill acquisition theories explain why native-like forms are used in some contexts but not others. As stated before, knowledge can be restructured at the proceduralized and automatized stages, which leaves that knowledge susceptible to errors. Fourth, attentional capacity can be limited for some students, which means that there is variability and conflicting demands on students' cognition. Fifth, skill acquisition theories explain why learning is incremental, because as knowledge or learning moves from one phase to the next, it frees up memory in declarative (short term memory) as it moves to proceduralization (long term memory). Lastly, they can potentially explain why there are differences between individual learners. This is because the establishment of declarative knowledge is likely to be affected by individual differences, such as general intelligence, level of proficiency, the capacity of a learner's working memory,

individual cognitive differences or learning styles (DeKeyser, 2003, 2005; Roehr, 2008).

2.2.3 Self-Efficacy Theory

Besides looking at language and skill-related theories to explain why WDs occur, this study also explores self-efficacy theory to explain why WDs may occur and persist. According to Bandura, self-efficacy is defined as an individual's belief in his or her ability to succeed in specific situations or to accomplish a task (Bandura, 1977, 1986). This points to the notion that an individual's sense of self-efficacy may play a pivotal role in how students approach goals, tasks, and challenges. How they act, think and feel may be directly connected to their beliefs and vice versa (Pajares & Valiente, 2006). This means that academic writing self-beliefs may be strongly predictive of academic writing performance.

Students with high self-efficacy are more likely to approach difficult tasks as challenges to be mastered rather than as challenges that are limiting. If this is the case, they might be expected to set themselves challenging goals and maintain a strong commitment to accomplishing them, sustain their efforts in the face of failure, and attribute failure to insufficient effort or inadequate knowledge and skills that could still be acquired (Bandura, 1995). On the other hand, students with low self-efficacy in a given area may easily give up on trying to accomplish difficult tasks. They are likely to have goals that they feel are less achievable, a weaker commitment to the goals that they choose to accomplish and may not concentrate much on how to perform well. Instead, they may spend much of their energy focusing on their limitations and failures. When faced with difficult tasks, their faults and the obstacles they might encounter trouble them. As a result, they may decrease their efforts and quickly give up in the face of challenges, be slower to recover their sense of efficacy following failure or setbacks

35

because they perceive their performance as an example of their limited capabilities (Bandura, 1995). From these explanations of students with high and low self-efficacy, it would seem best for students to have high self-efficacy, especially when addressing WDs, because they are more likely to take on the challenge of the difficulty with added effort and commitment. Also, students with a high awareness of self-efficacy are likely to approach a writing task differently than those with a low awareness of self-efficacy because high self-efficacy will likely enhance motivation to succeed whereas low self-efficacy may impart a belief that the task is unachievable (Bandura, 2012). Self-efficacy theory, therefore, suggests that students with high self-efficacy are more likely to commit to achieving difficult tasks while those with low self-efficacy are not.

To ensure that students progress towards having high self-efficacy, they need to know what factors help develop self-efficacy. There are four major sources that contribute to the development of self-efficacy beliefs: 1) performance accomplishments, 2) vicarious experience, 3) verbal persuasion and 4) physiological states (Bandura, 1977). '*Performance accomplishments*' are when the experience of expert knowledge or outstanding ability influences students' perspective on their abilities. Successful experiences lead to greater feelings of self-efficacy. However, failing to successfully deal with a task or challenge can also undermine and weaken self-efficacy. '*Vicarious experience*' is when observing someone else perform a task or handle a situation can help students to perform the same task through modelling. If the person they are observing succeeds in performing a task, they are likely to believe that they will succeed as well, if the task is not too difficult. Observing people who succeed and are similar in ability to the one, who is trying to succeed, will increase beliefs that one can master a similar activity. '*Verbal persuasion*' is when other people encourage and convince students to perform a task, they tend to believe that they are capable of performing the task. Constructive feedback is important in maintaining a high sense of

efficacy as it may help overcome self-doubt. *'Physiological states'* are moods, emotions, physical reactions, and stress levels that may influence how students feel about their personal abilities. If they are extremely nervous, they may begin to doubt themselves and develop a weak sense of self-efficacy. If they are confident and do not feel anxiety or nervousness, they may experience a sense of enthusiasm that encourages a great sense of self-efficacy. It is the way students interpret and evaluate their emotional states that are important for how they develop self-efficacy beliefs. For this reason, being able to diminish or control anxiety may have a positive impact on self-efficacy beliefs. From these four sources, the two sources that could likely be more helpful in addressing WDs in a classroom situation are *'vicarious experiences'* and *'verbal persuasion'* because students can see how to address a WD through teacher/peer modeling and are guided in the right direction with encouraging, constructive feedback. Bandura (1977) goes on to say that verbal modelling of what the teacher/peer is doing and thinking, builds self-efficacy and promotes cognitive skill development because students are not just imitating what they see should be done but also imitating what they think should be done.

Self-efficacy theory in this study, therefore, leads to research questions 1b and 1c that investigate the self-efficacy (perception) that students have of their WDs (1b) and then explore whether there is a correlation between their perceptions of their WDs and their actual WDs (1c). For example, if a student perceives difficulty with writing an introduction (RQ 1b), then the purpose of RQ 1c investigates whether there is a correlation between that perception and the student's actual writing of an introduction.

2.3 Genre

The literature so far has shown some of the problems that students have when writing (2.1) and has suggested language-related reasons and self-efficacy theory why

these problems may occur (2.2). Another reason, however, that writing problems occur is that students may be unfamiliar with and/or have insufficient knowledge of the genre they are writing within. In order to address this problem, students need to know the characteristics typically expected of the genre. Therefore, it is necessary to analyse a genre by identifying the genre characteristics and then determine if students are able to write according to those genre characteristics. Before describing the expository essay genre, this section defines the term 'genre'.

2.3.1 Defining genre

The definition of genre, especially in terms of L2 writing, has changed over the years according to different L2 researchers. Swales (1990) defined genre as a class of communicative events that are employed by a particular discourse community whereby the members of the community understand, know and share the same general communicative purposes. He further states that genre demonstrates various patterns of likeness in terms of style, structure, content and the intended audience. Therefore, when a text meets a sufficient likeness or commonality of expectations and possible requirements of the discourse community or genre, then the text is considered to be a prototypical member of that discourse community. Other genre researchers also agree that not every text produced within a genre is going to be exactly the same (Johns, 2008; Paltridge, 2004; Tardy, 2009). For example, in the expository essay genre, one can expect essays to be written for a diversity of disciplines, indicating that while they are considered products of the same genre, they will not necessarily look the same because of discipline variation (Samaraj, 2004). That being said, the main genre characteristics should still be evident in final written products. Writers who are frequently involved in a particular genre agree on how a type of writing should be produced because they are consistent participants and users of this discourse

community. In other words, regular users of a genre should be able to easily recognize and construct text based on an understanding of what is expected regarding how language, structure, purpose and content should be realized in that genre, and because they have the appropriate genre knowledge and expertise (Hyland, 2007; Tardy, 2009).

To summarize, therefore, it can be said that genre is a type of discourse which occurs in a particular setting/context, and has distinctive and recognizable patterns and conventions with respect to content (including language) and structure. Two features of genre that are key to this study are: 1) the defining characteristics of a specific genre, and 2) the rhetorical organization of those characteristics. The relevance of genre theory in this research is that the principles of genre may enable teachers to predict the type of global WDs their students may experience in the genre.

Another reason that genre is important to this study, is because it has been the focus of much discussion with regards to L2 writing pedagogy for the past two decades (Tardy, 2017). L2 writing teachers have found that it is difficult to teach genre because of the danger of becoming too prescriptive which may hinder students' innovation and creativity (Kay & Dudley-Evans, 1997; Tardy, 2017). However, this issue may be avoided by providing explicit instruction only targeting the genre characteristics that are problematic for students.

2.3.2 The defining characteristics of the expository essay genre

For this research, the expository essay has been chosen as the genre to investigate WDs because it is a mode of discourse that is commonly used in writing assignments at both the undergraduate and postgraduate level in university study (Diehl, 1980; Heath, 1980; Mikuleky, 1982; Northcut, 1975). Its purpose is to update, explain or develop knowledge in a specific content area in different ways, for example, by comparing and contrasting, problem solving or argumentation (Allington & Strange,

39

1980). For an expository essay, a student is usually required to explore an idea and then evaluate evidence to assist in the development of the idea. The main purpose of idea development is to present an argument about that idea in a clear, lucid manner. A number of universities have online sources that provide structures of commonly used genres in academic settings. This study uses one of those sources (Purdue's Online Writing Lab) to describe the general characteristics and structure of an expository essay and is presented below in Table 2.2.

Table 2.2

Structure of an expository essay (The Purdue Online Writing Lab)

Expository Essay	
Characteristics	Description
A clear, concise, and defined thesis statement that occurs in the first paragraph of the essay.	It is essential that this thesis statement be appropriately narrowed to follow the guidelines set forth in the assignment. If the student does not master this portion of the essay, it will be quite difficult to compose an effective or persuasive essay.
Clear and logical transitions between the introduction, body, and conclusion.	Transitions are the mortar that holds the foundation of the essay together. Without logical progression of thought, the reader is unable to follow the essay's argument, and the structure will collapse.
Body paragraphs that include evidential support.	Each paragraph should be limited to the exposition of one general idea. This will allow for clarity and direction throughout the essay. What is more, such conciseness creates an ease of readability for one's audience. It is important to note that each paragraph in the body of the essay must have some logical connection to the thesis statement in the opening paragraph.
Evidential support (whether factual, logical, statistical, or anecdotal).	Often times, students are required to write expository essays with little or no preparation; therefore, such essays do not typically allow for a great deal of statistical or factual evidence
A bit of creativity!	Though creativity and artfulness are not always associated with essay writing, it is an art form nonetheless. Try not to get stuck on the formulaic nature of expository writing at the expense of writing something interesting. Remember, though you may not be crafting the next great novel, you are attempting to leave a lasting impression on the people evaluating your essay.
A conclusion that does not simply restate the thesis, but readdresses it in light of the evidence provided.	It is at this point of the essay that students will inevitably begin to struggle. This is the portion of the essay that will leave the most immediate impression on the mind of the reader. Therefore, it must be effective and logical. Do not introduce any new information into the conclusion; rather, synthesize and come to a conclusion concerning the information presented in the body of the essay.

From this table, we can see in the first column that the expository essay has recognizable characteristics and in the second column there is a description of each characteristic. Because there are various types of exposition, this research has chosen to focus specifically on the defining characteristics and rhetorical organization of an

argumentative expository essay because this type of writing is commonly used in academic writing.

2.3.3 A genre description of the argumentative essay

The general features of an expository essay can be seen in Table 2.3 and an argumentative essay is one type of expository essay. The argumentative essay is a genre of writing that requires the student to investigate a topic, collect, generate and evaluate evidence and establish a position on a topic in a concise manner (Purdue OWL). Additionally, the argumentative essay is defined by its purpose, which is to persuade the reader of the appropriateness of a central statement (Hyland, 1990). This research uses Hyland's (1990) Elements of structure of the Argumentative Essay (Table 2.3 below) as a basis for the typical characteristics of argumentation.

Table 2.3

Elements of structure of the Argumentative Essay (Hyland, 1990, p. 69)

Stage	Move
1. **Thesis** – Introduces the proposition to be argued.	(Gambit) Attention Grabber – controversial statement or dramatic illustration. (Information) Presents background material for topic contextualization. (Evaluation) Positive gloss – brief support of proposition. (Marker) Introduces and/or identifies a list.

2. **Argument** – Discusses grounds for thesis. (Four move argument sequence can be repeated indefinitely)	Marker
	Signals the introduction of a claim and relates it to the text.
	
	(Restatement)
	Rephrasing or repetition of proposition.
	
	Claim
	States reason for acceptance of the proposition. Typically based on:
	  a. Strength of perceived shared assumptions.
	  b. A generalization based on data or evidence.
	  c. Force of conviction
	
	Support
	States the ground which underpin the claim.
	Typically:
	  a. Explicating assumption used to make claim.
	  b. Providing data or citing references.

3. **Conclusion** – Synthesizes discussion and affirms the validity of the thesis.	(Marker) Signals conclusion boundary.
	Consolidation Presents the significance of the argument stage to the proposition.
	(Affirmation) Restates proposition
	(Close) Widens context or perspective of proposition.

As can be seen in Table 2.3, the organization of the three stages is stated in terms of stages and moves. Hyland (1990) states that the elements in parenthesis are optional in the structure of an argumentative essay and indicates that if a particular element were to be used, it would occur at that position in the essay. Each stage has particular functions, which are explained in the following paragraphs.

The thesis stage introduces the discourse topic and advances the writer's position or central statement. The first optional move in the thesis stage is the gambit and its purpose is to capture the reader's attention rather than to merely inform. Hyland (1990) has made this optional because he states that this move requires a certain skill to impress the reader. The information move, on the other hand, is generally featured in this type of writing and can come in the form of definitions, classifications or descriptions. The main part of the thesis is the proposition stage, which provides a specific statement of position that defines the topic and its focus. An evaluation may follow the proposition while the marker structures the discourse by signposting the direction of the essay.

The next stage, argument, consists of the possibility of four moves because the restatement is optional. The moves are cyclical in that they are most likely repeated in a specific order. The marker move gives direction to the argument and connects it to the steps in the argument and the proposition. A proposition is often restated next (optional as shown in Table 2.3), but the central move in the argument stage is the claim. The claim is a reason for the given proposition and Hyland (1990) offers three ways to help

students with persuasion (as shown in Table 2.3). The last move in the argument stage is the support move, which is an essential second part to the claim. It provides reinforcement for the claim and may comprise more than one paragraph if using a range of sources. The support move is therefore relevant to the claim and the proposition.

The conclusion stage is more than a summary or review of what has already been written. Rather, Hyland (1990) claims that the conclusion "functions to consolidate the discourse and retrospectively affirm what has been communicated" (p. 74). Here, he offers four moves (as shown in Table 2.3) to be considered at the conclusion stage that present more than just a summary, with the key move being to present the significance of the argument stage to the proposition.

After reviewing the structure of an expository essay and the elements of an argumentative essay, it can be seen that the following characteristics can be expected for an argumentative type expository essay. The essay will have a thesis that introduces the proposition to be argued and the thesis will occur in the introduction paragraph. The introduction will also have context to frame the argument or proposition. The essay will continue with body paragraphs that will be connected with clear and logical transitions and each body paragraph will provide a reason for the given proposition with support and evidence. The number of body paragraphs will depend on the number of propositions given by the writer. The essay will conclude with a synthesis of the given argument and a restated thesis statement. When these features are not present or are not appropriately written, it can be said that a WD has occurred.

2.3.4 WDs predicted from genre description of the argumentative essay

Having a clear genre description of the argumentative essay, such as the one provided by Hyland (1990), makes it easy to predict possible WDs. These include a misinterpretation of the writing assignment, unclear thesis statement and minimal to no

contextualization (Lea & Street, 1998; Wolfesberger, 2007). These WDs may prove problematic for the learner's organization of the essay and ultimately make the writing difficult for the reader to understand. Predicted WDs at the argument stage are a weak signal or no signal to introduce a claim, unclear propositions, unclear reasons for propositions, lack of supporting details for a proposition, lack of connection to thesis statement and propositions unrelated to thesis statement (Belcher, 1994; Casanave & Hubbard, 1992; Ching, 2002; Cooley & Lewkowicz, 1995; James, 1984; Kroll, 1990; Sasaki, 2004; Sengupta, 2000). All of these WDs make it especially difficult for a reader to understand the direction the writer has taken (i.e., in terms of meaning and organization) and the point the writer is trying to convey. Finally, if the ideas and arguments given in a conclusion have not been appropriately consolidated into a conclusion, then a WD with regards to writing a conclusion can be predicted.

L2 students most likely experience WDs at the discourse level because they do not have the genre knowledge they need in order to write appropriately in the genre. Students may have some knowledge about general writing but not necessarily the characteristics of a particular genre. For example, in the argumentation genre mentioned above, students may know how write an introduction but not necessarily how to introduce a claim and then further support it. Belcher (1994) states that students need to be able to situate themselves within their writing and be able to transfer the rhetorical skills gained from one genre to another genre in order to be successful in academic writing. However, this is problematic when a student lacks the genre knowledge, which is needed to sufficiently complete a writing assignment (Swales, 2004). Hyland (1990) agrees that difficulties faced by EFL and ESL students can be attributed to an inadequate understanding of how texts are organized within a genre and proposes that genre be an important focus when teaching writing.

Despite the WDs referred to in this section, they continue to occur and this may

be because of learners' lack of genre knowledge and teachers' lack of genre-based instruction. L2 students can build their genre knowledge by being explicitly told what features of their writing are not within the boundaries of the genre. This is best communicated by instructors who are assigning the given written task because they would be most knowledgeable about the genre of the writing task they are assigning. As a result, instructors must be familiar with the genre, the defining characteristics of the genre, and be able to explicitly instruct the stages of the defining characteristics of the genre. Once genre characteristics have been defined and chosen upon for instruction, the next step is to choose an appropriate type of approach to target genre WDs. This leads to the discussion of what instructional approaches have been previously used to address WDs and the extent to which they have been successful.

2.4 Previous approaches used to address WDs

In the published L2 writing research, there have been a number of previously reported approaches that focused on helping L2 students with their WDs (e.g., Ashwell, 2000; Bacha, 2010; Cooley & Lewkowicz, 1995, 1997; Ferris, 2006; Hartshorn, 2010; Storch & Tapper, 2009). Although some of these studies were of contexts that may be outside the scope of this research (e.g. postgraduate), they still offer useful insights for future approaches. Therefore, the purpose of this section is to discuss these approaches and determine to what extent each approach was successful or unsuccessful. The discussion is structured as follows: individual writing feedback from teachers and (2.4.1) instruction from ESL writing courses and workshops (2.4.2).

2.4.1 Individual writing feedback from classroom writing teachers

A well-known approach that has helped students address their writing errors is direct/indirect written corrective feedback (CF) from writing teachers (Bitchener &

45

Ferris, 2012; Bitchener & Storch, 2016). In contrast to language learning teachers, who provide feedback on a range of language learning issues (e.g. pronunciation, listening, speaking, reading, etc.), writing teachers provide feedback only on issues that occur in written texts. The written CF provided by writing teachers can help students to improve accuracy in the use of specific linguistic forms and structures (local WDs), and also improve the clarity of argument and organization (global WDs) (Bitchener, 2008). Therefore, written CF literature is worth reviewing to understand why some errors still occur in subsequent writing assignments even when written CF has been given previously. In addition, written CF literature can inform us of which errors to focus on, for example, those that occur more than others. There is a body of literature that reports different types of written CF research, such as the short-term effects of teachers' feedback (Ashwell, 2000; Hartshorn et al., 2010; Truscott & Hsu, 2008) and the long-term effects of teachers' feedback (Chandler, 2003; Foin & Lange, 2007). This section will discuss two of these studies (Ashwell, 2000; Hartshorn et al., 2010) to assess the contribution that written CF research can make to address WDs. These studies were chosen because they took place in contexts similar to that of this research. For example, they took place in L2 writing classes (as opposed to ESL general language classes), and both local and global errors were attended to as part of process writing instruction (e.g., two or more drafts were written before final submission).

2.4.1.1 Feedback addressing local and global WDs

The discussion begins with an overview of the first study. Ashwell (2000) compared three types of written CF treatment in a study of 50 undergraduate EFL participants at a Japanese university. The three types of written CF were given to experimental groups. The feedback comprised indirect feedback on form (local WDs e.g., grammatical, lexical or mechanical) by underlining or circling the error and direct feedback for content (global WDs e.g., organization, paragraphing, cohesion and

relevance) through written comments. Students were given feedback after their first and second draft of an assignment with the aim of producing a quality (e.g., almost error free) third and final draft. Group 1 received content feedback on draft 1 and form (accuracy) feedback on draft 2; group 2 received form feedback on draft 1 and content feedback on draft 2; and group 3 received a mix of content and form feedback on both draft 1 and draft 2. Group 4 was the control group and did not receive any feedback at all.

The context of the study was a university writing class that followed a process writing approach. Process writing is where students are instructed to carry out different processes when writing (e.g., pre-writing, drafting, revising and editing) with multiple drafts and peer-editing (Bereiter & Scardamalia, 1987; Flowers & Hayes, 1980, 1981; Krapels, 1990). The focus of this study was to see whether treating content (global WDs) errors before form (local WDs) errors (the treatment for group 1) in a writing class that used process instruction improved students' writing more than treating form errors before content errors (treatment for group 2) or treating both form and content errors at the same time (treatment for group 3). This type of approach was investigated because a few L2 writing researchers who support process-based writing instruction believe that students should attend to content (global WDs) before form (local WDs) (Ashwell, 2000; Sommers, 1982; Zamel, 1985). They believe that content and form feedback should be given separately (e.g., first draft – content, second draft – form) because sometimes when teachers address both content and form errors in the same piece of text, their feedback can be seen as confusing for the student. For example, teachers may provide feedback on punctuation errors while providing feedback on a content related error, such as asking a student to clarify a point that is unclear, in the same paragraph. This can be confusing for students because they may not know whether to focus on explaining the unclear point first or

correcting the punctuation. Furthermore, when students do clarify unclear points, they may eliminate the need to correct the punctuation errors, or there may be new punctuation errors as a result of the revised text. This is an important point because it suggests that when attending to WDs, perhaps consideration should be given to correcting global WDs first, so that meaning is clearly conveyed, before attending to local WDs.

The results of this study (Ashwell, 2000) provide insight into the type of feedback that was most successful in improving students' writing. The first result was that the group that showed the most improvement in both content and form in draft 3 (final draft) was group 3 (mixture of local and global feedback at draft 1 and draft 2), indicating that this type of feedback was most effective. However, this finding does not support the argument that feedback on content before feedback on form is most effective (Sommers, 1982; Zamel, 1985). For this argument to be supported, group 1 would have to have shown the most improvement in content and in form at draft 3.

In fact, overall, the results of group 1, who received feedback on content in draft 1 and form in draft 2, do not support the hypothesis that student writing will improve the most when feedback is provided on content first as this group showed the least improvement in content of all the groups. Even the control group (group 4) showed slightly more improvement in content with no feedback than group 1, suggesting that perhaps attending to content first is not the most effective. This may be because written CF on form is clearer to students than written CF on content. For example, Ashwell (2000) found that students focused more on form feedback than on content feedback because in most cases they found the form feedback easier to address. For example, some form errors (13%) were fairly simple to address (such as spelling/typo – grasses [glasses]), while many content errors (67%) such as reader comprehension were

more cognitively demanding, and where the researcher may have commented 'what do you mean/I can't follow this?' In some cases, students did not know how to revise their text from the content feedback and only made a one-word change to content errors that needed more modifications. Thus, students may need more explicit instruction to accurately attend to their content errors than what can be provided through written feedback.

Other results concern group 2, who received feedback on form in draft 1 and feedback on content in draft 2, and group 4, the control group, that received no feedback. Group 2 improved slightly less than group 1 in regards to form and made the same amount of improvement as the control group (group 4) when it came to content. While group 4 (no feedback) made the least improvement in form, it was the second most improved in content along with group two.

From these results it can be seen that the provision of direct and indirect individual feedback allowed some students to show improvement when writing their final drafts. However, the results also show that correcting content-related errors was not as successful, suggesting that additional explicit instruction may be needed when addressing content-related errors. Furthermore, because only one piece of writing was produced, one important gap in this research is that there was no process in place to assess whether the improvement that occurred in students' writing was retained for more than one writing assignment. This gap could be addressed in future studies by having students produce a similar text after a period of time to see to what extent the writing improvement observed after the initial written CF was retained.

The second written CF study by Hartshorn, Evans, Merrill, Sudweeks, Strong-Krause & Anderson (2010) took place in an Intensive English Program at an American university and included 47 EFL participants. Students wrote a 30 minute essay at the beginning of the semester and essays were scored in two areas: linguistic accuracy

(local WDs) and 'rhetorical writing competence' (global WDs). Then the researchers used a six step approach throughout the semester, after which the students wrote another 30 minute essay at the end of the semester to measure improvement. The six step approach was conducted as follows. In step 1, students wrote a 10 minute paragraph daily and gave it to the teacher. Then for step 2, the teacher would code the students' errors (indirect feedback) on the paragraph and return the paragraph to the student. With this step, the teacher would also give the paragraph a score. At step 3, students would log their errors on an error tally sheet, correct the errors and hand in a rewritten paragraph to the teacher. At step 4, the teacher would code any errors that still existed (as in step 2) and then return the paragraph back to the student. For step 5, the student would log any further errors (as in step 3), correct the errors and resubmit the paragraph to the teacher. If any further errors existed, then step 6 would be a repeat of steps 4 and 5 as needed until the writing was error free. This approach focused mainly on accuracy errors (local WDs) such as incorrect or omitted articles, wrong subject verb agreement, wrong verb form, incorrect use or omitted prepositions, and incorrect verb tenses to name a few. Hartshorn et al. (2010) used an experimental and control group, whereby students in the experimental group received the six step instruction and students in the control group did not.

In the study, Hartshorn et al. (2010) reported two main results that provide insight into what was successful or unsuccessful about the written CF approach. The first result showed that the students in the experimental group had fewer errors related to linguistic accuracy in the post-test than the students in the control group, suggesting that the instruction was successful with regards to accuracy (local WDs). However, the second result showed that the overall rhetorical competence (global WDs) was not affected by the written CF approach. In fact, the written CF approach seemed to have a negative effect on the rhetorical competence of the experimental group.

All L2 students need to be able to adequately address their L2 WDs. These two studies have thus far shown approaches used to help students at the undergraduate and intensive English program level of study attend to some of their WDs. However, WDs also exist at the postgraduate level. As previously mentioned (2.5), despite the postgraduate context being outside the scope of this research, these studies are worth referring to as they offer insights for the creation of a new approach for dealing with undergraduates' WDs.

2.4.2 Postgraduate writing courses and workshops/seminars

One way to help students overcome their WDs at the postgraduate level that has been examined is having them take writing courses or workshops/seminars designed specifically to help L2 writers. Writing courses can be offered every semester or in some cases they are created specifically as a particular need arises. The following two studies provide examples of writing workshops (Cooley & Lewkowicz, 1995, 1997) and writing courses (Storch & Tapper, 2009). They show that postgraduate students still have a range of problems with their L2 writing.

The aim of Cooley and Lewkowicz's (1995, 1997) studies were to provide a series of workshops to improve the quality of the thesis writing of MA and PhD students at the University of Hong Kong. In order to design appropriate workshops, Cooley and Lewkowicz (1995, 1997) asked students, via surveys, what they thought was the most difficult for them when writing because they wanted the workshops to focus on the areas considered to be most problematic. The results showed that 47% of the survey respondents wanted help mostly with writing style and expression, organization, grammar, referencing and writing literature reviews. In addition, after analysing students' texts, the WDs revealed to be most problematic were global WDs grouped under four main headings: communication, substantiation, discourse elements

51

and editing. With regards to communication, students' texts showed global WDs such as having an unclear thesis statement, poor organisation and contradictory arguments. Global WDs were also the issue in relation to substantiation, such as the inability to justify claims from research, incorrect referencing and an inability to use sources to prove a position. Discourse elements and editing problems, on the other hand, were a mixture of global and local WDs like poor paragraph development, inadequate overall structure (global WDs), poor choice of vocabulary and poor grammar (local WDs). This data from the surveys and text analyses were used to determine the aspects of writing that would be focused on during the workshops.

After a series of six workshops, student feedback showed that they believed that the workshops were helpful, but a number of important gaps were revealed that the researchers believed should be addressed in future investigations. First, there were no data or examples from texts produced by the students after attending the workshops to illustrate that there had been improvement. Cooley and Lewkowcz (1995, 1997) recognized this but stated that the improvement of students' writing could only be truly assessed by the students themselves or by their supervisors and examiners because they came from different writing disciplines with different types of writing requirements. The second gap is that if students' writing did improve, there was no process in place to determine whether the improvement was the result of the writing workshops. In other words, there was no evidence that the workshops were effective in addressing problematic areas in postgraduate students' writing. The last gap is that because students belonged to a range of different disciplines, their writing needs were different. As such, Cooley and Lewkowicz (1995, 1997) acknowledged that discipline-specific workshops were needed.

The gaps from this study suggest things to consider when planning future investigations about how to attend to WDs. First, data need to be collected to be able to

assess if writing improved as a result of the workshop. This means there needs to be a system that assesses students' writing before the workshop and after the workshop in order to reveal writing improvement and help researchers determine if the workshop was effective. Third, there also needs to be a method of assessing students' writing needs before the workshop and after the workshop to see if their writing problems were addressed as a direct result of the approach and not as a result of other moderating factors (e.g., teacher and/or tutor assistance, the impact of concurrent coursework).

Another study that investigated a course designed to attend to global WDs experienced by ESL postgraduate students was conducted in Australia over a 12-week semester (1.5 hours a week) (Storch & Tapper, 2009). The course was called Presenting Academic Discourse (PAD) and it focused on developing students' language and academic skills, for example, being able to write research-related texts accurately with appropriate language. This course was created as a result of postgraduate lecturers and supervisors reporting concerns with students' writing and also students themselves reporting that they needed help with their writing.

The instruction was based on four main writing tasks (summary, comparison summary, research proposal and writing an oral presentation) and students were able to choose their own topic to focus on for each task. After the first draft of each task, the instructors gave feedback on structure and language only. This was because the instructors were not content-specific instructors, so they felt they could only comment on structure and language. After the first draft, instruction consisted of a discussion of the most frequently revealed errors using examples from students' writing. Some examples of the most common local WDs were incorrect use of articles and inappropriate adverb and verb use. Instructors used model texts for students to analyse and then compare with their own text to hopefully raise awareness of what was missing or inappropriate in the students' writing. When comparing texts (model text vs student

text), students looked at structure, language and phrases that were common and frequently used in the model text.

In order to see if the PAD approach was effective, Storch and Tapper (2009) used a test/re-test design where students wrote a piece of text in week 1 and again in week 10. Students were asked to describe an important issue or concept or process that was relevant to their field of study in 30 minutes in week 1 (test) and then write using the same topic again in week 10 (re-test). Students also completed a short questionnaire which elicited information about their English language use, proficiency, and writing assignments other than the ones in the PAD course, along with whether they thought PAD had helped them in their academic writing. Students' texts were analysed for language fluency and accuracy, use of academic vocabulary, text structure and rhetorical quality. The results of the text analysis found that most of the students had improved by week 10 in comparison to week 1. In addition, students' comments from the questionnaire indicated that because of taking the PAD course, they were more aware of the structure, grammar, and referencing that is expected in writing assignments at postgraduate level, suggesting that this approach was successful.

However, there were gaps and limitations to consider when assessing whether the approach was the reason for the improvement. The first gap is that peers studying at the postgraduate level, but who had not participated in PAD, also experienced writing improvement from week 1 to week 10 as reported by instructors of their concurrent courses. This casts doubts on whether the students who participated in PAD and improved by week 10 had done so specifically because of their enrolment in the PAD course. Because the approach was over 12 weeks and students were taking concurrent courses, it is difficult to know whether PAD was the reason for students' improvement. Students' writing may have improved from the academic learning in their concurrent courses or influential factors other than PAD (e.g. peer or tutor help). This issue may

have been addressed if a control group had been used because a control group would have provided clearer evidence that the PAD was the reason for improvement in students' writing. Also the PAD approach had a range of comprehensive instruction, which makes it difficult to link a specific part of the PAD course to the improvement of a particular aspect of students' writing when so many other influential factors were apparent. Finally, a limitation to the study was that a single 30 minute text may not necessarily fully reveal a student's writing ability. Storch and Tapper (2009) acknowledged this limitation and stated that 30 minutes led to the production of short texts, especially for postgraduate students, which made them difficult to assess for rhetorical quality and even fluency.

As pointed out with the studies previously discussed in this section, the gaps in this study require consideration for future investigations. The first gap suggests that a control group should be used in conjunction with a treatment group to help determine the effectiveness of any intervention. The second gap, also mentioned with other studies (Cooley & Lewkowicz, 1995, 1997; Hartshorn et al., 2010), implies that a systematic method needs to be implemented that clearly links improvement in students' writing to the instruction provided. In this example, by not being able to connect parts of the PAD instruction to students improved writing; it is difficult to determine whether PAD was effective and the cause of any writing improvement. Finally, in order to overcome the limitation created by the 30 minute time limit, students should be given more time (perhaps 50- 60 minutes) to get an accurate idea of their rhetorical ability. As with the Ashwell (2000) study, a further gap was that no measures were put in place to determine whether the PAD helped students in future writing assignments. As previously stated with regards to Ashwell (2000), students should produce another text after an appropriate amount of time to see the extent to which the WDs addressed by the instruction remain lessened after a period of time. The last issue revealed from both

studies (Cooley & Lewkowicz, 1995, 1997; Storch & Tapper, 2009), is that students at the postgraduate level still have WDs despite receiving L2 writing assistance at the undergraduate level (e.g. L2 undergraduate writing classes and L2 writing tutors). This raises a concern about whether the writing assistance or approaches received at the undergraduate level were inadequate in addressing WDs or whether they only addressed WDs short term (i.e., only for one assignment).

2.4.3 Summary

From the evidence above we see that some of the strategies employed in the different approaches were found to be helpful in addressing WDs and some were not. For example, written CF was helpful in attending to a number of accuracy errors but not necessarily to content errors because students needed more explicitly guided instruction on how to address content WDs errors than was provided by the feedback (Ashwell, 2000; Hartshorn et al., 2010). Additionally, despite some evidence of focused instruction benefitting L2 learners (Cooley & Lewkowicz, 1995, 1997; Storch & Tapper, 2009) more research is needed to investigate what type of instruction would best to address L2 learners WDs. From the evidence that some strategies successfully addressed WDs, the next section (2.6) will discuss empirical research and theories that support investigating an instructional approach that focuses on strategies.

2.5 Investigating an explicit strategy instructional approach to treat WDs

This section begins by describing the issues in defining a strategy (2.5.1) because these issues have impacted the different ways strategies have been used and taught in L2 classrooms and operationalized in empirical research. Next is a discussion of two theoretical explanations (skill acquisition theories (2.5.2.1) and metacognitive theory (2.5.2.2)), about how strategies work and a justification as to why they are worth

exploring with regards to treating WDs. After this, a review of literature will be

presented, looking specifically at L2 writing studies that have reported research on

strategy-based instruction (2.5.3). The review of literature will show what was effective

and ineffective in the research.

2.5.1 Issues in defining a strategy

As previously stated (Chapter 1 – Introduction), a writing strategy, in the

context of this research, is defined as '*a conscious action/s taken by a learner to*

achieve a goal that contributes to improvement in their L2 writing'. According to N. J.

Anderson (2008), strategies have to be a conscious action because learners have to be

aware of the problem they face in order to consciously complete an action to solve

them. In addition, he argues that in order for a student to recall a strategy to use again at

a later time, the student needs to have been consciously aware of it the first time it was

used. Cohen (2010) also agrees with N. J. Anderson (2008) that a student needs to be

aware of the strategy being taught in order for it to be useful.

Defining a strategy has been an ongoing issue in strategy research (Cohen &

Macaro, 2007). This issue was addressed as part of a survey conducted at the

International Project on Language Learner Strategies (IPOLLS) where Cohen asked a

number of strategy researchers in L2 learning (Anderson, Chamot, Macaro, Oxford,

Rubin, Takeuchi and Vandergrift to name a few) to respond to the following proposed

strategy definition:

> 'Strategies can be classified as conscious mental activity. They must contain not
>
> only an action but a goal (or an intention) and a learning situation. Whereas a
>
> mental action might be subconscious, an action with a goal/intention and related
>
> to a learning situation can only be conscious' (Cohen & Macaro, 2007, p. 31).

Only three participants agreed with this definition in full, as some did not agree with the "conscious" component. These respondents argued that students who are more competent seem to use language-learning strategies more and more routinely, so that the strategy is no longer conscious. They claimed students who perform the strategies unconsciously have in fact automatized the strategy, which is then referred to as a skill (see section 2.5.2.1 for further explanation). This movement from strategy to skill (or consciousness to unconsciousness) is best explained by theories that show how information is processed.

2.5.2 Theoretical explanations of strategy effectiveness

There are two theories that best explain the nature of how strategies work and how they can be utilized to attend to WDs. They are skill acquisition theories (2.5.2.1) and metacognitive theory (2.5.2.2).

2.5.2.1 Skill Acquisition Theories

As previously explained (see section 2.2.2), skill acquisition theories explain how learners acquire a skill from initial instruction to automatic advanced competence. In this section, active control of thought (ACT) (J. R. Anderson, 1983, 1993), is discussed because it is more closely related to the skill development of strategies (e.g. declarative knowledge to procedural knowledge). This shows that there are skill acquisition theories that are relevant to both language (the information processing model) and skill areas.

Like the IPM model, J. R. Anderson's (1982, 1983) ACT also maintains that information is processed in three stages: 1) cognitive (declarative) stage 2) associative (procedural) stage and 3) autonomous (automatic) stage. At the cognitive stage, instruction is given and this results in declarative knowledge. The creation of

knowledge at this point requires attention (consciousness) before it can be accurately and effectively proceduralized. In the associative stage, the declarative knowledge can be proceduralized as a result of practice opportunities. Practice allows declarative knowledge to become less conscious and more unconscious and automatized. Despite some declarative knowledge requiring a large number of practice opportunities (e.g., knowledge regarding accuracy of complex L2 form and use) before proceduralization occurs, proceduralization can become complete after just a few trials/instances. For example, it may be quicker to learn and master how to write an effective topic sentence after only a few practice opportunities than to master the use of the definite article 'the' correctly in different situations. This is because linguistic accuracy requires consideration of more factors (e.g. form, meaning, use) than a L2 writing genre feature like writing a topic sentence. Once knowledge has been practised enough to become proceduralized, it moves on to the autonomous stage, when a learner is able to effortlessly retrieve the declarative knowledge and use it reliably and unconsciously.

From the stages of ACT, we can make the following predictions. First, while some types of automatized knowledge are transferable to other contexts, skills or tasks (e.g., signalling the direction of an argument by means of an advance organizer), some types of automatized knowledge are not easily transferable because they are highly context and skill specific. One such example is the skill of using the definite article correctly. Second, if the declarative knowledge is not explicit, students may have trouble putting that declarative knowledge into practice. It is difficult to practice something if one is unsure about what should be practised (proceduralization). Finally, proceduralization can occur after only a few practice opportunities, depending on the type of knowledge being proceduralized.

The underlying principles of skill acquisition theories inform this research because the process of how conscious actions taken to achieve a goal (strategies) is

similar to the process for acquiring skills (Oxford, 2011). In other words, strategies are operationalized in the same way that information is processed. For example, knowledge or instruction of a strategy begins with a description and example of the strategy, which results in declarative knowledge. Then the strategy is put into action and practised. Finally, once the strategy is mastered it is automatized and can be used unconsciously. N. J. Anderson (2008) maintains that knowledge of a strategy 'must' initially (at the cognitive/declarative stage) be conscious so that the learner is aware of the problem that the strategy is helping to overcome. He illustrates this in his Strategy-to-skill continuum shown in Figure 2.1 below.

Figure 2.1

Strategy-to-skill continuum (N. J. Anderson, 2008)

Strategy   **Skill**

Conscious awareness   Unconscious use
Language learning   Language use
(Consciously aware of   *(Unconsciously*
how to attend to WDs)   *attending to WDs)*
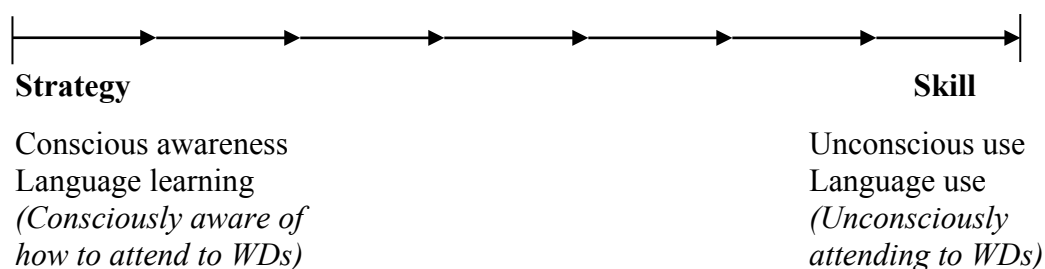
According to Figure 2.1, the strategy end of the continuum represents the cognitive stage (declarative knowledge). N. J. Anderson (2008) believes that a strategy is made conscious, either through explicit instruction or self-learning, and it is then utilized for the purpose of learning, or in the case of this study, attending to WDs. The continuum represents the associative stage (proceduralization) and the arrows represent practice opportunities. For some strategies, the continuum may be much shorter if they are easier to understand and use than others as explained previously. Once the strategy is mastered, N. J. Anderson (2008) shows that the strategy (conscious action) becomes a skill (strategy that has become automatic) that is unconscious and automatically retrieved for the purpose of accomplishing a particular objective. Therefore, we once again see the parallelism between skill acquisition theories (J. R. Anderson's ACT) and strategies (N. J. Andersons strategy to skill continuum).

An important part of strategy instruction is to ensure that students have a clear understanding of the purpose of the strategy that is being taught, because that will help them to know when and how to use it. For example, students should be explicitly aware of why they are using a strategy, know about its purpose, and the benefit of using it, to enable them to use it correctly and produce the targeted skill appropriately and accurately. In order for students to articulate their understanding of a strategy, they need to have metacognitive awareness of what it is that makes it an effective strategy for a particular skill. The various elements of metacognition (awareness and understanding of one's own thought processes) are explained in the following section.

2.5.2.2 Metacognitive Theory

Metacognition can be defined simply as thinking about your thinking (N. J. Anderson, 2002; Flavell, 1979). It is a combination of different thinking and reflective processes that inform how one would go about accomplishing a particular goal. Therefore, it is important for teachers to help students understand metacognition in order to encourage them to think deeper and reflect on how they learn, and lead to improved performance (N. J. Anderson, 2002). Therefore, one way to incorporate metacognition into a classroom is by using N. J. Anderson's (2002) model of metacognition.

2.5.2.2.1 Model of Metacognition

N. J. Anderson's (2002) model of metacognition was developed to be used in an L2 teaching and learning domain. The five components of the model are: 1) preparing and planning for learning, 2) selecting and using learning strategies, 3) monitoring strategy use, 4) orchestrating various strategies, and 5) evaluating strategy use and learning. According to N. J. Anderson (2002), L2 teachers can use the various

components of his model to help students think and reflect on how they learn. He further clarifies that metacognition is not a linear process that moves from the first component to the next component, as more than one component may occur at the same time. For example, as students are preparing and planning how to accomplish a task, they may also be selecting which strategies to use. Another example is that while students are monitoring the strategies they are using, they may realize that the strategy they initially chose is not working so they move on to another strategy, which is an example of arranging (orchestrating) their various strategies. As N J Anderson (2002) puts it, "The ability to coordinate, organize, and make associations among the various strategies available is a major distinction between strong and weak second language learners". L2 teachers can play a pivotal role in metacognitive awareness.

One way L2 teachers can raise metacognitive awareness is by helping students have metacognitive experiences. Metacognitive experiences are cognitive instances or occurrences that we associate with our learning (Flavell, 1979). For example, when a teacher is giving instruction of a task to be completed, as part of that instruction (a cognitive experience) the instructor may highlight the primary goal of the instruction (another cognitive experience), then lead a discussion of what strategies students could use to accomplish the task (another cognitive experience), have students write down the strategies they think they would individually use (another cognitive experience) and finally show examples of acceptable and unacceptable completed tasks so that students can see what they are working towards (another cognitive experience). Each cognitive experience goes deeper into the learners' thinking and enables them to reflect on how they would complete the task and pinpoint where they could make a change to do something better or, after completing the task, perhaps reflect further on where they have made an error. A lack of metacognitive experiences may reduce the ability to

explain or reflect upon why an aspect of a given task was not able to be successfully accomplished.

Another way L2 teachers can promote metacognition in students' learning is to help them evaluate their performance at various stages of the task through thoughtful questions (N. J. Anderson, 2002). For example, at the beginning of the task a teacher could encourage students to ask themselves 'What am I trying to accomplish?' Throughout the task, the teacher can prompt metacognition by asking students to consider questions like 'What strategies am I using?', 'How well am I using them?' and 'What else can I do to improve this assignment?' Answering these questions integrates all of the previous components of N. J. Anderson's (2002) model of metacognition by prompting reflective and thinking moments that can pinpoint where students have gone wrong in accomplishing a task, or what they did well that they may like to do again with another task.

Similar to skill acquisition theories, there are some important assumptions that can be made from metacognitive theory. For example, if students are not engaged in metacognition when performing a task, they may be at risk of making errors and not knowing why, how or when the errors came about. N. J. Anderson (2012) explains a consequence of students not being metacognitively aware may be a false self-assessment. He states that students may falsely assess themselves in two ways. Those who have a superficial self-assessment (which shows a lack of metacognition) believe their performance in a given task or skill is excellent and may not feel challenged, while students who have a hypercritical self-assessment (also shows a lack of metacognition) of their performance may underestimate their ability and proceed to give several reasons why they are not performing well. In order for both groups of students to engage in critical, accurate assessment, they need to be metacognitively aware of their learning processes. Another assumption is that engaging in metacognition can help

63

students take control of their learning because it instigates actions like preparing for effective learning, making decisions and monitoring what actions to perform when completing a task and then evaluating the effectiveness of the actions taken. In other words, there are benefits for learners being metacognitively aware and for teachers to engage learners in metacognition (N. J. Anderson, 2012).

The importance of metacognition with regards to this research is that if students are metacognitively aware, they may be able to attend to their problems without delay and with less difficulty. For example, they may benefit from having metacognitive knowledge about their WDs in order to know how to best attend to them. It is also important that they engage in a number of metacognitive experiences, which will help them be aware of the difference between what would work in a given situation versus what would not work. Metacognitive experiences will also allow the learner to be more reflective and think carefully about what is happening when they write. It may help them to fix WDs on their own rather than needing to be told what to do every time they face a problematic issue in their writing. Also, teacher-directed explicit strategy instruction can lead to metacognition being raised by the teacher initiating metacognitive moments at different times during the instruction. For example, at the beginning of the strategy instruction the teacher can ask: "What are you trying to accomplish" to have students begin to think of the purpose of using the strategy being taught.

These two theories (skill Acquisition theories and metacognitive theory) explain how strategies are operationalized. However, to further investigate strategies as a means of addressing L2 WDs, it is necessary to see what has been reported in terms of strategy-based instruction and focus on what issues have arisen with regards to L2 writing strategy instruction.

2.5.3 Empirical research for explicit strategy instruction

Strategy-based instruction is a process that involves explicit step-by-step instruction about how to perform a specific strategy, and instruction is usually provided by a teacher or a skilled user of the strategy (Cohen & Macaro, 2007). Therefore, with explicit strategy instruction, students can expect to be guided through the process of how to use a strategy, be given clear explanations about the purpose and rationale for the strategy and clear demonstrations of the strategy, with supported practice, until independent mastery has been achieved (Archer & Hughes, 2011).

There is a large body of research on the strategies that L2 learners use, with a growing number of those studies specifically looking into the instruction of strategies that will help improve L2 learners' writing (AlHasan & Wood, 2015; Berman, 1994; Ching, 2002; Cresswell, 2000; Panahi, 2013; Rao, 2007; Sengupta, 2000). The L2 writing strategy instruction research has been conducted from different perspectives, one of which has been to experimentally measure the effects of strategy instruction on students' writing. Some of these studies have looked at the effects of planning strategies (2.6.3.1) (Panahi, 2013; Rao, 2007), revising strategies (2.6.3.2) (Ching, 2002; Sengupta, 2000), essay writing strategies (2.6.3.3) (Berman, 1994), and formulaic sentence strategies (2.6.3.4) (AlHasan & Wood, 2015) on L2 writing. From a comprehensive review of these studies, it can be seen that there are some concerns that need to be considered when conducting further strategy instruction research.

2.5.3.1 Strategy instruction that focused on planning strategies

Strategy instruction research to improve the planning of L2 writing has been reported in different publications over the past decade. Panahi (2013) conducted a study of explicit strategy instruction on how to brainstorm (plan and generate ideas) before writing an essay, and reported that brainstorming strategies had a positive effect on

students' writing of two different essays (expository and argumentative). The strategy instruction consisted of strategies that helped students brainstorm individually and then collaboratively so they could receive and offer help regarding each other's ideas. The two written essays that were used to determine if the instruction was effective were rated on content, organization, language in use, grammar and mechanics. If students scored high on the essays, then Panahi (2013) considered that the high score was an effect of the brainstorming strategy instruction. Additionally, students stated that the brainstorming strategies helped them to write better.

Another study of strategy instruction for planning, conducted by Rao (2007), also focused on brainstorming. Rao (2007) investigated the effects of brainstorming strategies on learners' perceptions and performance in L2 writing with 118 students at Jiangxi Normal University (Peoples Republic of China). An identical writing task was used for the pre-test and post-test and gains from the pre-test to post-test for different assessment criteria along with an attitudinal survey were the instruments that determined whether the brainstorming instruction strategies had been effective. The study involved three groups of Chinese students whereby two groups were given strategy instruction (experimental groups) in conjunction with the traditional product-based approach and the last group (control group) only followed the traditional product based approach. The product approach began with controlled writing exercises using models and gradually moved to free writing once students had memorized models they should have been following. Before completing a 30 minute writing task, the experimental groups additionally received instruction on how to perform the following brainstorming strategies: 1) thinking individually, 2) verbalizing ideas in pairs or groups, 3) brainstorming ideas in oral and note forms and 4) classifying ideas into proper categories. When comparing means for the pre-test and post-test, the experimental groups made more gains than the control group despite the control group

having a slightly higher mean at pre-test than both of the experimental groups. Additionally, from the attitudinal survey over 80% of the students agreed that using a brainstorming strategy was an efficient way to increase their writing competence and more than 80% of the students responded that the brainstorming strategies stimulated their thinking and helped them organize their thoughts and the material into a logical order.

The most notable limitation of both of these studies is that the assessment criteria for the essays were not part of the strategy instruction. In other words, the criteria used to measure whether the strategy instruction was effective were not part of the strategy instruction. For Panahi (2013), the strategy instruction focused on brainstorming and the assessment criteria for the two essays focused on five criteria other than brainstorming. Therefore, it is difficult to know whether the strategy instruction had a direct positive impact on students' writing because the strategies were not easily identifiable in the essays. This was also the case for Rao (2007), where the pre-test and post-test essays were assessed on criteria (content, organization, vocabulary, language use and mechanics) that were not part of the strategy instruction, again making it difficult to link the effectiveness of the strategy instruction to writing gains at post-test. Therefore, the post-test of any strategy instruction should assess the aspects of writing that were the focus of instruction in order to accurately establish whether the instruction was effective or not. This means that what is assessed in the pre-test should also be linked to the strategy instruction.

The most important gap in these two studies was that it was not reported if brainstorming was a problem for students in their writing prior to strategy instruction. If students were already able to brainstorm or had their own strategies to generate ideas, then they would most likely produce high scoring essays regardless of the strategy instruction. Therefore, strategy instruction becomes more purposeful if it targets an area

that is known to be problematic for most of the students' receiving the instruction. For example, if global WDs were to be the target of strategy instruction, then the WDs that were most problematic for students receiving the strategy instruction should be determined prior to the strategy instruction.

2.5.3.2 Strategy instruction that focused on revising strategies

There have been studies that have taught revising strategies to help improve L2 writing (Ching, 2002; Sengupta, 2000). Ching (2002) investigated whether strategy instruction for seven weeks with 29 students in Malaysia would help students to better plan and revise their essays. She also explored if being better at planning and revising would have a favourable effect on students' attribution, self-efficacy and self-determination. The study consisted of teaching a planning and revising strategy for different genres of writing. For example, for the genre of process description writing students were taught the '20 questions' planning strategy and the 'Revising for clarity' revising strategy. The pre and post questionnaire, with open and close-ended questions, found that students were able to attribute their successful essay writing to a number of the strategies taught as part of the strategy instruction. Because Ching (2002) had names for the different strategies taught, students were able to recall the strategy they believed caused a change in their essays after the instruction. The findings from Ching (2002) indicated that the revising strategies had a positive effect in improving students' writing.

A second study (Sengupta, 2000) investigated the effects of explicit strategy instruction in revision on learners' performance and perceptions about their writing. There were 118 students from Hong Kong who participated in the study and they were split into two experimental groups and one control group. Sengupta (2000) conducted a four strategy instructional intervention about the topic of revision over a period of one

year. This included students composing an essay, the teacher commenting after draft 1 with revision strategies and providing guided practice of strategies, then an application of the strategies to students' texts before working on draft 2 and then composing a final draft. A pre and post-test writing sample was used to compare and determine whether the instruction was effective. Pre and post questionnaires were also used to determine if the instruction influenced the students' perception of writing. The pre and post-test writing samples were given a holistic impression score from 1-9 (9 for the strongest and 1 for the weakest). No other information was given with regards to the scoring criteria. From the writing samples and questionnaires, Sengupta (2000) found that the students in the experimental group made more gains in the holistic rating from pre-test to post-test than those in the control group. However, both studies (Ching, 2002; Sengupta, 2000) raised concerns that should be considered when conducting similar research in the future.

The most noteworthy concern is that the strategy instruction was conducted over a period of more than a month. The issue with this is that influences other than the strategy instruction can be a reason for improved post-test writing. For example, Ching (2002) conducted strategy instruction over seven weeks and Sengupta (2000) over a year. Both studies took place in contexts where other English instruction was given apart from the strategy instruction, which suggests that students were exposed to English learning opportunities that may have also impacted their post-test writing samples and questionnaires such as classroom instruction, peer help and teacher help. This brings into question whether the strategy instruction was effective and the reason for improvement. Despite Sengupta (2000) using a control group, the longer time period of strategy instruction over a year leaves a lot of room for other English language and writing variables to influence students' writing. To eliminate such variables, a post-test would best be implemented immediately after the strategy instruction. This way a true

69

indication would be given as to whether the instruction was effective and then any improvement could be directly attributed to the strategy instruction.

Additionally, both of these studies raise the concern similar to Panahi (2103) and Rao (2007). While teaching explicit strategy instruction for planning and revising are both commendable, evidence that those planning and revising strategies were the reason for improvement in a piece of writing are not easily verified. The best way to determine if planning and revising strategies were effective is through student self reports and not samples of student writing. A final writing draft does not include what was taken into account a student was planning and revising their previous drafts. The problem with student self reports, however, is that students may report a strategy that is helpful but not necessarily use it. Therefore, explicit strategy instruction is best conducted on a WD than can be easily identified in a post-test writing sample.

2.5.3.3 Strategy instruction that focused on essay writing strategies

Apart from planning and revising strategies, L2 strategy instruction has also been conducted for different areas of essay writing. Berman (1994) compared three different groups where two groups received specific essay writing instruction over a year. In one group, students were instructed on essay writing in their L1 (Danish); in the other, they were instructed on essay writing in their L2 (English); and the third group did not receive the specific essay writing instruction that group 1 and 2 received. The essay writing instruction consisted of focusing on different essay writing issues over a number of class periods. For example, one class period focused on audience and another class period focused on transitional phrases. To help measure if the essay writing was effective, students were required to compose a pre-test and post-test essay that was assessed in six areas: thesis, argument, conclusion, organization, grammar and length of essay (number of words). From the pre-test, students were grouped into two categories,

low proficiency and high proficiency, based on their rating scores. In this study, Berman (1994) found that from the post-test, students in the experimental groups improved in essay writing after a year of essay writing instruction in comparison to the control group. However, it was the first group, which received their instruction in their L1, that showed the most improvement and specifically, the students who were in the lower proficiency category at pre-test. Obviously students with higher pre-test scores did not stand to make as much improvement as those with lower pre-test scores.

Although this study had a different strategy focus, the concerns with the Berman (1994) study are similar to those previously mentioned concerns (Ching, 2002; Panahi, 2013; Rao, 2007; Sengupta, 2000). For example, because the instruction was conducted over a year, students may have improved in their essay writing as a result of pedagogical influences other than the instruction (e.g., help from tutors, peers and other English language teachers). Similar to Rao (2007), even though Berman used a control group in his study as a means to determine whether the instruction was effective, some of the assessment criteria for the pre and post-tests were not part of the instruction. For instance, large gains were shown in grammar at post-test for a number of students, yet the type of grammar that was being assessed was not part of the essay writing instruction. This suggests, then, that the gains in grammar may have come from learning experiences and sources other than the instruction. As previously stated, the outcome would be more reliable if the pre and post-tests assessed the same criteria that were targeted as part of the instruction and if the influence of other factors had been eliminated or reduced.

2.5.3.4 Strategy instruction research focused on formulaic sentences

A study that investigated strategy instruction focused on formulaic sentences was a good example of being able to clearly identify the focus of strategy instruction in

a post-test. AlHassan & Wood (2015) investigated the extent to which formulaic sentence instruction would affect 12 students' writing in Canada. Formulaic sentences are defined as 'prefabricated chunks that are stored in and retrieved from the memory as wholes' (Ding, 2007; Wood, 2006; Wray, 2002). The explicit instructional approach comprised instructing students on formulaic sentences that are typically used in a specific L2 writing genre. The coding of formulaic sentences in the post-test showed clear gains from pre-test to post-test with examples of formulaic sentences that were part of the explicit strategy instruction showing that the instruction was effective. The assessment of effectiveness in this study was more reliable than in Berman (1994), because there was clear evidence of examples from the strategy instruction.

Despite having a positive effect from the strategy instruction, there are some concerns with this research (AlHassan & Wood, 2015). The first is a limitation in that only a small number of students were used. Despite studies with small sample sizes providing rich analyses, caution needs to be exercised with regard to generalizations that can be made. The second concern is whether students continually used the formulaic sentences after a significant period of time. This was not investigated. In order to demonstrate that the formulaic sentence strategy instruction had been effective long-term, this study would have benefitted from a delayed post-test after a period of time to determine if students still used the formulaic sentences appropriately.

2.5.3.5 Summary of concerns raised from strategy instruction research

From the strategy instruction research, it can be seen that there are important gaps and limitations that need to be considered for further research. First, strategy instruction should focus on solving a problem or addressing an issue that has been revealed as problematic for the group of participants in a study. Second, the strategy instruction and the assessment of whether the strategy instruction is effective should be

aligned in order to reliably show whether the instruction was effective or not. Third, a post strategy instruction assessment (e.g. post-test) would best be conducted immediately after the instruction in order to eliminate or reduce any influences that might impact upon the results. Fourth, a delayed post-test would be beneficial to measure the long-term effect of the strategy instruction. Finally, in order to make generalizations to the field, there should be at least 50 participants in the study (Mackey & Gass, 2005).

2.6 Gaps in the review of literature and research questions

From the review of literature it can be seen that WDs are not being adequately addressed because they continue to occur for L2 learners. One reason is that there has been an insufficient understanding about what causes WDs (section 2.1, 2.2 and 2.3). Despite a number of studies reporting the occurrence of WDs (section 2.1), they have not been narrowed down into manageable groups (e.g., global WDs for expository essay writing) for investigation. Therefore, RQ1 is:

(RQ 1) What are the writing difficulties that L2 learners experience when writing an expository essay?

In addition to wanting to know what the WDs are, this research also strives to better understand why WDs occur in the hope of providing a more appropriate means of addressing them. For this reason, in addition to investigating the WDs of L2 writers in expository writing, this thesis aims to also investigate the relationship between students' revealed WDs and students' perceptions of their revealed WDs. Therefore, research question 1 is further divided into three sub questions to provide further insight into why WDs occur:

(RQ 1a) What are the actual writing difficulties?,

(RQ 1b) What are the perceived writing difficulties? and

(RQ 1c) To what extent is there a relationship between perceived and actual writing difficulties?

Understanding the nature of WDs and how to identify them in students' writing is the first step to addressing them. The next step is finding an appropriate method for address them, which has not been previously used (section 2.4). The literature review of strategy instruction (section 2.5.3) reveals explicit strategy instruction to be a possible approach; however, some highlighted gaps and limitations need to be taken into consideration. Therefore, research question 2 is:

(RQ 2) What are the effects of an explicit strategies instructional approach on treating writing difficulties?

To respond to the question reliably, research question 2 has been expanded with two additional sub questions:

(RQ 2a) what is the <u>immediate</u> effect of an explicit strategies instructional approach on treating writing difficulties and

(RQ 2b) what was the <u>long-term</u> effect of the intervention when comparing data from the pre-test, immediate post-test and delayed post-test?

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter presents the methodological approach and procedures used to answer the research questions of this thesis. It begins with a description of the chosen methodological approach used to drive this study (3.1), and continues with the scope of the research and the main purpose of this thesis (3.2). Then, the research questions and an explanation of how each question was investigated are presented (3.3), followed by a description of the context and participants (3.4) and an explanation of the instruments and how they were used (3.5). After that, a breakdown of the data collection procedures (3.6) and a description of how the data were analysed (3.7) is given, as well as how the data were measured for reliability and validity (3.8). This is followed by the main outcomes of the pilot study (3.9) and the chapter concludes by addressing the ethical issues considered important for the study (3.10) and by providing a chapter conclusion (3.11).

3.1 Methodological Approach

This study is based on a postpositive methodological approach to research because postpositivism believes that there is a relationship between cause and effect as a result of an intervention. Cresswell (2009) further that explains postpositivism research comprises four major characteristics: determination, reductionism, empirical observation and measurement, and theory verification. The idea of determination results in research being conducted with a focus on the causes that have an influence or effect on outcomes. Postpositivism is also reductionistic as its aim is to reduce a hypothesis into simple concepts to test. Additionally, cautious empirical observation and measurement are vital steps taken by postpositivists because they are steps that develop

the knowledge that the research is seeking to provide. Finally, postpositivism research begins with a theory, followed by data collection that verifies or refutes the theory, after which changes are suggested before investigating the theory further or again.

This thesis follows a postpositivism approach in that it was conducted with a focus on the issues that cause L2 students to experience WDs. The issues were important because they helped determine an appropriate pedagogical approach that attends to those that student's experience (determination). This thesis also proposes that the treatment of WDs can best be achieved by reducing the phenomena into simple organized elements to test, for example, separating WDs into local and global WDs, treating only two WDs and providing a treatment that consists of straightforward, instructional steps (reductionism). Also, this thesis has employed an assessment criteria framework measurement system that can be developed and adapted to different genres and that can add to knowledge of how to identify and attend to frequently occurring WDs (observation and measurement). Finally, this thesis tests the theory that an explicit strategy instructional framework may improve L2 students' expository writing and possibly assist them in attending to their writing in a manner that reduces their frequently occurring WDs.

3.2 Scope of the Research

This thesis aims to build upon the limited existing empirical research that focuses on the effects of explicit strategy instruction in L2 writing. Currently there is empirical research that has utilised explicit strategy instruction, but not in a way that specifically attends to frequently occurring WDs as was the focus in this thesis. Past research into strategy instruction with L2 writers (Berman, 1994; Ching, 2002; Cresswell, 2000; Rao, 2007; Sengupta, 2000) has investigated the effect of instruction using a pre-test, instruction, post-test methodology to measure effectiveness, as this

study did, but this thesis also included a delayed post-test to test the retention of knowledge from the intervention and provide further evidence of the effectiveness of the intervention. In addition, all of these studies, except for Ching (2002), utilised a control group and experimental group, as this thesis did.

However, this thesis differs from the research of Berman (1994), Rao (2007) and Sengupta (2000) who conducted their strategy instruction over a period of 12 months or more and the research of Ching (2002), who conducted her study over a 7 week period. These long periods of time in between instructional sessions means that other variables, like teacher and tutor assistance, may have been the cause of improvement in students' post-test writing rather than the intervention itself. Even if the strategy instruction led to improvements in the post-test, it is unclear whether the students gained improvement solely from the strategy instruction. In the current thesis, immediately after the strategy instruction was given, the post-test was conducted to ensure no influential variables other than the strategy instruction would be the reason for any improvement. In addition, the immediate post-test was rated only on the rhetorical features taught during the strategy instruction (WD 4 – propositions for stated thesis, WD 5 – examples of propositions), not on a holistic writing score as was done in the studies by Ching (2002) and Rao (2007).

The last difference between this thesis and studies that have been previously conducted is that the strategies chosen for instruction targeted particular difficulties. Berman (1994), Ching (2002), Cresswell (2000), Rao (2007) and Sengupta (2000) provided strategy instruction on a writing skill that would be helpful for students, but not necessarily in an area that had been revealed as problematic for the group of students who they investigated. Ching (2002), Rao (2007) and Sengupta (2000) taught brainstorming and/or revision strategies but they did not determine whether students had significant difficulty in these areas prior to the strategy instruction. In the current

thesis, a measurement (pre-test) was employed prior to strategy instruction to determine the areas in which students needed the most help. Consequently, the strategy instruction attended to the two most problematic areas across the majority of students. The expected genre characteristics were used as a criteria framework for determining what criteria were not met and were therefore difficult to achieve (revealed WD).

3.3 Research questions

This research had two main aims. The first aim was to investigate the type of WDs experienced by L2 learners and the second aim was to assess the extent to which an explicit instructional approach enabled L2 learners to improve their writing of an expository essay immediately after explicit strategy instruction had been provided, and the extent to which their performance was retained ten weeks later.

There were two main research questions with research question one divided into three sub-questions (1a, 1b and 1c), and research question two divided into two sub-questions (2a and 2b).

RQ 1 - What are the writing difficulties that L2 learners experience when writing an expository essay?

This research question aimed to investigate the WDs that L2 students revealed as most problematic (actual WDs – 1a), the WDs that L2 students perceived to be most problematic (perceived WDs – 1b), and determine to what extent, if any, there was a relationship between the two in order to establish a practical solution for attending to the WDs in question.

RQ 1a – What are the <u>actual</u> writing difficulties?

RQ 1a investigated the genre characteristics of L2 students' expository essays to establish which characteristics were revealed to cause the most difficulty when writing

an essay in a 60-minute period. An Assessment Criteria Framework (Appendix B) was used to evaluate the identified genre characteristics.

RQ 1b – What are the <u>perceived</u> writing difficulties?

RQ 1b was investigated using the results of a 5-point scaled survey that comprised nine statements describing genre characteristics for exposition. Students indicated, via the survey, the degree to which they perceived each statement was true, or not true, of their writing ability. Principles of the Self-Efficacy Theory were explored to help understand learners' perceptions of their WDs (section 2.3.3).

RQ 1c – To what extent is there a relationship between perceived and actual writing difficulties?

RQ 1c was designed see if students' perception of their writing (RQ 1b) matched their actual writing (RQ 1a). As a result, RQ 1c compared the results of RQ 1a and RQ 1b to determine if a relationship existed between the two variables. Once the WDs were established, the next area of concern was the manner in which to provide appropriate instruction to treat WDs, which provides justification for research question 2.

RQ 2 – What was the effect of the intervention?

RQ 2 explores the effects (short term – RQ 2a, long term – RQ 2b) of an intervention on the two genre characteristics that were revealed to be the most problematic from the findings of RQ 1.

RQ 2a – What was the <u>immediate</u> effect of the intervention?

RQ 2a investigated the immediate effect of an explicit strategy instructional approach on the revision of students' previously written expository essays. The assessment criteria framework was once again used to evaluate effectiveness, but only for the two genre characteristics targeted as part of the intervention.

RQ 2b – What was the <u>long-term</u> effect of the intervention when comparing data from the pre-test, immediate post-test and delayed post-test?

RQ 2b investigated the long-term effect of an explicit instructional approach on students' construction of another expository essay ten weeks after the instruction. The assessment criteria framework was once again used to evaluate effectiveness, but only in the two areas targeted as part of the intervention.

3.4 Context and participants

This research was conducted at an Intensive English Program that was part of a large university, in the USA. The Intensive English Program consisted of two English language pathways: Foundations and Academic. The Academic classes focus on preparing students to have an adequate level of English to cope with the demands of studying at an English speaking university. There are three proficiency levels in the Academic track: Academic A, Academic B, and Academic C and participants from Academic A were invited to participate in this research because there were more students in this track (5 classes of 14-16 students). If a student was attending the institution for the first time, they were placed in an Academic level based on the results of an institutional placement test. However, if the students had been attending the institution for more than one semester, then they were most likely placed in Academic A based on a level incremental promotion from the previous semester. There were 5 classes of Academic A students that were part of this research. One class was randomly selected to be the control group and the four remaining classes were the experimental groups.

Participation was voluntary and there was no assurance that students would volunteer or be available for the three tests (pre-test, immediate post-test and delayed test) as well as the intervention that was conducted between the pre-test and immediate post-test. Of the 70 students who agreed to participate in the pre-test, 69 students from

the pre-test agreed to participate in the intervention and immediate post-test and 58 students from the pre-test, intervention and immediate post-test agreed to participate in the delayed post-test. All 70 students also completed the survey. Therefore, when responding to RQ 1a, the analysis of 70 pre-tests was used, and when responding to RQ 1b and RQ 1c, the analysis of 69 pre-tests and 69 surveys was used. Similarly, the analysis of 69 pre-tests and immediate post-tests was used to answer RQ 2a and only 58 students pre-test, immediate post-test and delayed post-tests were analysed to answer RQ 2b. Each test, and the intervention, was conducted during a one-hour session for each class.

Participants for this research were students from diverse backgrounds (e.g., Asia, South America, Europe, Middle East, etc.). Of the 70 participants, 31 (44.3%) were males and 39 (55.7) were females. Table 3.1 presents the number of male and female participants and their L1 background.

Table 3.1

Gender and first language of students who participated in this research

First Language	*N*=70	%	Male	Female
Spanish	40	57	18	22
Korean	9	13	4	5
Chinese	5	7	3	2
Portuguese	4	6	2	2
French	3	5	1	2
Russian	3	5		3
Ukrainian	2	3		2
Italian	1	1		1
Hungarian	1	1	1	
Vietnamese	1	1		1
Japanese	1	1	1	

Most of the students indicated on their survey that they had studied English for at least 2 or more years prior to participating in this research, suggesting that most had been exposed to English language learning and, more specifically, to L2 writing.

Additionally, most students indicated that their previous language learning took place in an English as a Foreign Language context.

3.5 Instruments

The two instruments used in this study were students' written texts (3.5.1) and a survey (3.5.2). The instrument used to assess the texts is explained further in the data analysis section of this chapter (3.7)

3.5.1 Expository Essays

Students submitted three texts as part of this research. The first essay (pre-test) was constructed in the second week of the semester; therefore, students had had minimal academic writing instruction for the upcoming semester before the pre-test essay was constructed. Students had 60 minutes to write and respond to the following topic:

> *Some people think that they can learn better by themselves through books, online sources or talking to others than with a teacher. Others think that it is always better to have a teacher. Which do you prefer? Use specific reasons to develop your essay.*

The topic above was chosen because it was a subject area that was familiar to all participants and it was a topic that would enable students to demonstrate the genre characteristics of exposition. The topic would require students to provide a thesis, related propositions, and to explain and develop the propositions with supporting relevant detail. The time of 60 minutes was established from the results of the pilot study, which revealed that 55-60 minutes was an adequate amount of time to construct a sizeable amount of text to be evaluated for WDs. As previously mentioned, this study

was a controlled study in that the writing task was completed in timed conditions with no opportunity for researching resources to generate content.

The second essay (immediate post-test) was a revision of the pre-test that was conducted immediately after the explicit strategy instruction to eliminate any outside influences that could interfere when investigating the effectiveness of the instruction. Only two strategies were taught as part of the instruction because the pilot study had revealed that a cognitive overload may be caused by teaching more than two strategies, and that this would most likely result in minimal improvement.

The third essay was composed 10 weeks after the pre-test and students were given another topic with a subject familiar to them.

Some students prefer to study alone. Others prefer to study with a group of students. Which do you prefer? Use specific reasons and examples to support your answer.

Students also had 60 minutes to respond to the topic. The aim of this task was to see whether students had retained the information learned from the strategy instruction by either improving their writing in comparison to the pre-test or retaining their improvement made at the immediate post-test in the two areas targeted by the intervention.

The essays were operationalized in a manner where students' written performance before the treatment was compared with their written performance following the treatment (Mackey & Gass, 2005). In order to accurately determine the extent to which the treatment resulted in an improved piece of writing, a control and an experimental group design was employed. The experimental group received the strategy instruction treatment while the control group did not receive any instruction.

3.5.2 Survey

The survey consisted of statements that participants responded to by selecting from provided responses. The survey was administered to determine to what extent students perceived characteristics of expository essay writing to be problematic for them. The 5-point scale had nine statements, each of which referred to a genre characteristic that should be present when writing exposition. Participants responded by indicating how true the statement was for them as they reflected on their L2 writing. The questionnaire statements (Table 3.2) were reflective of the genre characteristics from expository essay writing (see Chapter Two, section 2.3 for detail of characteristics).

Table 3.2

Survey of students' perceptions of difficulty when writing an essay

WHEN WRITING AN ESSAY IN ENGLISH I HAVE DIFFICULTY …	never true	usually not true	somewhat true	usually true	always true
1. Understanding the purpose of a given writing assignment.	1	2	3	4	5
2. Writing the first sentence of a paragraph.	1	2	3	4	5
3. Knowing how to introduce my essay.	1	2	3	4	5
4. Writing a strong opinion or argument.	1	2	3	4	5
5. Developing and supporting my ideas.	1	2	3	4	5
6. Knowing how to conclude the essay.	1	2	3	4	5
7. Connecting my sentences together so that they make sense.	1	2	3	4	5
8. Linking my paragraphs together so that they flow logically.	1	2	3	4	5
9. Writing sentences that are clear for the reader to understand.	1	2	3	4	5

Self-Efficacy Theory (see Chapter 2 section 2.2.3) maintains that students who have a high perception of their ability in a particular task are most likely to employ the required effort and motivation towards successfully achieving the task in question. Conversely, students who have a low perception of their ability contribute minimal or insufficient effort and motivation towards a task, which may result in an unsuccessful outcome.

3.6 Data Collection procedures

This thesis utilised a pre-test, post-test, delayed post-test design. Below, in Table 3.3, is an outline of the data collection procedures that were followed.

Table 3.3

Timeline of data collection process

Time	Task
Week 2 (3.6.1)	Survey
	Pre-test essay
	Pre-test assessment
Week 3 (3.6.2)	Explicit strategy instruction (treatment)
	Immediate post-test
	Immediate post-test assessment
Week 13 (3.6.3)	Delayed post-test
	Delayed post-test assessment

3.6.1 Week 2 procedures

3.6.1.1 Survey

The survey (Appendix A) was distributed to all students (experimental and control group) who agreed to participate in the study. All students completed the survey on the same day in their respective classes, taking between 10-15 minutes. Most students were able to complete the survey with no assistance but there were one or two students who had minor questions about the instructions.

3.6.1.2 Pre-test essay

Students from both the experimental and control groups constructed an essay using the first topic stated in 3.2 above. This pre-test essay was written in the second week of the semester because the first week involved diagnostic testing and verification of student placement, leaving no time for students to do the writing required by this research. Because of this, there had also been minimal in-class writing instruction in the first week, which meant that students were using their existing writing skills to write the essay without instruction or preparation of how to write exposition. The instructions given for the pre-test did not prime the students regarding the focus of the essay assessment. Students were given 60 minutes to compose the essay on a computer, using a program that did not provide spellcheck or a dictionary.

3.6.1.3 Pre-test assessment

The purpose of the pre-test writing task was to determine what the most problematic WDs were by evaluating each essay using the assessment criteria framework. The assessment was used to determine which two WDs were the most problematic for the majority of students, and therefore determine which strategies would be explicitly taught. Inter-rater reliability was achieved by a second rater who rated 25% of the randomly chosen text samples independently of the first rater. In the case of disagreement, both raters discussed the discrepancies until a decision was agreed upon.

As previously stated, the intervention was to target the two criteria that were assessed as most difficult for students to achieve. It can be seen in Table 3.4 that maintaining coherence was revealed as the most difficult for all classes in the experimental group. Class 5 was the control group and were not assessed for receiving explicit strategy instruction.

Table 3.4

Results from the pre-test assessment for each class in the experimental group

	Criterion most difficult	Criterion next most difficult	Criterion next most difficult
Class 1	Maintaining coherence (WD 9)	Propositions for stated thesis position (WD 4)	Examples of propositions (WD 5)
Class 2	Maintaining coherence (WD 9)	Examples of propositions (WD 5)	Propositions for stated thesis position (WD 4)
Class 3	Maintaining coherence (WD 9)	Propositions for stated thesis position (WD 4)	Examples of propositions (WD 5)
Class 4	Maintaining coherence (WD 9)	Propositions for stated thesis position (WD 4)	Examples of propositions (WD 5)

However, because this thesis aimed to treat only global WDs, and maintaining coherence was classified as a local WD, it was not part of the intervention (see Chapter 2, section 2.1.2.4). Consequently, providing adequate propositions for the stated thesis and examples of propositions were the two areas of foci for the strategy instruction.

3.6.2 Week 3 procedures

3.6.2.1 Explicit strategy instruction (Intervention)

The explicit strategy instruction was conducted by the researcher to ensure that the strategies were taught appropriately, and consisted of strategies that addressed WD 4 (inability to clearly state propositions that support thesis position) and WD 5 (inability to clearly explain and further develop propositions), because they were the two most problematic areas revealed in the pre-test. The experimental group received the instruction on the same day during their respective class times, and this was followed by the immediate post-test. Even though the control group was given the same amount of time as the experimental group to do their immediate post-test, they did not receive the treatment.

At the beginning of the treatment, students in the experimental group were given a printed copy of their pre-test with no feedback or markings on it. They were encouraged to take notes during the strategy instruction and make revisions to their pre-test throughout the strategy instruction. The researcher regularly prompted students to think about what they had heard, saw and understood from the strategy instruction so that they could make immediate changes to the printed copy of their pre-test. This was to engage students in metacognition (see chapter 2 for more details on metacognition). Below are two tables that show the steps of the treatment (Table 3.5) and an outline of how those steps were explicitly taught (Table 3.6).

Table 3.5

Teacher fronted explicit instruction model

Steps	Description
1	Describe the revealed WD
2	Introduce the strategy that will address the WD
3	Explain the steps of how to do the strategy
4	Show examples of the strategy

Table 3.6

Explicit strategy instruction for propositions for stated thesis position (WD 4)

Step	Description
1	**Describe the revealed WD**

Using slide 1 (Figure 3.1) the researcher explained the goal of the instruction, which was the to treat a WD. The explanation included a clear description of the WD, reasons why this WD was problematic and which students revealed this WD in their writing using student ID numbers.

The researcher also engaged students in metacognition at parts of the explanation by asking students to think and reflect about why this problem would occur and why it would be seen as problematic and how they would possibly attend to it.

Figure 3.1

Slide 1 – Explanation of the WD being treated

What was the Writing Difficulty?

Writing difficulty
Unable to **clearly** tell the reader your reasons for your argument. For example you may have an **unclear** topic sentence for one of your body paragraphs.

Why is this a problem
This is a problem because:
- it confuses the reader what your argument is
- your argument may not be convincing
- organization of paper is difficult to follow

Who
218713554
254566410
449972225
580263255
584256831
662094767
675144929

| 2 | **Introduce the strategy that will address the WD** |

Next the strategy was introduced using slide 2 (Figure 3.2). The strategy was given a name to help students recall the strategy and the steps of how to perform the strategy. Therefore, the strategy was called **Why** and **What**. This name was given to encourage students to think about answering the questions **Why** is this your proposition, and **What** do you mean? At this point students were able to ask any questions.

One component of Anderson's metacognitive model is to select and use a strategy. In this case the researcher gave students the strategy, as

opposed to them choosing a strategy, because the teacher had a greater understanding of what was needed in this situation of treating a WD.

Figure 3.2

Slide 2 – Steps of the strategy that will treat the WD

3   **Examples of the steps of how to do the strategy**

After the strategy and its steps were explained, each step was repeated and explained in further detail with a given example starting with step 1 (Figure 3.3). This procedure was repeated for each step of the strategy (Figure 3.3 – 3.6)

The majority of the students wrote the steps on a piece of paper even though it was not required, suggesting that students were engaged in the explicit strategy instruction. The teacher regularly promoted metacognition by asking questions that would help students reflect and think about what they were doing. This was done by asking, for example, why are we doing this, how would this help treat the WD, can you think of a better way, what questions do you have.

Figure 3.3

Slide 3 – Example of step 1 of the strategy

> 1. Think of reasons to defend **Why** this is your preference
>
> Reasons – Teacher
> - Have knowledge
> - Can give me answers
> - Know about a subject
> - I want to be a teacher
> - Paid to help me
> - Are helpful

Figure 3.4

Slide 4 – Example of step 2 of the strategy

> 2. Choose 3 and write a simple sentence defending **Why** this is your preference
>
> 1. I prefer to learn with a teacher because a teacher can be a source of knowledge.
> 2. I prefer to learn with a teacher because teachers are trained to teach me in a subject.
> 3. I prefer to learn with a teacher because I want to be a teacher one day.

Figure 3.5

Slide 5 – Example of step 3 of the strategy

3. Clarify your preference by answering the question **What** do you mean

1. I prefer to learn with a teacher because they can be a source of knowledge.
   - (What I mean by this is) If I need to know where to look for information, or how to look for information on a particular subject I would ask my teacher that teaches that subject first.
2. I prefer to learn with a teacher because they are trained to teach me in a subject.
   - (What I mean by this is) Teachers attend university for at least 4 years to be qualified to teach a certain subject. My best chance of learning well is to use the knowledge a teacher gained during their university education. Not just the knowledge about a school subject but even tips on how to be a good learner and how to study successfully.
3. I prefer to learn with a teacher because I want to be a teacher one day.
   - (What I mean by this is) Because I want to be a teacher when I graduate from university, I will take the opportunity to learn from the teachers I currently have. I will watch the way they teach and ask a lot of questions to help me understand they way they teach.

Figure 3.6

Slide 6 – Example of step 4 of the strategy

4. Join information improving topic sentences

1. I prefer to learn with a teacher because they can be a source of knowledge. If I need to know where to look for information, or how to look for information on a particular subject I would ask my teacher that teaches that subject first.
2. Not only are teachers a source of knowledge, but they are also trained to teach me in a subject. Teachers attend university for at least 4 years to be qualified to teach a certain subject. My best chance of learning well is to use the knowledge a teacher gained during their university education. Not just the knowledge about a school subject but even tips on how to be a good learner and how to study successfully.
3. In addition to the previous good reasons to learn with a teacher, my priority reason for learning with a teacher is that I want to be a teacher one day. Because I want to be a teacher when I graduate from university, I will take the opportunity to learn from the teachers I currently have. I will watch the way they teach and ask a lot of questions to help me understand they way they teach.

Table 3.7

Explicit strategy instruction for examples of proposition (WD 5)

Steps	Description
1	**Describe the revealed WD**

Using slide 6 (Figure 3.7) the researcher explained the goal of the instruction, which was the to treat a WD. The explanation included a clear description of the WD, reasons why this WD was problematic and which students revealed this WD in their writing using student ID numbers.

The researcher also engaged students in metacognition at parts of the explanation by asking students to think and reflect about why this problem would occur and why it would be seen as problematic and how they would possibly attend to it.

Figure 3.7

Slide 7 – Explanation of the WD being treated

2	**Introduce the strategy that will address the WD**

Next the strategy was introduced using slide 7 (Figure 3.8). The strategy was called **Additional Support**. This name was given to encourage students to think about audience and purpose and self reflect on questions like: have I given enough support to be convincing in my argument, what additional support can I give for my argument, is my argument convincing, what more can I add to improve my essay? At this point students were once again able to ask any questions.

One component of Anderson's metacognitive model is to select and

use a strategy. In this case the researcher gave students the strategy, as opposed to them choosing a strategy, because the teacher had a greater understanding of what was needed in this situation of treating a WD.

Figure 3.8

Slide 8 – Steps of the strategy that will treat the WD

3   **Explain the steps of how to do the strategy**
After the strategy and its steps were explained, each step was repeated and explained in further detail with a given example starting with step 1 (Figure 3.9). This procedure was repeated for each step of the strategy (Figure 3.9 – 3.11)

Again, the majority of the students wrote the steps on a piece of paper even though it was not required, again suggesting that students were engaged in the explicit strategy instruction. The teacher regularly promoted metacognition by asking questions that would help students reflect and think about what they were doing such as, why are we doing this, how would this help treat the WD, can you think of a better way, what questions do you have.

Figure 3.9

Slide 8 – Example of step 1 of the strategy

1. Write an example in a simple sentence, to support you reason

Reason 1

I prefer to learn with a teacher because they can be a source of knowledge. If I need to know where to look for information, or how to look for information on a particular subject I would ask my teacher that teaches that subject first.

 – For example, I looked in books instead of asking my teacher.

Figure 3.10

Slide 9 – Example of step 2 of the strategy

2. Provide a detailed explanation

Reason 1

I prefer to learn with a teacher because they can be a source of knowledge. If I need to know where to look for information, or how to look for information on a particular subject I would ask my teacher that teaches that subject first.

 – For example, when I was having trouble understanding a concept with mathematics I went to the library and looked for several books. The mathematics texts were very difficult to understand so I asked my teacher if there was another book I could read. Not only did she answer my question without referring to a book, but she also encouraged me to ask her questions first whenever I was confused or misunderstood the mathematics in class instruction.

Figure 3.11

Slide 10 – Example of step 3 of the strategy

3. Combine explanation and reason to form a body paragraph

I prefer to learn with a teacher because they can be a source of knowledge. If I need to know where to look for information, or how to look for information on a particular subject I would ask my teacher that teaches that subject first. For example, when I was having trouble understanding a concept with mathematics I went to the library and looked for several books. The mathematics texts were very difficult to understand so I asked my teacher if there was another book I could read. Not only did she answer my question without referring to a book, but she also encouraged me to ask her questions first whenever I was confused or misunderstood the mathematics in class instruction.

3.6.2.2 Immediate Post-test

Once the explicit strategy instruction was completed, students from the experimental group were asked to revise their pre-test essay based on what they had learned as part of the instruction. They could use any notes taken during the explicit strategy instruction to help them with their immediate post-test revisions.

Students in the control group were also asked to revise their pre-test, but they had been given no instruction to guide their immediate post-test and in addition, they were not advised as to who had revealed any WDs. As a result, the following two main observations were noted from the control group. Firstly, three students read their essays and did not detect any need for revision and finished their pre-test in approximately five minutes. Secondly, the remainder of the control group spent about 20-25 minutes reading their essay, but made only a few minor revisions that were mainly related to linguistic accuracy. This suggests that without targeted feedback, students saw no need to make major revisions.

3.6.2.3 Immediate Post-test Assessment (Week 3)

The purpose of the immediate post-test essay was to determine whether the intervention was effective and this was shown if there was a significant improvement between the immediate post-test and their pre-test. To measure the improvement, the immediate post-test was rated, but only for the criteria targeted as part of the intervention (WD 4 propositions for stated thesis statement and WD 5examples of propositions). The pre-test rating was then compared with the immediate post-test and the results of the assessment revealed which students had improved and had not improved as a result of the strategy instruction. Again inter-rater reliability was achieved by a second rater assessing 25% of randomly chosen text samples independently of the first rater. The immediate post-tests from both the experimental and control groups were assessed.

3.6.3 Week 13 procedures

3.6.3.1 Delayed Post-test (10 weeks after treatment)

The purpose of the delayed post-test was to determine whether improvement brought about by the treatment had been retained. Students from both the experimental and control groups constructed another essay. The topic was:

Some students prefer to study alone. Others prefer to study with a group of students. Which do you prefer? Use specific reasons and examples to support your answer.

Again this prompt was chosen for two reasons. Firstly, it is a topic area that is familiar to all students and, secondly, it is a topic that requires the type of expository writing skills needed in this academic learning context. The delayed post-test writing was 10 weeks after the explicit strategy instruction and the immediate post-test. Students had 55-60 minutes to produce the text.

3.6.3.2 Delayed post-test assessment

The purpose of the immediate post-test essay was to determine whether there was an improvement in the writing as a result of the treatment. To measure improvement, the pre-test was compared with the immediate post-test using the assessment criteria framework scoring sheet, but only for the criteria that had been taught as part of the treatment. The results of the assessment revealed which students had improved and had not improved as a result of the strategy instruction. Again, inter-rater reliability was achieved by a second rater assessing 25% of randomly chosen text samples independently of the first rater. Delayed post-tests from both the experimental and control groups were assessed.

3.7 Data Analysis

This section describes the analyses of data from the pre-test, immediate post-test, delayed post-test and questionnaire. The section is organized by research question and therefore begins with an explanation of the assessment criteria framework scoring sheet (Appendix B) which was the target measurement used for the pre-test (RQ 1a). This is followed by the statistical analyses used to calculate the mean scores for the questionnaire (RQ 1b) and the correlation between the pre-test and questionnaire (RQ 1c). Finally, an explanation is given of how the assessment criteria framework was used to analyse the immediate post-test (RQ 2a) and delayed post-test (RQ 2b) as well as the statistical analyses used to determine the main effects of the intervention.

3.7.1 Analysis for <u>actual</u> WDs (RQ 1a)

The nine-item assessment criteria framework that was designed for this thesis to analyse and compare the quality of improvement in students' essays at pre-test,

immediate post-test and delayed post-test is presented in Appendix B. For the pre-test, students' essays were analysed and assessed on all nine criteria to determine which criteria were more problematic. A copy of Appendix B was attached to each student's essay for raters to give a score and make any comments.

It can be seen from Table 3.8 below that the first column includes the nine assessment criteria that were the foci of assessment for determining the actual WDs (RQ 1a). Each of the criteria was categorized under one of the three major areas that are required in an expository essay: 1) focus/relevance, 2) development of ideas and organisation, and 3) cohesion and coherence. In column two, explanations of each assessment criterion are presented. The information in column three explains what was required for each criterion to be awarded an "achieved" or "not achieved" status.

Table 3.8

Assessment criteria framework scoring sheet that explains how the data were analysed (Appendix B)

Assessment Criteria	Explanation of assessment	Measurement Achieved / Not Achieved
Focus / Relevance		
1. Thesis position argued	Ability to argue a clear position arguing one side showing a sound understanding of the writing assignment.	**A –** Student has taken a side to argue and clearly reiterated it throughout the essay. The opposite side may have been used but only to justify their position. **NA –** Student has not met the above measurement
Development of Ideas and Organization		
2. Topic sentence stated	Ability to construct a topic sentence that clearly indicates the central focus of each paragraph.	**A –** Student has shown ability to construct a topic sentence that clearly indicates the central focus of two or more body paragraphs (excluding introduction). **NA –** Student has not met the above measurement for two or more body paragraphs (excluding introduction)
3. Introduction presented	**3a.** Ability to present an introduction with a clear thesis statement. **3b.** Ability to present an introduction with contextualization	**A –** Student must a) state a clear thesis position and b) provide contextualization that is more than a single stated thesis position in the introduction. **NA –** Student has not met the above measurements, or only met one of the above measurements.
4. Propositions for stated thesis position	Ability to clearly state appropriate propositions that are sufficiently well explained for stated thesis position.	**A –** Total number of clearly explained propositions divided by total number of propositions presented. Score must be more than 80% to receive an achieved. **NA** – Student has not met 80% of the above measurement.
5. Examples of propositions	Ability to state examples of propositions that are sufficiently well explained which provides added clarity to appropriateness of proposition and stated thesis position. All paragraphs must be given achieved status for this criterion to be awarded an "achieved" status.	**A –** Student must have at least one clearly stated example that connects to a proposition within a body paragraph. If example is present, clearly stated and showing development of idea then achieved status is given. **NA –** Student has not met the above measurement.
6. Conclusion presented	**6a.** Ability to present a conclusion that reiterates the stated thesis position without restating verbatim previous information. **6b.** Ability to present a conclusion with appropriate contextualization.	**A –** Student must a) reiterate the stated thesis but not verbatim from the introduction and b) provide appropriate contextualization. **NA –** Student has not met the above measurements, or only met one of the above measurements.
7. Interparagraph links	Ability to link relevantly between paragraphs within the essay with the use of discourse markers and other techniques.	**A –** Student has shown a link between paragraph more than two occasions **NA –** Student has not shown a link between paragraph on two more occasions
Cohesion and Coherence		
8. Intersentential links	Ability to provide cohesion between sentences within the paragraph with the use of discourse markers and other techniques. Verbal and logical connections must be present to justify sentence linking.	**A –** Total number of sentences that **are** linked to their preceding sentence divided by total number of sentences (-1). Score must be more than 80% to receive an achieved. **NA –** Student has not met 80% of the above measurement.
9. Coherence maintained	Ability to communicate each point of information completely in clear, unambiguous sentences. This includes spelling, punctuation and any forms of grammar errors.	**A –** Total number of coherent sentences divided by total number of sentences. Score must be more than 80% to receive an achieved. **NA –** Student has not met 80% of the above measurement.

For some criteria, it was appropriate to simply award an "achieved" if the criterion was met and a "not achieved" if the criterion was not met, as in assessment criterion one. However, for some other criteria, it was necessary to conduct two measurements. For example, criteria four, eight and nine required a division of the overall instances of the criterion by the number of correct and appropriate instances of the criterion. If students showed that in 80% or more instances they had been successful, then an "achieved" status was awarded. The benchmark of 80% was chosen because it is considered an above average passing grade in a number of North American universities (the context of this research).

The researcher rated all pre-tests while the second rater assessed 25% of the pre-tests. Reliability is of the highest confidence when two or more people rate 100% of the texts (Mackey & Gass, 2005). However, Mackey and Gass (2005) maintain that the nature of the coding scheme should be considered when deciding how much data should be assessed by a second rater. They claim that with a highly objective, low-inference coding scheme and/or validation testing of the assessment criteria, it is possible to achieve inter-rater reliability confidence with the second rater assessing as few as 10% of the texts. Therefore, the assessment criteria framework-scoring sheet (coding scheme) was tested at the pilot study for reliability with both raters (validation testing) and for this reason it was possible to use this rationale to ensure inter-rater reliability (Mackey & Gass, 2005). To satisfy this rationale and provide added reliability, the researcher had the second rater rate 25% randomly selected essays as opposed to only 10%. In the case of discrepancies, both raters reassessed the essay and discussed any issues until agreement was reached. The researcher was the first rater and the second rater had over 5 years of teaching L2 writing experience with 3 of those years at the institution where the study was conducted. She also had a Master of Arts degree in Teaching English to Speakers of Other Languages. Overall, the number of disputed

ratings was mostly less than 10%. The table below shows the inter-rater reliability calculations for each WD at pre-test, immediate post-test and delayed post-test.

Table 3.9

Inter-rater reliability calculations

WD	Pre-test	Immediate Post-test	Delayed Post-test
1	1.0	1.0	1.0
2	1.0	1.0	1.0
3	1.0	1.0	1.0
4	.93	.96	1.0
5	.93	.96	1.0
6	1.0	1.0	1.0
7	.93	.96	.96
8	.89	.96	.96
9	1.0	1.0	1.0

To add to the reliability, both raters assessed writing samples on the same day, at the same time and in the same location.

Frequencies and percentages of the number of students who "achieved" and did "not achieved" each criterion (underline actual WD) are presented in Table 4.1 of the results chapter along with examples of students' WDs (section 4.1.1 – 4.1.9).

3.7.2 Analysis for underline perceived writing difficulties (RQ 1b)

The data from the survey, which was completed by 70 students, were analysed in order to determine the perceived WDs (RQ 1b). The survey had nine statements that identified the expected characteristics of exposition and students were required to identify the extent to which they perceived that they had difficulty with the criterion referred to in the statement using a five-point scale. The mean and standard deviation scores from the descriptive statistics were investigated, looking for ceiling or floor effects to ensure that the means were central on the scale and there was some degree of variability.

3.7.3 Analysis for determining a relationship between <u>perceived</u> and <u>actual</u> writing difficulties (RQ 1c)

Analysis to investigate a possible relationship between students' perceived WDs and their actual WDs was conducted using a point-biserial correlation. A point-biserial correlation is a relationship between continuous and dichotomous variables. The correlation coefficient output indicates whether there is a relationship between the corresponding actual and perceived WD. A correlation coefficient of 1 would mean that the two variables (actual and perceived WDs) correlate perfectly, while a correlation coefficient of zero would mean no relationship exists between the variables and a correlation coefficient of -1 means that the two variables are perfectly inversely correlated.

3.7.4 Analysis for measuring the <u>immediate</u> effect of the intervention (RQ 2a)

Because WD 4 (propositions for stated thesis) and WD 5 (examples of propositions) were the only criteria taught as part of the intervention, they were the only areas rated and measured for immediate effectiveness. Despite previous data for WD 4 being the frequencies of those who achieved and did not achieve when responding to RQ 1a (what are the actual WDs), the data for WD 4, when responding to RQ 2a, consisted of the scores allocated to each essay (continuous data). As previously stated in 3.7.1, WD 4 (propositions for stated thesis) had two measurements where the first was the division of overall instances by the number of appropriate and clear instances, and the second was the awarding of "achieved" if the final number was 80% or more. It was the data from the first measurement for WD 4 that was used to measure the main effect. As a result, for the analysis of an effect from pre-test to immediate post-test for WD 4 and WD 5, two different types of tests were used because WD 4 yielded continuous

data (numbers from 1-100) while WD 5 yielded dichotomous data ("achieved" or "not achieved").

A mixed model analysis of variance (ANOVA) was conducted to analyse the data for effect of time (pre-test to immediate post-test), effect of condition (experimental and control group) and interaction for WD 4. A mixed model ANOVA was used because the data being analysed has a repeated measures variable (time) and an independent samples measure, or variable that is between subjects, and the dependent variable is continuous. The mixed model ANOVA was the best test to use for these different types of variables. The mixed model ANOVA analysis tells us if the effect was significant or not and if it was, further interpretation of the results were carried out.

A McNemar Chi-square analysis was conducted to analyse the data for effect of time (pre-test to immediate post-test), effect of condition (experimental and control group) and interaction for WD 5. The McNemar Chi-square analysis was used because the data was frequency data, which means other parametric tests could not be used. For frequency tests, Chi-square is the appropriate analysis and the design of your research would determine the type of Ch-square analysis to use. For the data for WD 5, a McNemar Chi-square was best because it was a dichotomous variable.

3.7.5 Analysis for measuring the <u>long-term</u> effect of the intervention (RQ 2b)

The analysis for the long-term effect of the intervention for WD 4 (propositions for stated thesis) and WD 5 (examples of propositions) was a direct parallel of the analysis for RQ 2a (3.7.4) with the addition of the delayed post-test (see Chapter 4 for results and examples of results).

3.8 Data Reliability and Validity

3.8.1 Data Reliability

Data reliability is best explained by Dornyei (2007), who states: "Reliability indicates the extent to which our measurement instruments and procedures produce consistent results in a given population in different circumstances" (p. 50). Following Dornyei's (2007) rationale, I have outlined the measures taken to ensure the reliability of the instruments and analysis in this research.

With regards to reliability in this study there was consistency in test administration whereby all participants completed the questionnaires on the same day and in the same manner. All participants were given the same instructions with no added dialogue during the instructions that could accidentally prime them regarding what type of information was being sought. There was also consistency in pre-test, immediate post-test and delayed post-test scoring. The essays were all analysed against the Assessment Criteria Framework scoring sheet. To ensure the results were reliable, inter-rater reliability was performed. As explained previously, "if 100% of the data can be coded by two or more people, the confidence of readers in the reliability of the coding categories will be enhanced, assuming the reliability scores are high" (Mackey & Gass, 2005, p. 243). Also mentioned previously, before inter-rater reliability was calculated, a rating calibration took place with the second rater to ensure clarification of the procedures and to answer any questions or misunderstandings. Both raters practised evaluating texts until they agreed that an acceptable level of consistency in their rating had been achieved prior to the actual rating.

3.8.2 Data Validity

The validity of one's research takes into consideration that the results accurately reflect what we believe they will (Mackey & Gass, 2005). Consequently, measures were

taken, specifically with participants and the explicit strategy instruction, to establish validity by ensuring that the results were relevant to the focus of the research questions. In addition, an in depth pilot study was conducted, that adds further validity, and is discussed in the following section (3.9)

3.8.2.1 Participants

To ensure that the participants of this research were able to complete each test (pre-test, immediate post-test and delayed post-test), those who were invited to participate had been estimated to be of the same proficiency level. This was based on the results of an institutional placement test. Additionally, all students indicated on their surveys that they had had at least 1.5 years of L2 writing instruction with experience in writing essays prior to completing the pre-test. This indicated an acceptable amount of writing background experience to accomplish the pre-test, immediate post-test and delayed post-test.

In dealing with participant attrition, the researcher only used data from those who had performed all tasks required for the research question. For example, for RQ 1a (what are the actual WDs) only students who performed the pre-test were used (N=70), for RQ 1b (what are the perceived WDs) only students who completed the survey were used (N=69) and for RQ 1c (to what extent is there a relationship between actual and perceived WDs) only students who completed the pre-test and survey were included (N=70). For RQ 2a and 2b only students who performed in the pre-test, immediate post-test, delayed post-test and the explicit strategy instruction were used (N=58) in order to provide valid results. The useable data from students in this study follow the guidelines of Fraenkel and Wallen (2003) who state that 50 participants for correlational studies and 15-30 per group for experimental studies is acceptable when determining the number of participants.

Additionally, in order for the findings to be generalized to a wider population, participants represented a variety of ethnicities (Creswell, 2009). From students' survey responses, it can be seen that students came from eleven different L1 backgrounds and that these students seem to closely resemble a typical L2 student studying academic English in the United States of America.

3.8.2.2 Explicit Strategy Instruction

WD 4 (inability to show propositions for stated thesis) and WD 5 (inability to develop and show examples of propositions) were the only two WDs targeted as part of the explicit strategy instruction. Table 3.10 below best illustrates validity of the explicit strategy instruction in relation to the WD it was targeting to treat. It shows how the instruction given was valid in providing the students with enough instruction to treat the WD in question.

Table 3.10

Validity of strategy instruction in relation to the WD it treated

WD	Explicit Strategy Instruction
WD 4	• The WD being treated is explained in detail to students (see Figure 3.1). • Students are told the name of the strategy that will treat the WD • Students are shown the 4 steps of the strategy, and then shown a model of how each step is completed (see Figure 3.2 - 3.6) • Students are shown examples of the strategy and explained how it treated the targeted WD
WD 5	• The WD being treated is explained in detail to students (see Figure 3.7). • Students are told the name of the strategy that will treat the WD • Students are shown the 3 steps of the strategy, and then shown a model of how each step is completed (see Figure 3.8 - 3.11) • Students are shown examples of the strategy and explained how it treated the targeted WD

From Table 3.9 it can be seen that the WD was first explained to students so that they understood the purpose of the instruction and what it was trying to treat. Then, after the explanation and modelling of the strategy, examples were provided in order to show students what would be typically expected. These steps in the instruction ensured that what was being explicitly taught was valid enough to expect improved clear propositions.

3.9 Pilot Study

The pilot study took place at the English Language Centre where the main study was conducted. Because of the intricate organisation that needed to occur with a large number of students, an extensive pilot study was conducted. The pilot study tested the instruments and data analysis with the same number of students expected to participate in the main study. Some pilot studies have merely tested their instruments with a few participants, which is acceptable if the main data collection only requires a few participants. However, with a main data collection group of over 50 students, a pilot of over 50 students was also considered desirable because it would indicate in real terms how long it would take to rate pre-test essays in order to prepare for the strategy instruction (Mackey & Gass, 2005).

There were two main outcomes from the pilot study. The first was the decision to reduce the number of strategies to be taught. In the pilot study, students were taught five strategies, and after the third strategy they were losing focus. As a result, strategies for the two most frequently occurring WDs were taught as part of the main strategy instruction.

The second outcome was to add metacognition to the instruction following N. J. Anderson's (2002) metacognition model. This was added so that students were explicitly aware of what was the goal of the instruction, how to achieve the goal from the instruction, and how the instruction could help improve their writing. Some students, as revealed by the survey, perceived that they did not have a difficulty but they showed evidence of the difficulty in their writing. As a result, these students needed to be made explicitly aware that they had a WD in order to pay full attention to the strategy instruction. In other words, they needed to be metacognitively aware that they

had a problem so they could have metacognitive experiences that would change their perception and thus influence their writing performance.

3.10 Ethical issues

Participants for this research followed normal protocols that took into account both the rights of the participants and the best interests of the study (See Appendix C and D for participation consent forms). Students were invited to participate in this research and it was ensured that their involvement was voluntary. To attract participants, detailed explanations of the study were provided as well as explanations of the rewarding techniques that could positively impact their future writing. A box was provided on consent forms for participants to check if they would like to see the analysis of the data they provided. Also, to ensure participant confidentiality, pseudonyms were used when reporting and analysing the data (Mackey & Gass, 2005). This research was given written formal approval by AUT ethics committee (AUTEC) on 28 October 2011, Ethics Application number 11/210, and BYU's Internal Review Board (IRB) on 31 August 2012, study number E120321 (Appendix E).

3.11 Conclusion

This chapter presented the scope of the research and provided an outline of the data collection procedures. A pre-test, post-test, delayed post-test design was chosen to investigate the effectiveness of an explicit strategies instructional approach using both a control and experimental group. A detailed description of how the quantitative data were analysed and how validity and reliability were taken into consideration as well as the privacy of the participants is also presented in this chapter.

The next two chapters present the results and discussion of results (Chapter 5) for research question 1 (RQ 1a, 1b and 1c) (Chapter 4) and research question 2 (RQ 2a and 2b) (Chapter 5).

CHAPTER FOUR

RESULTS AND DISCUSSION OF RESULTS FOR

RESEARCH QUESTION ONE

4.0 Introduction

Chapter Four includes the results and discussion of results for research questions (RQ) 1a, 1b and 1c. Two sets of quantitative data (pre-test and survey) were collected to answer each question. The analysis of students' pre-tests was used to respond to RQ 1a (4.1 results and 4.2 discussion), students' survey responses were analyzed to respond to RQ 1b (4.3 results and 4.4 discussion) and the combination of both sets of data were used to respond to RQ 1c (4.5 results and 4.6 discussion). A discussion follows the results for each research question and each is discussed in terms of empirical research and theories.

4.1 Results for RQ 1a - What are the <u>actual</u> writing difficulties?

The purpose of this question was to investigate students' revealed WDs when writing an expository essay (pre-test). Students wrote an essay responding to the following writing prompt:

> *Some people think that they can learn better by themselves through books, online sources or talking to others than with a teacher. Others think that it is always better to have a teacher. Which do you prefer? Use specific reasons to develop your essay.*

The criteria framework (Appendix B) that was designed to analyse and compare the quality of texts at three different time periods (pre-test, immediate post-test and delayed post-test) is presented in Table 4.1 and explained in detail in Chapter 3, section 3.7. The researcher analysed each essay and randomly selected essays were rated by an additional trained rater. In the case of discrepancies, both raters reassessed the essay and discussed any issues until agreement was reached.

Table 4.1 comprises nine assessment criteria, explanations of each assessment criterion, and the frequency and percentage of students who did not meet the assessment criteria.

Table 4.1

Number of participants who did not achieve the pre-test assessment criteria (Actual WDs) N=70

Assessment Criteria	Assessment criteria explanation	Actual WDs	
		Frequency	Percent
1. Thesis position presented	Ability to argue a clear position arguing one side showing a sound understanding of the writing assignment.	11	16
2. Topic sentence for paragraph stated	Ability to construct a topic sentence that clearly indicates the central focus of each paragraph.	25	36
3. Introductory paragraph presented	Ability to present an introduction with a clear thesis statement and contextualization.	23	33
4. Propositions for stated thesis position presented	Ability to clearly state appropriate propositions that are sufficiently well explained for stated thesis position.	39	56
5. Examples of propositions presented	Ability to state examples of propositions that are sufficiently well explained which provides added clarity to appropriateness of proposition and stated thesis position.	33	47
6. Concluding paragraph presented	Ability to present a conclusion that reiterates the stated thesis position without restating verbatim previous information.	29	41
7. Paragraph linking demonstrated	Ability to link relevantly between paragraphs within the essay with the use of discourse markers and other techniques.	23	33
8. Intersentential linking demonstrated	Ability to provide cohesion between sentences within the paragraph with the use of discourse markers and other techniques. Verbal and logical connections must be present to justify sentence linking.	29	41
9. Coherence maintained	Ability to communicate each point of information completely in clear, unambiguous sentences. This includes spelling, punctuation and any forms of grammar errors.	68	97

The criterion that was most problematic for students was criterion 9, with 97% (*n*=68) 'not achieving' the required criterion, which means only two students (3%) were awarded an 'achieved' status. All other assessment criteria showed that less than 60%

of the students' demonstrated difficulty, suggesting that criterion 9 was extremely difficult to achieve. This is consistent with observations and findings from other studies (See section 4.2).

To help further illustrate the extent to which students revealed difficulty, examples are presented for each assessment criteria. The purpose of the examples is to illustrate what the quantitative findings have revealed. The assessment criteria are discussed beginning with the most problematic (e.g., WD 9). From this point on, each criterion will be referred to as WD with its corresponding assessment criterion number and a title that best represents the difficulty (e.g., WD 1 – Thesis position unclear). Examples are used to demonstrate how the criterion for each WD was not met and, in some cases, an explanation of how the WDs were manifested is given as it was apparent that some WDs were manifested in more than one way.

4.1.1 Sentences that are unclear and difficult for the reader to understand (WD 9)

WD 9 was assessed by dividing the total number of sentences by the number of sentences that were clear and easy to understand. An 'achieved' was awarded when students had a score of 80% or more. From the 70 students who participated, only two students (student ID 33 and 39) 'achieved' the criterion with scores of 100% and 82% respectively. The students who did not achieve the criterion had scores that ranged from 0% - 70%.

The assessment for WD 9 comprised the analysis of each sentence for language inappropriateness in the categories of grammar and vocabulary (See Chapter Two, section 2.1.1 - local WDs). Grammar errors in students' writing included, but were not limited to, problems with a number of verb tense issues, incorrect and omitted articles and prepositions as well as missing and incorrect infinitives and pronouns. Vocabulary errors included incorrect word choice, limited range of vocabulary and inappropriate

collocations, while mechanical errors were mostly related to spelling and punctuation. Some sentences contained errors from only one or two categories, while other sentences had errors from all three categories. Language errors were sometimes only a distraction for the reader, but on some occasions meaning was obscured as can be seen in some of the examples following. In sections 4.1.1.1 are examples of grammar errors and 4.1.1.2 shows examples of vocabulary errors. Following these sections is, an example of one expository essay (student 67) showing a combination of grammar and vocabulary errors (4.1.1.3).

4.1.1.1 Grammar errors

The most frequently occurring error in the students' writing concerned the use and form of verbs. Participants regularly used the verb in the wrong form, added a verb that was not necessary or used the verb incorrectly. Some students made these errors repeatedly while others made them only occasionally. Students also showed a number of errors related to article use in the forms of omitting the article, using the wrong article or using an article when one was not needed. Verb tense and article use had the highest frequency of errors. Other types of grammatical errors were wrong prepositions, incorrect use of passive voice, incorrect plural nouns and wrong pronouns.

Table 4.2 below shows some examples of grammar errors made by students and explanations of each error.

Table 4.2

Examples of grammar errors in participants' pre-test

Student	Examples of students' writing errors and an improved version	Explanation of errors
16	… students are better have a teacher because students … … students are better *to* have a teacher because students …	The verb *have* should be in the infinitive form.
16	Most of people prefer study by themselves. Most people prefer *to* study by themselves. Most people prefer *studying* by themselves.	The preposition *of* should be deleted from the phrase *Most of people*. Also, the verb *study* could be used in the infinitive form or the gerund form.
32	Finally, asking question is another important method for me. Finally, asking *a* question is another important method for me.	The noun *question* is missing an article before it.
43	Another fact that make it better to study with teacher is that they can supply your needs. Another fact that *makes* it better to study with *a* teacher is that *he or she* can *cater to* your needs.	The verb *make* does not appear to agree with the singular subject *Another fact*. The noun phrase *teacher* seems to be missing an article before it. Also the word *supply* could probably be replaced with a better synonym or phrase. The pronoun *they,* refers to more than one person but the writer has only referred to one person.
62	Second, I think the invention of Internet makes the efficiency of learn by myself … Second, I think the invention of *the* Internet makes the efficiency of *learning* by myself …	The noun *Internet* is missing an article before it. The verb *learn* is in the wrong form after the preposition *of*. This should be changed to the gerund form

As you can see from students 16 and 32, their grammar errors were merely distracting for the reader and did not hinder meaning. On the other hand, even though the sentences from students 43 and 62 could be understood, they contained slightly more errors than students 16 and 32, which caused the raters to pause on occasion when reading, and in some cases caused them to labour over understanding the meaning, especially when a number of minor errors occur in one sentence.

4.1.1.2 Lexical errors

The main challenge participants had with vocabulary was repeating words and not using a range of vocabulary. This is probably because they had a limited lexical repertoire. The passage below presents a number of instances where limited vocabulary caused problems such as unclear and hindered meaning.

> First, teachers have **knowledge** to share. People who choose study to teach really like to help people to *understand* new things because they receive a lot of **knowledge** while they are studying. Students need that **knowledge**. Sometimes this **knowledge** is difficult to *understand* if nobody explain to you about it, so it is better to have somebody who can explain clearly. In that way you will *understand* better. To *understand* the information, teachers can use didactic skills, examples, activities and, even games. Trough this evidences you can realize that teachers are prepared people who can explain things in an easy way.
> Another fact that make better to study with teacher is that they can supply your needs. I said this reason because sometimes people have special concerns about specific information. Teachers can help you to *understand*. Teachers have the skill to know how to teach specific people. For Example, teachers who teach in a kinder garden have the skills to teach something to little boys and girls. The same example can be applied to you. There are teacher who are specialized to teach what you need to learn or improve. Using this way to study you will improve you **knowledge** a lot. (**Student 22**)

In addition to some grammatical errors, student 22 also shows lexical difficulty by using some words repetitively. For example, the word 'knowledge' appears five times in two paragraphs. Different synonyms like 'experience', 'education', and 'expertise' could have been used if the student had a reasonable repertoire. Additionally, the word 'understand' is also used five times when other words or phrases could have been used like 'comprehend', 'identify with', and 'be aware of'. Even though these sentences are straight-forward in terms of meaning they could be improved in terms of vocabulary selection. The combination of limited vocabulary and grammatical errors for student 22 make it somewhat difficult to understand her intended meaning at times.

Other miscellaneous types of errors that made sentences sometimes unclear are errors related to spelling and punctuation. Although several students exhibited spelling

116

errors, they were mostly a simple omission of one letter but in other instances they were errors that made words difficult to interpret. Punctuation errors were mainly in the form of missing and incorrectly placed commas. These types of local WDs are probably the least problematic when it comes to understanding the writer's development of ideas as illustrated below in the pre-test of student 67.

4.1.1.3 Analysis of WD 9 errors from Student 67 pre-test essay

Below is the pre-test essay for student 67. From this writing sample we will be able to see examples of the areas analysed for WD 9 and see the impact such errors have on the reader. The grammar-related errors are underlined and lexical-related errors are italicized.

(Line 1) I prefer learning by *oneself* through books, online source or talking to other than with a teacher to having a teacher. Of course, it is more *efficient* for you to study or learn something with a teacher, and it is *helpful* to you if you are young person or student. But considering of your future and long time, it will not have helped by the time when you grow up.

(Line 6) When I was a university student, I used to make some money to teach students as *each* private teacher for 4 years. Each student improved their grade or knowledge to be *possible* to apply their university and they were admitted to go to university, which they want to go after all. And then they quit learning by other person like a private teacher and they started to *study themselves*. The interesting thing is that though they studied harder *that* before, they did not achieve anything, which they *satisfied* to themselves.

(Line 13) Though there are a few reasons like environment that is different to high school and different curriculum and so on. But above all, they did not know how to study by their *own*. It is too difficult to *get this* "ability" *which is how* to study by *themselves*. To get it, they should have studied by themselves or *had* habit to study alone using through books, online source, talking to other and so on. After 2 years when they *go* to university, they started to get a better grade. This is result of "self studying" using *other source* instead using a teacher. A good teacher knows a lot of knowledge *and experience* but it is a drop in the ocean comparing to books, information on the Internet, knowledge and experience from a lot of people.

(Line 23) *It is not denial* that a teacher *can have* students learn *custom*, tradition, courtesy without books and some knowledge. It is important for us to know that true when we first start to learn about our world. But *it* has a problem, which is limitation to expend your knowledge and experience.

(Line 27) To improve yourself constantly, you have to <u>learn "studying</u> by yourself". <u>Many books, online source or getting knowledge or experience by talking to other people helps you break down your limitation which you study with a teacher.</u> Also, you can improve <u>the ability of "studying</u> by yourself" which helps you <u>in</u> university, your work place or <u>your</u> whole life. <u>Consequently, it is granted</u> that you can learn better by yourself through books, online sources or talking to others than with a teacher. (Student 67)

At an overall glance, it is clear to see that grammar-related errors are the most problematic in this piece of writing. In some cases, the errors are only a distraction, as exemplified in the first sentence. Despite the meaning of the sentence being easy to understand (eg. the writer prefers to learn on her own as opposed to learning with a teacher), the identified errors are distracting. For example, the writer uses 'oneself' (italics) in the first sentence, where it is more appropriate to use the word 'myself'. Also, the phrase 'online source' (underlined), is more appropriate pluralized or with an article (an) before it. Similarly, the word 'other' would be more appropriate if pluralized, and the last phrase 'to having a teacher' would best be omitted. From the errors (lexical and grammar) that we see in the first sentence we see that the writer has repeated these types of errors throughout their essay.

4.1.2 Unable to clearly state propositions for stated thesis position (WD 4)

The analysis for WD 4, the second most difficult criterion after WD 9, assessed students' ability to justify a stated position with clearly explained propositions. The findings for WD 4 revealed that 38 students (54%) struggled to give clear propositions to support the stated thesis position they had taken. This was demonstrated primarily in two ways. The first way is where 13 students (19%) gave reasons that justified the opposing argument rather than the one originally presented, as can be seen in the excerpt from student 64 below. She stated in her introduction that she preferred to learn with a teacher, but in her body paragraphs (one body paragraph shown below) she provided more support for the opposing argument (underlined).

(Body paragraph 2) <u>People who like to study by themselves, they do not have pressure to study for tests or read a lot to know more about things they want</u> to such as politics, business, mechanic or any other subjects. They like to read and practice those things, <u>because they do not have the opportunity to someone teaching them</u> or <u>because they like to lean alone</u>. They look information, which is good for them and they put practice on this. It is important to know that the people who are doing that needs <u>to be self independent to study alone,</u> and resolve the problems that sometimes we face to study and the sacrifice that it is necessary to pass. (Student 64)

Her topic sentence and other portions of the text clearly indicate a preference for learning on her own (underlined) but this is the opposite position to the one taken in her introduction (to learn with a teacher). On the other hand, she could have been supporting her point by explaining the weaknesses of the opposing argument, but if this was her intention, it has been poorly executed. A number of language errors (e.g., incorrect and missing prepositions) also make it difficult to determine what she is trying to say, which suggests that she may have been able to prove her point clearly if she had had a higher level of language proficiency.

The second way this WD was demonstrated was by 27 students (39%) who composed a text that was either challenging to understand because of grammar, lexical and sentence coherence issues, or one that contained information unrelated to the writing task. The example below from student 59 includes a lot of information but lacks an argument related to the position taken and to the writing task.

(Body paragraph 3) *A while back there was a commercial in Television, the commercial was about a man that was using a company's application for his phone; while standing in the street, a woman walked by and ask him what he was doing, he explained that the was looking at his state agent internet application to search for some information that he needed, the woman replied to him that she thought that the state agent company did not have an internet application and that she knew that information because she saw it on the internet, so she knew it was true, at the same time she told him she had to leave because she was waiting for her date to appear, a French model she met over the internet, as she started to leave, the "French model" appeared; he was a not so good looking American that only knew how to say "bonjuor" in French.* <u>This basic Television commercial shows the importance of paying attention and not settling for everything that the Internet or friends tell you. Many times we blindly believe on what a friend is telling us or what we are reading on</u>

books or internet sources, we should not do that. We should question it, we should look for information in many different sources and match the information together to analyzed what information is important and true, and which information we need to dismiss. (Student 59)

In this body paragraph, it is difficult to find evidence of her stated position, which was to learn with a teacher. The writing is reasonable in terms of comprehensibility, but a great deal of the information seems unrelated and off the topic. The anecdote (italicized), although somewhat attention grabbing, seems to connect with its intention (underlined) but is unrelated to her position of learning with a teacher. There is a suggestion, albeit vague, from the underlined text, that perhaps learning with a teacher is preferable because Internet sources are unreliable. However, this point is not explained in-depth. Finally, even though the language in the last sentence suggests a strong belief in using reliable sources of knowledge, it provides no substantial evidence as to why the author prefers to learn from a teacher. Student 59 provides an example of a student who has a high level of English language proficiency but who has not used his ability to meet criterion 4. Despite being able to easily read his text, it is unrelated to the writing assignment.

4.1.3 Unable to clearly state examples of propositions (WD 5)

For WD 5, the expectation was that students would be able to develop a paragraph by providing further supporting details in favour of their argument in the form of definitions, explanatory details, examples, etc. There were 33 students (47%) who showed an inability to use their background knowledge and generate ideas to develop their position. Students either provided evidence of examples of propositions adequately for only one body paragraph (14 students, 20%) or they did not do it at all (19 students, 27%). One example of a student who made an effort to explain his propositions but did not do so in a clear manner was student 32.

(Introduction) Education is the key to be successful in live. Some people think that they can learn better by themselves through books, online sources or talking to others than with a teacher. However, I am always better to have a teacher for several reasons.

(Body paragraph 1) I like to have teachers <u>because their professional experiences. Teachers have trained relate area that they are going to teach in the future, and they also have a ton of opportunities to practicing their teaching skills.</u> As a result, they know how to teach student and answer questions correctly. I believe through their teach learning skills, and it benefits me the most.

(Body paragraph 2) *Teacher's homework assignments are also best to me for my learning. When I was little I didn't like to study, doing my homework was the significant learning to me. I learned a lot through those homework assignments, so I am really grateful for my teachers who were given me learning chances. For example, I completed my Chinese homework assignments, so I know how to write Chinese.*

(Body paragraph 3) Finally, asking question is another important method for me. <u>There are so many different learners, and some people prefer by listening, some people might prefer by seeing. I like to build a structure of thought in my mind, so I like to ask questions to get much more informations I could.</u>

(Conclusion) People have different ways to learn, and it is really important to me to have a teacher for learning for teacher's experionces, homework assignments, and asking questions. (Student 32)

As can be seen, he has composed an introduction, three body paragraphs and a brief conclusion. Despite having good explanatory sentences about why he prefers to learn with a teacher (underlined) in body paragraph 1 and 3, the paragraph seems to lack depth and sufficient evidence to develop an argument with relevant supporting details. He helps the reader understand one reason for his argument in body paragraph 2 (italics) by providing a personal experience to show support for his idea, but this paragraph lacks the explanatory details that are in body paragraph 1 and 3. A combination of explanatory details and examples in each body paragraph would have improved his text.

4.1.4 Unclear and/or non-contextualised conclusion (WD 6)

WD 6 had two parts to its assessment and students needed to demonstrate both parts adequately to be awarded an "achieved" status. The first part for WD 6 was a

restatement of the proposed thesis position (as stated in the introduction) and the second part was the ability to provide concluding contextualization. If a student lacked either one or two parts, then a "not achieved" was awarded. A total of 29 students (41%) were awarded "not achieved": seven (10%) did not achieve in both parts and 22 (31%) did not achieve in only one part. Looking at the example below from student 23, it can be seen that the student did not achieve the criteria in both parts because it was unclear if the proposed thesis statement was about learning with a teacher or about learning by himself or herself and it failed to provide adequate contextualization. From this conclusion, we can infer that there was not a clear thesis position in his introduction, which seems to be the case for this student. It is difficult to provide sufficient contextualization for a conclusion when you do not have a clear thesis.

> (Conclusion) Finally, learning by them is a good thing, but people will always need help from other people. Also, people will always find something to struggle with, and the find someone who has some challenge than they are. (Student 23)

There are issues with linguistic accuracy for student 23 that both distract the reader's attention and hinder meaning, thus making the conclusion difficult to follow. It is also brief; showing superficial thought and therefore suggests that this student may not know how to write a suitable conclusion.

From the conclusion below, we can see that student 20 did not achieve one or both criterion because he also did not clearly state the position he had taken. A conclusion requires a restating of the thesis position and appropriate contextualization. However, if he had not understood the writing task, then writing a conclusion would be difficult.

> (Conclusion) In other words if we are going to have a tutor that means that we have to humble themselves and be like little kids, even that tutors can have errors, we all do, for me is such a good travel when you have someone to travel with and guide you. (Student 20)

Like student 23 above, student 20 had issues with linguistic accuracy that limited the reader's ability to clearly understand what has been written and therefore make it difficult to determine whether or not he has achieved the criterion of the assessment criteria framework. In addition, he introduces the topic of travel, which has not been presented in the body of his text.

4.1.5 Intersentential linking insufficient (WD 8)

For WD 8, students were required to show a connection from sentence to sentence through either logic or the use of language. In order to calculate whether a student was awarded "not achieved", the total number of sentences was divided by the number of sentences that were clearly linked to each other. Students needed 80% to be given an "achieved" status and there were 29 students (41%) who did not achieve this criterion. From these students, nine (13%) did not achieve because their essays received 50% or less, demonstrating an extensive degree of difficulty. The examples below show consecutive sentences that do not connect appropriately.

> The first and most important thing that <u>helps in studying is doing homework</u>, which, obviously, <u>means using textbooks and Internet</u>. There is no denying that it is extremely significant for student to be involved in different spheres of life. (Student 30)

In the first sentence, I have underlined key phrases and terms that provide meaning to the sentence. In order for a connection between the two sentences to occur, there should be some key word or logical connection of ideas in the following sentence. However, there are no such phrases, terms or logic to clearly show how the sentences connect.

In another example below, long run-on sentences with several ideas made it difficult to see an appropriate connection from sentence to sentence. This is exemplified by the extremely long first sentence (italics), which contains several ideas (underlined).

There is <u>no way that we can learn at the 100% by ourselves</u> <u>something that we don't know nothing about</u>, and I'm not saying that we don't have the ability, I'm saying that It can be perfect, and my own personal example is learning English, <u>I learn must of my English by myself just by</u> <u>watching hearing and reading tv programs and music that were in English,</u> but when I came here to the ELC I notes that <u>I have a lot to improve in my</u> <u>writhing</u>. And I find many good teachers who have the knowledge and the techniques appropriated for me, and that has helped me a lot to improve my English skills. (Student 50)

The fact that the first sentence is long, with a number of different points, makes it difficult to understand the author's intention, which in most cases impacts on the preceding and following sentences. Therefore, this example was not awarded an achieved because the first sentence is unclear and therefore is unable to adequately show a link to the following sentence. Despite this style of writing (commas separating several clauses) being common in some L1's (e.g. Spanish), it can create difficulties in understanding what is intended in English writing.

4.1.6 Topic sentence unrelated to paragraph (WD 2)

Students who were unable to provide evidence of a topic sentence that clearly indicated the central focus of its paragraph manifested the WD in two ways. First, by not writing clear, focused topic sentences for two or more paragraphs and, second, by writing an unsatisfactory paragraph (e.g. only one or two sentences), thus making it difficult to have an appropriate topic sentence. Of the 25 students (36%) who did not achieve the criterion, 10 students showed difficulty with two unclear topic sentences and 15 students showed difficulty with more than two unclear topic sentences. The paragraph below is an example of a topic sentence that was unclear and lacked a central focus and connection to the paragraph.

(Body paragraph 1) <u>First of all, most of students do not know what the</u> <u>important thing is.</u> Actually, sometimes I used to study alone, and it could not be continued for a long time. When I had to select my materials, I did not know what the best thing is for me. The first step was unclear for me, so it could not be persisted. Also, when I studied, I could not sure I did well so far. I felt

124

anxiety and it made me so nervous. Confidence which means "Am I doing well so far?" is very important to students. I think teachers know what we have to learn. They can guide for students. For this reason, we learn with our teacher, it can be more helpful for us. (Student 4)

His topic sentence (underlined) initially shows potential by opening with a sequential marker (First), but his word choice "thing" presents ambiguity because it is impossible to know what "thing" refers to. After repeatedly examining the remainder of the paragraph, the meaning of "thing" remains unclear and the added problem is that language and lexical errors do not contribute to clarity. Regrettably, subsequent paragraphs in his essay followed a similar pattern of unclear topic sentences and further evidence of poor word choice.

Another example of inappropriate topic sentences was when a paragraph lacked sufficient information to attach an acceptable topic sentence to. Student 21 had more than two instances of this as shown below:

> (Body paragraph 1) In ancient times people used book as a resource for learning by themselves, and instructive books and magazines already exist but with Globalization has change the world making more possible that people can learn by themselves with out the help of a tutor.
> (Body paragraph 2) Technology had brought a lot of souse for self-knowledge. From English curses to how to repair a car, from cooking American food to Asian, is so amazing how resources are just there in the web, you just have to turn in the computer and look for what you would like to learn that day.
> (Body paragraph 3) Although there is a little part of humanity that even with the instructions don't take the risk to fail. We prefer to ask somebody, to look for other people opinions, someone that has the experience. (Student 21)

It can be seen that student 21 only has one sentence in her first body paragraph, making an appropriate topic sentence difficult to achieve. Despite her second and third body paragraphs having two sentences, there is still insufficient paragraph information that a topic sentence could introduce. Thus, in order to have a successful topic sentence, a related well-developed paragraph is also required. She obviously has thought-provoking ideas (the use of books, technology to self-study, not relying on humanity) that may lead the reader to deduce that her preference is to

learn on her own, but without a clear introduction of an idea and supporting

evidence (e.g. topic sentence and accompanying related paragraph), her ideas do not

explicitly support a position, leaving the reader confused.

4.1.7 Unclear and/or non-contextualised introduction (WD 3)

Students' introductions needed to consist of two main parts in order to be

awarded an "achieved" status for WD 3. The first part is a clear thesis statement (see

4.1.1 for an example) and the second part is evidence of contextualization must be

related to both the writing task and the thesis position. From the 23 students (33%) who

received "not achieved", all (except one) were inadequate in only one part of the

assessment (thesis or contextualization). A total of 11 students (16%) did not state a

clear thesis statement, while 11 students (16%) did not provide adequate

contextualization. Consequently, one student (student 51) revealed difficulty in both

areas as shown below.

> (Introduction) We want to study knowledge as much as possible in our life. Why we are doing that? "Learning knowledge as long as you can live" –by First President of China: Zedong Mao. *The knowledge can bring us a great future, can help us to achieve our dreams, fulfill our empty heart.* **However people are timeless for everything in these days.** We have to study from our experience of how to use our time effectively and the productively. One headmaster in the Moon Hill High School announce <u>that the best way for learning is to learn with a teacher</u>. However, many students said on the school web they rather <u>to study by themselves</u>. ***Finally, the problem becomes a universal topic.*** (Student 51)

The example begins with reasons (italics) as to why we should gain knowledge,

drawing attention to the topic of learning (possible contextualization). However, the

fifth sentence (bolded), which has no logical or verbal ties to the preceding and

following sentence, is unclear in its attempt to contextualize. Portions of the last three

sentences (underlined) provide the first glimpse of a possible thesis. Both preferences

are mentioned but they are not clearly stated, once again demonstrating vagueness. The

final sentence (italics and bold) does not add clarity to a possible thesis or relate to the previous attempt at contextualization. For this reason, the above example did not achieve in either part of the criterion for WD 3. Unfortunately, linguistic errors make it difficult to identify the thesis statement and understand the writer's intentions.

The next example (student 38) states a thesis but fails to adequately contextualize it.

> (Introduction) <u>I think that it is always better to have a teacher</u> because I can *receive feedback* from them, *another point of view* about the subject, and I can *be guide*. (Student 38)

The student provides a clear thesis (underlined), and clear propositions that support her stated thesis (italics). Even with minor language errors that do not hinder meaning, readers should be able to understand her intentions and imagine how her essay will be organized. However, her introduction is marred by a lack of contextualization.

4.1.8 Paragraph linking not demonstrated (WD 7)

WD 7 manifested itself when students did not adequately show a clear connection between paragraphs. Because most of the students' essays consisted of 4-6 paragraphs, it was established that this WD occurred when a student did not link paragraphs on two or more occasions. From the 23 students (33%) who did not achieve this criterion, five students (7%) did not link paragraphs on two occasions and the remaining 18 students (26%) did not link paragraphs on more than two occasions. From the example below, student 67 has shown an inability to link paragraphs through language and ideas.

> (Introduction) I prefer learning by oneself through books, online source or talking to other than with a teacher to having a teacher. Of course, it is more efficient for you to study or learn something with a teacher, and it

is helpful to you if you are young person or student. <u>But considering of your future and long time, it will not have helped by the time when you grow up.</u>

(Body paragraph 1) <u>When I was a university student, I used to make some money to teach students as each private teacher for 4 years.</u> Each student improved their grade or knowledge to be possible to apply their university and they were admitted to go to university, which they want to go after all. And then they quit learning by other person like a private teacher and they started to study themselves. <u>The interesting thing is that though they studied harder that before, they did not achieve anything, which they satisfied to themselves.</u>

(Body paragraph 2) <u>Though there are a few reasons like environment that is different to high school and different curriculum and so on.</u> But above all, they did not know how to study by their own. It is too difficult to get this "ability" which is how to study by themselves. To get it, they should have studied by themselves or had habit to study alone using through books, online source, talking to other and so on. After 2 years when they go to university, they started to get a better grade. This is result of "self studying" using other source instead using a teacher. <u>A good teacher knows a lot of knowledge and experience but it is a drop in the ocean comparing to books, information on the Internet, knowledge and experience from a lot of people.</u>

(Body paragraph 3<u>) It is not denial that a teacher can have students learn custom, tradition, courtesy without books and some knowledge</u>. It is important for us to know that true when we first start to learn about our world. <u>But it has a problem, which is limitation to expend your knowledge and experience.</u>

(Conclusion) <u>To improve yourself constantly, you have to learn "studying by yourself".</u> Many books, online source or getting knowledge or experience by talking to other people helps you break down your limitation which you study with a teacher. Also, you can improve the ability of "studying by yourself" which helps you in university, your work place or your whole life. *Consequently, it is granted that you can learn better by yourself through books, online sources or talking to others than with a teacher.* (Student 67)

The underlined sentences (concluding and topic sentences of a paragraph) are typically where linking would occur from the end of one paragraph to the beginning of the next paragraph. However, it is difficult to establish a link between paragraphs from the underlined sentences because there are no key words or phrases that show a connection between paragraphs. This issue most likely stems from an unclear thesis statement at the beginning of this essay. His thesis seems to be much clearer in his conclusion (italics) but until this point, the reader may struggle to find a connection between the various ideas expressed in the paragraphs preceding the conclusion. There

are some cultures (e.g., Japanese) where it is common for the thesis to be in the conclusion in writing and this may be transferred to a student's L2 (English). However, this student was not Japanese and because he writes about both sides of the argument in his introduction, his paragraph focus, at times, is difficult to follow. Therefore, there is evidence of an inability to link paragraphs clearly on more than two occasions.

4.1.9 Thesis position unclear (WD 1)

It can be seen from Table 4.1 that there were 11 students (16%) who did not show sufficient evidence of achieving the assessment criterion for WD 1. Of these, nine students showed they could not clearly state their preference for either learning with a teacher or learning on their own or a combination of both, suggesting either a misunderstanding of the writing task, or an inability to present a position in a clear and coherent manner. Because there was an expectation that the thesis position would most likely occur at the beginning of the essay, students' introductions were analyzed for WD 1; however, other parts of the essay were analysed if the thesis was not apparent in the introduction. This was done because some L1 contexts (e.g., Japanese) have been known to teach students to present the thesis in other areas of their essay.

Two examples from the data (student 8 and student 13) clearly illustrate the difference between a text that presents an appropriate thesis position (student 8) and one that fails to do so (student 13).

> (Introduction) When you have a goal, the best you can do is find the sources than will be useful to learn and catch your goal. <u>The best way to learn about something is when there is an expert (teacher),</u> who is going to be able to teach you and answer you your questions. There are three main reasons because to have a teacher. *First you can ask your questions and trust the teacher. Second, you also can study from books and other sources, and finally, the teacher is going to give you goals and guide.* (Student 8)

> (Introduction) <u>Learn by yourself, with books, online resources, or talking to other than with a teacher? I think using all of this can help you to improve and be better with your English.</u> Maybe sometimes is boring or not interesting to do one of these options, but if you try to see which one is better, you are going to

waist a lot of time. **If you choose all of them you are going to see the benefits** and you can improve your reading, listening/speaking, and grammar. Here you are going to see some reasons and examples. (Student 13)

We can see that, apart from minor language errors, student 8 is clear in her argument position (underlined) and shows evidence of understanding the writing task as she provides propositions (italics) that relate directly to her stated thesis. On the other hand, student 13 suggests both options as his possible preference (underlined) but is vague as to whether that is the position he plans to support. Although he again gives a subtle hint of supporting both options as his possible thesis position at the beginning of the fourth sentence (bolded), it is still unclear whether that is his intention. Further reading of his essay does not provide added clarity of his thesis position, because the remainder of his essay consists of a personal narrative about English skill areas (reading, listening, speaking and grammar). Throughout his essay, he fails to focus on the topic of the writing task.

WD 1 was also manifested when a learning style preference was clearly given but the opposite side was then argued throughout the remainder of the essay, with no clear rationale for the original argument. This was the case for two students (student 2 and student 13) who also failed to meet the criterion for WD 1.

4.2 Discussion of results for RQ 1a

Some of the WD results for RQ 1a are more extensive than others as shown by Table 4.1 and are therefore discussed in order of most problematic to least problematic. The results are discussed in relation to other research for WD 9 first (4.2.1), then WD 4 and WD 5 next (4.2.2), followed by a section that discusses WDs 6, 8, 2, 3, 7 and 1 collectively (4.2.3). This is followed by a discussion of the results in relation to theory (4.2.4) with a focus on three theories: acquisition learning hypothesis, skill acquisition theory and genre theory.

Even though WD 9 was not part of the explicit strategy instruction, it is discussed because it was revealed as the most problematic. Therefore, it needs to be acknowledged as an important component of WDs, but the focus of this research was the most problematic global WDs that students will be required to master in order to write more effectively in other ongoing university assignments.

4.2.1 Discussion of WD 9 (sentences that are unclear and difficult for the reader to understand) results in relation to other research

The results from WD 9 (maintaining coherence), especially with regards to grammar errors, were mainly expected because of the findings of previously published research that reported other L2 learners experiencing the same types of errors (Feng, 2003; James, 1984; Khansir, 2008; Ong, 2011; Qian & Krugly Smolska, 2008; Zhang, 2000). The most frequently occurring grammatical error reported in the findings was the use and form of verbs. The findings of this study showed that students regularly used the verb in the wrong form, added a verb that was not necessary or used the verb incorrectly in a sentence, which at times caused confusion for the raters in this study. Some students made these errors repeatedly while others made them only occasionally. These findings are similar to the findings of 100 EFL pre-university students in Iran, where a third of the students also showed difficulty with verb tenses especially with the use of the simple present (Khansir & Shahhoseiny, 2013). However, verb related errors were not the most problematic for the students in the study conducted by Khansir & Shahhoseiny (2013).

The findings of this study also showed a number of errors related to article use, especially article omission, using the wrong article, or using an article when one was not needed. This error proved problematic for the raters of this study because it could not always be determined what students were referring to when the definite article was

misused. This error seems to be common for students learning English in an EFL context. Khansir and Shahhoseiny (2013) reported that more than a third of their students also showed difficulties in the correct use of definite and indefinite articles (e.g., by omitting an article when one was clearly needed). They attributed the inappropriate use of definite and indefinite articles to Iranian students having yet to master the grammar rules correctly when composing, even though they had a lot of instruction and practice of how to use them correctly. However, they were unable to use them correctly in their writing because learning how to use articles correctly was mostly conducted with decontextualized grammar exercises and not for use in compositions. This was most likely also the case for the students in this study because most of their learning had been in EFL contexts through isolated one-sentence grammar exercises. Although verb related errors were the most frequent for this study, followed by incorrect article use, it was the opposite for the EFL students in Iran (Khansir & Shahhoseiny, 2013). Zhang (2000) reported that about half of her 20 EFL students in Singapore also showed problems with using the definite article correctly. Similar to the students in this study, they either used a definite article unnecessarily or they misused the definite article. Ong (2011) further believes that the incorrect use of articles was mainly due to L1 interference because there are no articles in Chinese. An interesting point to note here is that despite errors in article use occurring often in students' pre-tests in this study, they were sometimes only distracting and annoying for the reader rather than causing a breakdown of meaning. In some disciplines, at the undergraduate level, instructors have been known to allow L2 students to have language errors in their writing assignments especially if they are only distracting errors (Hirano, 2014). However, doing so may delay or discourage L2 students from addressing such errors because they are seen as acceptable. In addition, this may be problematic for students in

the future especially if they continue on to postgraduate study where writing assignment expectations are more demanding (James, 1984).

Another interesting point from the findings of WD 9 (maintaining coherence) is that local WDs may be difficult to address because one type of grammar error can be manifested in a number of different ways. For example, even though the most problematic grammar error was related to verbs, there were at least five different types of verb errors. Therefore, if this study were to provide explicit strategy instruction for the revealed verb WDs, it would need to consider five different verb related errors and provide targeted instruction for each error. This was also the case with articles where errors were shown to occur in at least three different ways. This challenge provides a reason for addressing global WDs because, in comparison to local WDs, they were more manageable to attend too.

Vocabulary related WDs were another reason for unclear sentences. The main challenge participants revealed was a limited lexical repertoire (see 4.1.1.2), which at times made it difficult for students to express what they wanted to say. This caused some to use words repetitively, which could sometimes cause the reader to think that students were retelling the same idea. However, they were introducing a new idea but doing so with a narrow range of vocabulary, which often resulted in incoherence. The lack of vocabulary for the students in this study may be the result of learning English in EFL settings where vocabulary is often learned by the rote memorization from teacher-selected words. This claim is supported by studies previously referred to in the literature review (chapter 2). For example, Ong (2011) and Zhang (2000) who both agreed that a lack of vocabulary was common amongst weak L1 Chinese writers in EFL contexts. Zhang (2000) also explained that Chinese students make inappropriate lexical choices because they have been taught vocabulary words and phrases in isolation rather than in context. Qian and Krugly-Smolska (20008) similarly stated that their Chinese students

struggled with using appropriate vocabulary because they learned vocabulary by rote memorization from lengthy lists and without contextualization. This type of vocabulary learning can hinder students from being able to use vocabulary appropriately in a particular context (e.g., academic writing) and may result in incoherence. Limited vocabulary was also problematic for James' (1984) student, whose texts showed that he found it difficult to clearly articulate his point because he did not have the appropriate lexicon to do so. This was also shown by a number of students in this study.

The type of local WDs shown by the students in this study are not WDs that are best addressed by explicit strategy instruction. However, there is a large amount of literature about written CF (Bitchener & Storch, 2016; Bitchener & Ferris 2012) that can be referred to for treating language errors.

4.2.2 Discussion of WD 4 (appropriate propositions) in relation to other research

From the analysis of the pre-test, it can be seen from Table 4.1 that just over half (56%) of the participants failed to write appropriate propositions (i.e. reasons to support their stated thesis position). There was an expectation that students would state their preference for either studying with books or with a teacher in a thesis statement and then continue the essay by clearly stating appropriate propositions that were sufficiently well explained for the thesis position (criterion 4 from the assessment framework). There were 13 students who wrote propositions that justified the opposite argument to the one they originally stated, and 27 students who either wrote propositions that were unrelated to the given writing task or propositions that were challenging to follow because of linguistic errors and/or the organization of the essay.

The findings of this study can best be explained by comparing findings from empirical research conducted in a similar manner. For example, one possible explanation as to why students did not write appropriate propositions is because they

lacked sufficient genre knowledge. Wingate (2012) supports this belief by reporting that 87% of the undergraduate students (*N*=117) in her study showed, through surveys, that writing argumentative essays was challenging for them. Their perception was supported by text analysis, which showed that 95% of the students demonstrated that they did not know how an argument should be structured. Wingate (2012) suggests that such challenges stem from shortcomings in previous L2 writing instruction, especially when instruction has been in an EFL context. EFL contexts do not always include a strong essay writing course or genre-based writing instruction. Kamel (2000) also supports this belief, stating that Arabic writers struggle to grasp the organization of an argumentative expository essay, possibly because of insufficient L2 writing instruction for them as well. Despite a number of the students in this study having more than 2-3 years of English language instruction, it was mostly in EFL contexts. If students have been taught to write a specific way, they will probably continue to write that way until instructed differently.

Another possible reason for WD 4 (appropriate propositions) occurring with over half of the students in this study is L1 interference (James, 1984). During the explicit strategy instruction, students justified their pre-test writing by stating, "but that is how I was taught to write" or "that is how I write in my native language". At this point, it was necessary for me to be clear in the explicit strategy instruction that the writing practices and beliefs they currently had were not meeting the characteristics of an expository essay in English. This suggests that it may be challenging for L2 students to change their writing practices, especially if they do not know what to change it to. For example, Arabic students are typically taught that propositions for an argument are usually at the end of the text, which is in contrast to where propositions are placed in English (Kamel, 2000). Because the students in the current study came from diverse backgrounds, it is likely that some of them came from L1 learning backgrounds that

may have caused the same L1 interference as those shown by Arabic students. Therefore, a great deal of attention is needed to change the mindset of students and the writing style in their L1 to what is required when writing in L2.

4.2.3 Discussion of WD 5 (supporting detail for propositions) in relation to other research

From the analysis of the pre-test, it can be seen that 33 (47%) of the participants failed to develop their paragraphs with supporting details in favour of their stated thesis position. From the assessment criteria framework (Appendix B), it can be seen that students needed to demonstrate an ability to state at least one clear example that added supporting detail for the proposition. If this criterion was not met, then students were awarded a 'not achieved'. From the 33 students who showed an inability to use their background knowledge and generate ideas to develop their position, 14 did so because they provided supporting details for one proposition only and 19 students did not provide supporting details at all (see 4.1.5 of results chapter).

One reason that students did not meet assessment criterion WD 5 is because they lacked genre knowledge about how to provide supporting detail for given propositions. If a lack of genre knowledge was the reason for WD 4, then it is more than likely going to be a reason for WD 5. It is difficult to write examples of propositions (WD 5) without appropriate propositions (WD 4). If a student does not know that an argumentative type of expository essay needs to include appropriate propositions, then it is also likely they will not know that propositions need to be developed with supporting detail.

Another reason why students were unable to provide supporting details to strengthen and develop a stated thesis position could be a lack of background knowledge and personal experiences to draw upon. The expository essay for this study

136

was written under a timed condition (60 minutes), which may have put students under some stress to generate ideas and then develop them. Additionally, students in this study did not have the opportunity to draw upon sources or references to further develop their argument, so their own personal and background experiences were all they could draw upon. Students may have had enough knowledge to provide a reason for the position taken (WD 4) but not enough to further develop the argument and make it convincing.

An interesting point from these results is that it would seem more practical to address local WDs after addressing global WDs. Because global WDs are problems that occur at the discourse level with regards to genre characteristics and organization, it would seem more beneficial to establish the genre characteristics and organization first because it is the organization of those characteristics that guide the content and meaning of what the writer would like to convey in clear complete sentences. A study for the future, therefore, would be one that investigates whether addressing global WDs in the immediate post-test has an impact on reducing local WDs from the pre-test to the immediate post-test.

4.2.4 Discussion of results for RQ 1a in relation to theory

The results of the pre-test analysis for WD 9 (maintaining coherence) may be explained by Krashen's (1982, 1985) Acquisition Learning Hypothesis which states that '*learning*' cannot develop into '*acquisition*' because '*learning*' is a conscious process that takes place in classroom settings and '*acquisition*' is an unconscious process that is the result of natural interaction with meaningful communication (see 2.2.1). Because more than 75% of the participants from this study were taught English in EFL settings prior to attending BYU's ELC, most learning took place in a classroom setting ('*learning*') rather than in a naturalistic setting ('*acquisition*'). Therefore, with regards

to grammar-related local WDs, Krashen's (1982, 1985) claim that '*learning*' does not turn into '*acquisition*' seems to be supported by the results of this study.

The findings for WD 4 and WD 5 can be explained using McLaughlin's Information Processing Model (1987, 1990). McLaughlin's model explains how learners develop from controlled cognitive processing of explicit/declarative knowledge of the target language to automatic use of implicit/procedural knowledge of the target language (see section 2.2.2 for an in depth explanation of this model). However, if at the declarative stage the knowledge of grammatical structures has not been given accurately or the knowledge is too complex, abstract or not salient for the learner, then it is difficult for that knowledge to enter the student's natural L2 English language use. Also, if the learner had not had sufficient practice opportunities for the explicit grammar knowledge, then it would most likely have taken longer for the explicit knowledge to convert to implicit knowledge causing local WDs to occur repeatedly.

The last theory to explain the results for the remainder of the WDs is genre theory. This theory explains that students are unable to provide appropriate propositions (global WD) if they lack knowledge of what is required in the genre of the writing assignment (in this case an argumentative type expository essay). Genre theory maintains that writers who are not frequent participants or regular users of a genre may experience difficulty when constructing text in the genre (Hyland, 1990, 2007). The expected characteristics of the expository essay genre in this study were also the characteristics that the assessment criteria framework was based on (Appendix B). Because a large number of the participants in this study were still learning the characteristics and organization of different types of academic writing, they may not have been aware that the task given to them required a clearly stated thesis accompanied by propositions, that supported their thesis in an organized manner. As can be seen in Table 4.1, most students understood the concept of a thesis because

criterion 1 (thesis presented) of the assessment framework was achieved by 84% of the participants. However, participants did not clearly know what was required when presenting an argument as evidenced by 56% not achieving the criterion.

4.3 Results for research question 1b – What are the <u>perceived</u> writing difficulties?

The aim of research question 1b was to investigate students' perceptions of what they believed to be their difficulties when writing an expository essay in English. Data were collected via a survey (see Appendix A) that had nine statements, each illustrating an expected requirement of expository essay writing. Students were asked to identify from the given statements the extent to which they perceived that they had problems by circling the appropriate response category: (1) Never True, (2) Usually Not True, (3) Somewhat True, (4) Usually True, (5) Always True. Table 4.3 below presents the means and standard deviations for the perceived WDs.

Table 4.3

Descriptive statistics for Perceived WDs using a 5 point survey (N = 70)

	Statements that students responded to	M	SD
	When writing an essay I have difficulty with …		
1	Understanding the purpose of a given writing assignment.	2.51	1.32
2	Writing the first sentence of a paragraph.	2.84	1.20
3	Knowing how to introduce my essay.	2.94	1.02
4	Writing a strong opinion or argument.	2.94	1.02
5	Developing and supporting my ideas.	3.03	1.04
6	Knowing how to conclude the essay.	2.93	1.16
7	Linking my paragraphs together so that they flow logically.	2.87	0.94
8	Connecting my sentences together so that they make sense.	2.81	1.12
9	Writing sentences that are clear for the reader to understand.	2.82	0.96

The first thing we can see is that most mean scores are similar and even though students' responses were between '(2) usually not true' and '(3) somewhat true' on average, most scores leaned toward '(3) somewhat true'. Generally, for all of the items above, the average response was around the mid-point of the scale and the deviation was between 0.5 and 1 scale points which means that on average students perceived difficulty with these areas of essay writing, but only some difficulty some of the time.

Statement 1 shows that on average students responded that it was '(2) usually not true' that they perceived they had difficulty with understanding the purpose of a writing assignment ($M = 2.51$). However, statement 1 shows the largest amount of deviation ($SD = 1.32$), indicating that on average, they also selected 'never true (1)' and 'somewhat true (3)' showing a spread from the mean score.

From the given data, we can see similarities with mean scores for survey statements 2 ($M = 2.84$), 7 ($M = 2.87$), 8 ($M = 2.81$) and 9 ($M = 2.82$). The standard deviations, however, reveal that for statement 2 ($SD = 1.20$) and 8 ($SD = 1.12$) students' responses on average deviated from, 'never true', to, 'usually true'. Despite survey statements 7 ($SD = 0.94$) and 9 ($SD = 0.96$) having, on average, slightly less deviation, there was still a spread of 'usually not true' to 'usually true'. Similarly, survey statements 3 ($M = 2.94$), 4 ($M = 2.94$) and 6 ($M = 2.93$) with almost the exact means yielded, on average, almost the same deviations (3 $SD = 1.02$, 4 $SD = 1.02$, 6 $SD = 1.10$) also ranging from 'usually not true' to 'usually true'.

Ideally, it would be best if students' perceptions of their WDs corresponded with their actual writing performance. For example, students who believe they have no difficulty with their writing also show no difficulty with their writing, and for those students who show difficulty in parts of their writing also believe those parts are difficult for them. Consequently, RQ 1c attempts to investigate whether there was a correlation between students' actual WDs and perceived WDs.

4.4 Discussion for research question 1b

From the results, it can be seen that students in this study mostly indicated that the survey statements were not usually difficult for them or only somewhat difficult for them when writing an expository essay. One reason that might explain these results is self-efficacy theory, which is defined as an individual's belief in his or her ability to

succeed in specific situations or to accomplish a task (Bandura, 1977, 1986, 1997). Therefore, as stated in section 2.2.3, students with high self-efficacy have a stronger belief and commitment to accomplishing a task while students with low self-efficacy easily give up on trying to accomplish difficult tasks. The results of research question 1b strongly indicated that, on average, students had borderline low self-efficacy, because, from Table 4.3, we see that most students perceived they had 'somewhat difficulty' with the survey statements, rather than 'always difficulty'.

Bandura's (1997) self-efficacy theory posits that students' perceptions are formed and developed through the influence of different sources. One of those sources is '*vicarious experience*'. This is when a student observes someone else successfully perform a task that is of similar ability, it is assumed or perceived that they too can perform the same task as long as the task is not too difficult. This perception increase in belief can contribute towards a more successful performance. Therefore, students in this study may have observed someone with similar ability to them successfully performing some of the survey tasks, and this may cause them to believe they would have difficulty performing the tasks. Or they observed someone perform the survey tasks unsuccessfully or without clear instructions, which would also explain why they would believe the task to be difficult for them. One reason why students might have observed unsuccessful writing tasks is because most students' previous L2 writing experiences took place in EFL contexts. Some EFL contexts do not necessarily teach L2 writing explicitly because writing instructors in these contexts may have low self-efficacy themselves and therefore unintentionally pass that belief on to their students.

Another source that contributes to ones self-efficacy is '*verbal persuasion*'. This is when other people like teachers and tutors encourage students to perform a task by providing constructive feedback that may help them see that they are capable of performing the task. Therefore, constructive feedback is important for maintaining a

high sense of efficacy. The results of this study, therefore, suggest that students were not given a lot of constructive feedback or verbal persuasion to convince them that they were capable of performing a task as they learned to write in their L2. On the other hand, perhaps the type of feedback that was given was not enough to convince them that they had performed the task successfully.

4.5 Results for RQ 1c - To what extent is there a relationship between perceived and actual writing difficulties?

The purpose of RQ 1c was to investigate whether there was a relationship between students' actual and perceived WDs in order to provide an understanding towards why WDs possibly occurred. The best way to attempt to determine a relationship between the two pieces of data in question was to conduct a point-biserial correlation analysis. A correlation of zero order means there is no relationship between the two variables.

A correlation coefficient (a numerical value between +1 and -1) provides an indication of the strength of the relationship between two sets of variables (Gass & Mackey, 2005). A coefficient of 1.0 means that the two factors correlate perfectly, or when a student perceives success or failure with something in his/her writing (first factor), that matches actual writing performance (second factor). Additionally, a coefficient of -1.0 means that the two factors are perfectly inversely correlated, for example, when a student perceives success with something in his/her writing, but in reality is extremely poor at it. A coefficient of 0.0 means that there is no relationship between the two factors, such as when a student perceives success with something, but there is no predictable evidence of her success or failure with that task. In other words, students' self-reported perceptions are not useful in terms of knowing which statements to target as part of strategy instruction. Table 4.4 below shows that from the correlation

coefficient values there are no relationships between the actual and perceived WDs for each WD topic.

Table 4.4

Correlations (Point-biserial) between participants Actual WDs and Perceived WDs (N = 70)

WD	Topic of perceived and actual WDs	r	p
1	Thesis position presented	.01	.93
2	Topic sentence for paragraph stated	-.11	.38
3	Introduction presented	-.05	.67
4	Propositions for stated thesis position	.05	.70
5	Examples of propositions	.03	.80
6	Conclusion presented	-.23	.06
7	Paragraph inking	.05	.66
8	Intersentential linking	-.09	.47
9	Linguistic accuracy	-.12	.33

Almost all correlations remain near +/- zero. This means that there is no strong relationship between the self-report of perceived WDs and the actual existence of WDs. Furthermore, the *p*-values indicate that none of the correlation values are statistically significant or significantly different from 0. Any (minor) correlation between the two scores can be attributed to random chance. Section 4.6 (Discussion of Results for RQ 1c) will discuss possible explanations as to why there was no relationship between participants' actual and perceived WDs.

One interesting point to note is that WD 6 shows a marginally non-significant relationship ($p = 0.06$). However, it is an inverse relationship (-.23) indicating a contrary relationship between the two variables such that they move in opposite directions. In other words, with actual WDs and perceived WD, as actual WDs increase, perceived WDs would decrease; as actual WDs decrease, perceived WDs would increase. The rest of the WDs are nowhere near significant.

The findings, therefore, indicated that there was no correlation between the actual WDs and the perceived WDs. One reason to explain these results is that perhaps the sample size was too small to detect the relationships. However, a correlation may have been detected if there had been a larger population, a stronger test with more liberal

rules, a greater *p* value or criteria that were not restrictive. Another possible reason why there was a mismatch between students perceived and actual WDs, is the writing task was given in a controlled timed-writing situation. If students were possibly given more time to write and had the ability to generate content from researching resources over a time period outside of class, then maybe they could have produced better writing samples. However, in this case it would have been difficult to eliminate influences other than the strategy instruction as the reason for any improvement made.

4.6 Discussion for research question 1c

The discussion for research question 1c begins with examples from individual students that provide further explanation of the results. Then reasons for expected and unexpected results are discussed using previously published research and theory.

From the results of this study, it can be seen that, on average, there was no strong matches between the actual WDs and the perceived WDs. Below are two examples of students who for the most part did not show a match between their actual and perceived WDs. From the Assessment Criteria Framework (ACF) and survey findings (Survey) it can be seen that Student 2 (Table 4.5) had six occurrences from nine WDs where there was no match (WD 1, 3, 4, 6, 7, 9).

Table 4.5

Example of perceived and actual WDs for Student 2

WD	1	2	3	4	5	6	7	8	9
Actual (ACF)	WD		WD		WD	WD	WD		WD
Perceived (Survey)				Some difficulty	Some difficulty				

From Table 4.5 all of the mismatches, except WD 4, are where the student did not perceive that they had a difficulty but according to the assessment of their pre-test essay, a difficulty was revealed. On the other hand, WD 4 was a mismatch, where the

144

student perceived that he had some difficulty but the essay did not show evidence of that difficulty. Despite three WDs showing a match, the matches were not the same. For example, WD 2 and WD 8 showed that the student perceived no difficulty and showed no difficulty (match of no difficulty), while WD 5 showed that student perceived difficulty and showed difficulty (match of difficulty). However, this student mostly showed mismatches where they over perceived their ability to write in relation to their actual writing.

Table 4.6

Example of perceived and actual WDs for Student 15

WD	1	2	3	4	5	6	7	8	9
Actual (ACF)	WD	WD	WD	WD		WD		WD	WD
Perceived (Survey)									

Another result from Student 15 (Table 4.6) showed a total of seven mismatches from nine WDs. All mismatches for student 15 were the same whereby the student perceived that he did not have difficulty with any of the criteria; however, his pre-test essay showed occurrences of WDs for all of the criteria except for WD 5 and 7, again showing an example of over perceiving an ability to write (in relation to his actual writing). The results for these two students suggest that they over-estimated their ability to meet the criterion being considered.

If a student did have a match between their perceived and actual WDs, then it was signified in two ways. Either the student did not perceive difficulty and did not show difficulty or the student perceived difficulty and showed difficulty in their pre-test essay. Student 1 in table 4.6 below exemplifies this.

Table 4.7

Example of perceived and actual WDs for Student 1

WD	1	2	3	4	5	6	7	8	9
Actual (ACF)		WD			WD				WD
Perceived (Survey)		Usually difficult			Usually difficult				

Student ID 1 had two occurrences (WD 2 and WD 5) where the perceived WDs showed a match with the actual WDs. He also had six occurrences where a match was shown where no difficulty was perceived or revealed in his pre-test essay. Despite there being a match for most of the WDs for student 1, overall there was mostly no matches for the students in this study with all of the WDs.

Although these mismatches are by individual students, we see similar results when analysing mismatches by WDs. For example, WD 9 (maintaining coherence) was revealed to be the highest actual WD (97%) for all the participants combined but only 60% of the students perceived difficulty with maintaining coherence, suggesting that a number of participants over perceived their writing ability in relation to their actual writing performance with regards to linguistic accuracy. It was both unexpected and expected that most students revealed difficulty with linguistic accuracy. It was unexpected because self-efficacy theory states that those with high self-efficacy are more than likely to be successful which was not the case for WD 9. However, this result was expected because previous empirical research has found that L2 learners may have difficulty writing clear understandable sentences (James, 1984; Ong, 2011; Zhang, 2000).

The most unexpected finding was that there was no relationship between perceived and actual WD 9 (writing sentences that are clear for the reader to understand). This is unexpected because students definitely showed difficulty with writing clear and unambiguous sentences, but they did not perceive, to the same degree,

difficulty with writing clear sentences. WD 9 was ranked sixth in terms of perceived difficulty, indicating that a lot of students believed they could write clear unambiguous sentences, suggesting a considerable difference between their perception and their actual performance. However, there is a body of literature that clearly shows that L2 writers do indeed have challenges with writing clear sentences For example, James (1984) states that L2 students have language issues at the sentence level that completely obscure meaning because of grammatical and lexical inappropriateness. L2 students also show consistent errors with pronouns, subject verb agreement and definite articles which make their sentences unclear, difficult to understand (Ong, 2011) and cause confusion and frustration for the reader (Cooley & Lewkowicz, 1995, 1997). So why, in the case of this study, did students not perceive statement 9 to be more difficult?

One reason why only 60% of the students perceived WD 9 to be difficult can be explained using Krashen's (1982, 1985) acquisition learning hypothesis (see section 2.2.1). Krashen (1982, 1985) maintains that *acquisition* and *learning* are two different processes, and that learning cannot develop into acquisition (non-interface position). Therefore, according to this theoretical position, it can be suggested that even though students in this study had several years of English classroom instruction, they may not be able to use certain features of the second language unconsciously in meaningful communication despite believing that they are able to do so because of the classroom instruction they received.

4.7 Summary of results for Research Question One

The objective of RQ 1a was to determine what aspects of L2 writing the intervention would be seeking to treat. Students' pre-test essays were analysed in detail to answer RQ 1a and it was found that students had the most difficulty with maintaining coherence and communicating their ideas in complete clear sentences (WD 9). The

grammar errors they struggled with most that led to a lack of clarity were incorrect use of verb tenses, articles, prepositions, pronouns and plurals. There were other grammatical features that they had difficulty with (e.g., using passive voice appropriately) but they were not as prominent. In addition, students showed a lack of appropriate academic vocabulary and knowledge about how to use punctuation correctly, so this also contributed to unclear sentences. Not only was maintaining coherence revealed as difficult for some students', but also writing clear and appropriate proposition statements (WD 4) and providing appropriate supporting details and examples for given propositions (WD 5) were aspects they struggled with too. These were the three criteria they found most difficult to achieve in their pre-test writing task.

The purpose of RQ 1b was to understand students' perceptions of what they found difficult when writing exposition and to assist in providing an approach that might help treat the WDs. Students responded to a survey that asked for their perception with regards to difficulties with nine different characteristics (corresponding with analysis criteria for RQ 1a) when writing an expository essay. The survey used a 5-point scale: (1) Never True, (2) Usually Not True, (3) Somewhat True, (4) Usually True, (5) Always True. Despite the mean scores of the survey indicating that on average, most students perceived they "somewhat" had difficulty with each of the nine characteristics, the standard deviation scores showed that their students' perceptions ranged from "not usually" perceiving difficulty to "usually" perceiving difficult.

The aim of RQ 1c was to see if there was a relationship between students' perceived and actual WDs and, if so, to what extent there was the relationship. Consequently, RQ 1c compared both the survey and pre-test results. It found that there was very little relationship between what they perceived to be difficult and what they actually showed to be difficult in their writing. The pedagogical contribution that these results and discussion make to the field is given in section 6.3.4.

148

CHAPTER FIVE

RESULTS AND DISCUSSION OF RESULTS FOR

RESEARCH QUESTION TWO

5.0 Introduction

In order to measure the effectiveness of the intervention, a pre-test, intervention, and immediate post-test were conducted to measure the immediate effect (RQ 2a), and a delayed post-test was further conducted ten weeks later to measure the long-term effect (RQ 2b). The pre-test was the construction of an expository essay, the immediate post-test was the revision of the pre-test immediately following the intervention and the delayed post-test was the construction of an additional expository essay 10 weeks later. The intervention comprised explicit strategy instruction that targeted the two most problematic global WDs (WD 4 - appropriate propositions for stated thesis, and WD 5 - supporting details for propositions given) from the pre-test. Only two areas were targeted as part of the intervention because the pilot study revealed that treating more than two global WDs at a time may cause a cognitive strain for students and therefore be counterproductive to any improvement. Even though WD 9 (maintaining coherence) was revealed as the most difficult, it was not chosen for the intervention because it focused on local WDs rather than global WDs that were the focus of this intervention (see Chapter 3 for further detail). At the completion of the intervention, students immediately revised their essay with no time lapse or outside assistance between the intervention and immediate post-test.

The organization of this chapter is as follows: First, the results for RQ 2a are reported (5.1) followed by RQ 2a discussion (5.2). Then, the results for RQ 2b are reported (5.3) also followed by RQ 2b discussion (5.4).

5.1 Results for RQ 2a - What was the immediate effect of the intervention?

RQ 2a investigated the immediate effect of the intervention when comparing pre-test and immediate post-test performance, and when comparing control group and experimental group performance from pre-test to immediate post-test. To determine if the intervention was effective, the data from RQ 2a were analysed for main effect of time (pre-test versus immediate post-test), main effect of condition (control group versus experimental group) and interaction for WD 4 (5.1.1) and WD 5 (5.1.2). Examples from the data, showing the extent of improvement from pre-test to immediate post-test, are illustrated and briefly explained in the discussion of results section (5.2.1).

5.1.1 What was the immediate effect from the intervention for WD 4?

A mixed model analysis of variance (ANOVA) was conducted to analyse the data for WD 4 because of the three variables that it was measuring. From the data being analysed, the first variable was a repeated measures variable, the second variable was a between subjects variable, and the third variable was the outcome variable. The mixed model ANOVA was the best test to use for these different types of variables and it tells us if the effect was significant or not (Mackey & Gass, 2005).

The interpretation of the results of the mixed model ANOVA comprised a comparison of mean scores (*M*) and standard deviations (*SD*), and a consideration of at the *p* value and *f* value to determine significance. The mean score for the immediate post-test ($M = .83$, $SD = 0.21$) was higher than the mean score for the pre-test ($M = .70$, $SD = 0.27$), indicating a noticeable improvement from pre-test to immediate post-test regarding the writing of appropriate propositions (WD 4) $F(1, 67) = 12.39$, $p = .001$.

A deeper analysis of the pre-test and post-test data illustrates the efficacy of the strategy instruction. For instance, of the 52 students (74.3%) who 'achieved' (scores over 80%) in the immediate post-test for WD 4, 30 students (58%) had retained their

'achieved' status from the pre-test while an additional 22 students (42%) had improved and changed their status from 'not achieved' to 'achieved'. From the 17 students (24.3%) who received a 'not achieved' status (scores under 80%) in the immediate post-test for WD 4, three students (18%) had improved from their pre-test, but this was not enough to be awarded an 'achieved' status. However, significant improvement is best measured when comparing a control and experimental group.

The effect of condition compares data from the experimental group and control group from pre-test to immediate post-test. The control group did not receive the intervention or any feedback regarding their WDs from their pre-test before their immediate post-test. However, they were given the same amount of time as the experimental group to consider the revisions they would make and then revise their pre-test, making any changes they thought would improve their paper.

Table 5.1 presents mean and standard deviation scores for WD 4 for the control and experimental group. Despite $N=70$ at the pre-test (Table 4.1), there were only 69 students who participated in both the pre-test and immediate post-test, resulting in usable data for only 69 students when answering RQ 2a. The same information is displayed in Figure 5.1 to provide a visual representation of the data.

Table 5.1

Mean and standard deviation scores of WD 4 ratings when comparing control and experimental groups at pre-test and immediate post-test (N=69)

WD 4 Propositions for stated thesis position	Experimental Group ($n=55$)		Control Group ($n=14$)	
	M	*SD*	*M*	*SD*
Pre-test	**.73**	0.25	**.60**	0.32
Immediate Post-test	**.87**	0.17	**.68**	0.27

As can be seen from Table 5.1, the mean scores for the experimental group at pre-test and immediate post-test were higher than the means scores for the control group at pre-test and immediate post-test, suggesting that the intervention had a positive effect because it caused an improvement in the immediate post-test for students in the

experimental group. Although there was a slight improvement in the control group from the pre-test to the immediate post-test, the increase was much less than the increase for the experimental group. This suggests that, on average, the students who received the intervention (experimental group) improved more than those who did not receive the intervention (control group), demonstrating a positive effect of the intervention ($F(1, 67) = 6.89$, $p = .01$). Despite the intervention having a positive effect for the experimental group, the data analysis has not yet shown whether the positive effect was significant. This can be determined when analysing for interaction. An interaction is when two independent variables interact (interaction effect) if the effect of one variable differs depending on the level of another variable.

Figure 5.1

Mean and standard deviation scores of WD 4 ratings when comparing control and experimental groups at pre-test and immediate post-test (N=69)
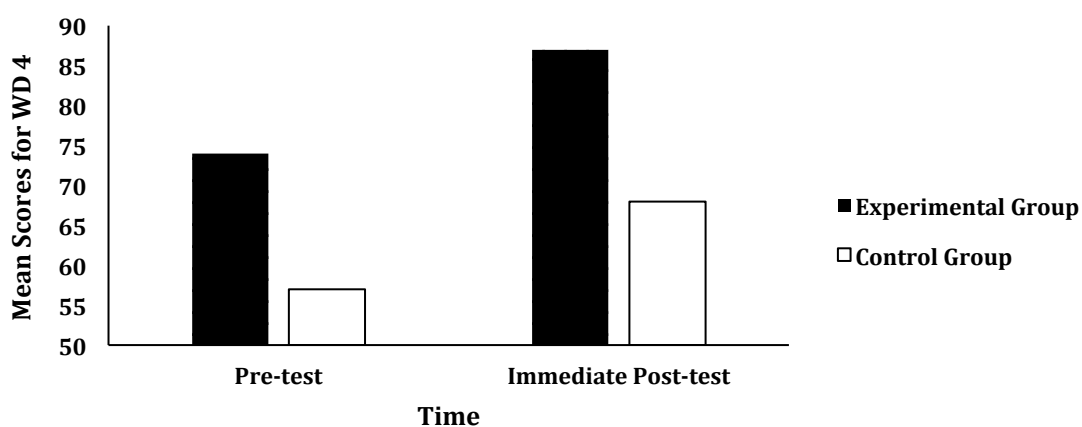
As previously stated, Figure 5.1 shows the mean scores of WD 4 (propositions for stated thesis position presented), for the experimental and control group in the pre-test and immediate post-test. The difference between the pre-test and the immediate post-test was not greater for the participants in the experimental group than for participants in the control group, which means that (as shown in Figure 5.1) there was no interaction. The effect of the intervention did not significantly improve the writing of students in the experimental group any more than those in the control group for WD 4.

If lines were to be drawn for mean scores from the pre-test and the immediate post-test scores for the experimental group and pre-test and immediate post-test scores for the control group, the two lines would be parallel, and when there is no interaction, the lines will always be parallel. As a result, there was no interaction between time and group ($F(1, 67) = 0.68$, $p = .41$), indicating the experimental group did not improve any more than the control group.

However, since there was a difference between the experimental and control group at the pre-test stage, it was decided to follow up with an analysis of covariance (ANCOVA) (Mackey & Gass, 2005). Before running the ANCOVA, however, it was necessary to test whether the homogeneity of slopes assumption (i.e., that there is no interaction between the independent variable and covariate) was met in order to run an ANCOVA. We found that there was an interaction between the covariate and the experimental group, resulting in the homogeneity of slopes assumption not being met. Consequently, I was unable to run the ANCOVA, meaning I was unable to further test the findings of the mixed ANOVA. The phenomenon of why the experimental group did not improve more significantly than the control group is discussed in detail in the Discussion of Results section (5.2) of this chapter.

Another means of determining whether the intervention had an effect is by sample text analysis. Because the intervention (see Chapter 3) targeted students who had poorly constructed propositions, there was an expectation that evidence of improved propositions would be seen in the immediate post-test for those students. An example of an improved piece of text for WD 4 is explained further in 5.1.3.

5.1.2 What was the immediate effect from the intervention for WD 5?

The results for WD 5 were analysed differently to WD 4 because the data was dichotomous (only two categories). Consequently, a McNemar Chi-square analysis was

153

conducted to analyse the data for effect of time (pre-test to immediate post-test), effect of condition (experimental and control group) and interaction for WD 5. The McNemar Chi-square analysis was used because the data was frequency data, which means other parametric tests could not be used. For frequency data, Chi-square is the appropriate analysis and the design of research would determine the type of Chi-square analysis to use and for the data for WD 5, a McNemar Chi-square was best.

Table 5.2 shows descriptive statistics for the frequency and percentage scores of students who 'achieved' and did 'not achieve' in the pre-test and immediate post-test for WD 5. The same information is displayed in Figure 5.2 to provide a visual representation of the data. From the results we can see that from the pre-test, 14 more students (20%) improved after the intervention at the immediate post-test.

Table 5.2

Frequency of participants who achieved and did not achieve the assessment criterion for WD 5 at pre-test and immediate post-test (N=69)

WD 5 Examples of propositions	Pre-test		Immediate Post-test	
	Frequency	**Percent**	**Frequency**	**Percent**
Achieved	**36**	52.2	**50**	72.5
Not Achieved	**33**	47.8	**19**	27.5

It can be seen from Table 5.2. that the main effect is positive because 14 more students achieved the criterion at the immediate post-test as a result from the intervention. Of the 50 students (72.5%) who 'achieved' in the immediate post-test for WD 5, 36 students had retained their achieved status while an additional 14 students had improved and therefore gained an 'achieved' status. These results show a positive effect from the intervention for WD 5 as improvement was made by a number of students. However, despite the results showing a positive effect for some students, further analysis was required to determine whether the effect was significant. To determine whether there was a significant difference between the pre-test and

154

immediate post-test for WD 5, a two (pre/post-test) by two (achieved/not achieved) McNemar Chi-square analysis was run on the frequency counts. The results showed a significant effect for those who achieved the criterion in the immediate post-test in comparison to the pre-test χ^2 (1, $N = 69$) = 18.23, $p < .001$) for WD 5.

Table 5.3 presents the frequency for students who achieved or did not achieve the criterion for WD 5 on the pre-test and immediate post-test for both the experimental and control group, reporting the main effect of treatment on condition (experimental and control group).

Table 5.3

Frequency of participants who achieved and did not achieve the assessment criterion for WD 5 at pre-test and immediate post-test for experimental and control group (N=69)

WD 5	Pre-test				Immediate Post-test			
Examples of propositions	Achieved		Not Achieved		Achieved		Not Achieved	
	Freq	**Percent**	**Freq**	**Percent**	**Freq**	**Percent**	**Freq**	**Percent**
Experimental group (*n=55*)	**28**	51	**27**	49	**43**	78	**12**	22
Control group (*n=14*)	**8**	57	**6**	43	**7**	50	**7**	50

Both the experimental and control group showed similar percentages of obtaining an achieved status (experimental 51% and control 57%) for WD 5 (examples of proposition) at the pre-test. However, in relation to students who improved in the immediate post-test, the control group decreased by one student while the experimental group increased by 13 students. This increase suggests that students who received the intervention improved more in their immediate post-test writing by providing examples and explaining propositions than those who did not receive the intervention.

For WD 5, a two (pre/post-test) by two (achieved/not achieved) McNemar Chi-square analysis was used to test for interaction (differences) between the control group and experimental group from the pre-test to immediate post-test. Figure 5.2 shows the results for WD 5 (examples of proposition) for the experimental and control group for

the pre-test and immediate post-test. It can be seen that there was a small difference

between the two groups at the pre-test χ^2 (1, $N = 69$) = 0.13, $p = 0.719$ (before the

intervention); however, after the intervention, the interaction of frequencies for the

experimental group and control group at immediate post-test χ^2 1, ($N = 69$) = 4.44,

$p=.322$ indicates a significant interaction effect.

Figure 5.2

Frequency of participants who achieved and did not achieve the assessment criterion
for WD 5 at pre-test and immediate post-test for experimental and control group
(N=69)
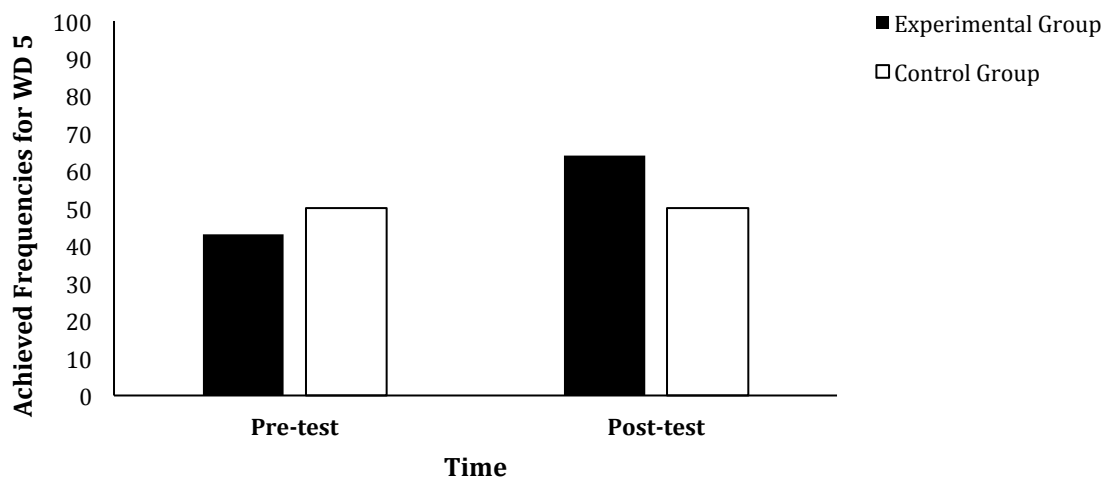
As previously stated, Figure 5.2 reveals the number of students who achieved

WD 5 (examples of propositions for stated thesis position presented), showing the

experimental and control group at pre-test and immediate post-test. Both groups started

reasonably close to each other (experimental group – 51%, control group – 57%) in the

pre-test for WD 5. However, the experimental group shows an increase over time (pre-

test to immediate post-test) while the control group had a slight decrease. This means

that there was a high rate of improvement for the experimental group and that the

intervention had had a positive effect for WD 5.

5.1.3 Examples of results for WD 4 and WD 5

The ability to clearly state appropriate propositions for the given stated thesis position (WD 4) was the first area focused on as part of the explicit strategy instruction. It can be seen from Table 4.1 (in chapter 4) that 56% of participants failed to include appropriate propositions to explain their thesis. After instruction had been provided, the immediate post-test results for WD 4 show us that 22 of the 39 participants who had failed to achieve in the pre-test writing task now included appropriate propositions for their theses. Of the 52 (from a total of 69) students who achieved this criterion in the immediate post-test, 30 students had retained their 'achieved' status from the pre-test and 22 students had improved from their pre-test by changing their 'not achieved' status to 'achieved'. Hence, a total of 74% of all students provided appropriate propositions in the immediate post-test.

The example below from an essay about whether students prefer to learn from a teacher or by themselves, shows one excerpt from student 12 where his immediate post-test had improved from his pre-test following the explicit strategy instruction.

(***Pre-test)***
In my opinion, I think it is better to have a teacher. Learning is an activity, which requires desire, explanations, and tutoring. The first requirement of learning is the desire. In all sectors or domains, when you are learning or you want to learn some specific subjects you need to have the desire to do it.

(Immediate Post-test)
In my opinion, I think that it is better to have a teacher <u>because they clarify explanations, they can correct my mistakes, and I can learn by their experiences.</u>
<u>*As a specialist in the domain of teaching, a teacher can clarify explanations of the subject that I am learning. A teacher can provide more details in order to help me to understand my subject.*</u>

In his pre-test, he clearly states his proposed thesis that it is better to have a teacher than to have to learn on his own. However, he then proceeds to explain the concept of learning without providing a clear argument for why he thinks it is better to have a teacher. In the first paragraph of the immediate post-test, he states his proposed

thesis with three propositions (underlined) that support his thesis. His next paragraph begins with a topic sentence that easily links to the first proposition and continues to expand on how a teacher can clarify explanations. The underlined segment in the immediate post-test text shows the changes made from the pre-test and reflects one of the strategies (see details of *'why and what'* strategy in Chapter 3) taught as part of the strategy instruction which provides further evidence of the strategy instruction being successful. We can clearly see elements of the strategy instruction (see Chapter 3 for elements of the strategy instruction) in the immediate post-test where the topic sentence of a body paragraph has a direct link to the thesis and the sentence following the topic sentence answers the question *'what do you mean'* (which was part of the strategy instruction).

The second area of focus that was part of the strategy instruction was the ability to state examples of propositions for the stated thesis position (WD 5). Table 5.1 in the results chapter shows that 53% of the participants managed to achieve the assessment criterion for stating examples of propositions in the pre-test. After the strategy instruction, the immediate post-test results for examples of propositions (WD 5) revealed an improvement by 13 of the 33 participants who had failed to achieve in the pre-test, which means a total of 72% of students achieved the criterion in the immediate post-test. A McNemar Chi-square analysis also indicated that the increase between pre-test ratings and immediate post-test ratings for stating examples of propositions (WD 5) was significant. Student ID 10 shows examples of the immediate effect of the intervention for WD 5.

Pre-test
I prefer having a teacher, because even though studying by ourselves gives us a certain type of freedom over what we study and the opportunity to have a better self-regulated learning experience, questions are always going to come up at some point, and despite the fact that we can look for the answers by ourselves, a teacher could provide them more easily and without the hassle of searching in books and online resources.

Moreover, having a teacher can provide you with the motivation you need to keep studying because no matter how passionate you are, there are going to be times when you just won't want to study and your teacher can motivate you and inspire you to keep going.

Post-test

I prefer having a teacher because they can clarify and explain things that we can't find in a book. <u>The reason for this is that questions are always going to come up at some point,</u> and despite the fact that we can look for the answers by ourselves, a teacher could provide them more easily and without the hassle of searching in books and online resources. <u>For instance, one time I was struggling with biology terms, no matter how much I looked the terms on a book, I couldn't understand them. Afterwards I asked my teacher and she explained the terms to me in greater detail than the book could ever have.</u>

Moreover, having a teacher can provide you with the motivation you need to keep studying. No matter how passionate you are, there are going to be times when you just won't want to study and your teacher can motivate you and inspire you to keep going. <u>For example, one day I failed to catch the school bus and by the time I arrived at school my motivation was gone. However, my teacher picked up on that and motivated me to keep looking forward to the rest of the day and not concentrate on what happened.</u>

From the example above for WD 5, it is clear from the underlined text that the student has expanded further on his propositions. One way he has done this is with personal examples. These are easily identified through the use of discourse markers (for instance; for example). One strategy which was taught as part of the strategy instruction to further develop the proposition was sharing a personal example, which the student has illustrated in his immediate post-test.

Another example of findings that is important to consider is from a student who was part of the group that did not receive the explicit instruction because it is an additional way of determining if the explicit strategy instruction was effective. By comparing text examples from students who received the instruction (experimental group) and students who did not receive the instruction (control group), we can see if students in the experimental group achieved more than those in the control group. The control group (*n=14*) in this study did not receive the strategy instruction and therefore had no idea, which areas of their writing needed attending too. Instead, they were asked to look at their pre-test texts and make any revisions that they thought needed to be

made. The first difference between the control and experimental groups was evident when students were instructed to make revisions. An informal observation from the researcher was that the control group seemed uncertain as to what was required of them and spent 5 – 7 minutes conversing with each other about what to do because no feedback had been given to prompt their revision. In contrast, because the experimental group had just received explicit strategy instruction, they knew exactly what they needed to revise and they had made notes on their pre-test texts to help with their revision. Because the control group had no direction, students in this group made minor local level revisions as illustrated below.

The two examples below are from student 67 (member of the control group) and are his pre-test and immediate post-test texts. A comparison of his introduction and first proposition is given to show the minimal changes he made, probably because he received no direction as to what did not meet the assessment criteria.

> *(Pre-test – student 67)*
> *(Introduction) I prefer learning by oneself through books, online source or talking to other than with a teacher to having a teacher. Of course, it is more efficient for you to study or learn something with a teacher, and it is helpful to you if you are young person or student. But considering of your future and long time, it will not have helped by the time when you grow up.*
> *(Body Paragraph 1) When I was a university student, I used to make some money to teach students as each private teacher for 4 years. Each student improved their grade or knowledge to be possible to apply their university and they were admitted to go to university, which they want to go after all. And then they quit learning by other person like a private teacher and they started to study themselves. The interesting thing is that though they studied harder that before, they did not achieve anything, which they satisfied to themselves.*
>
> *(Immediate post-test – student 67)*
> *(Introduction) I prefer learning by oneself through books, online source or talking to other than with a teacher to having a teacher. Of course, it is more efficient for you to study or learn something with a teacher, and it **would be** helpful to you if you **were** young person or student. But considering of **you now**, your future and long time, it will not have helped by the time when you grow up.*
> *(Body Paragraph 1) When I was a university student, I used to make some money to teach students as each private teacher for 4 years. Each student**s** improved their grade or knowledge to be possible to apply their university and **after all**, they were admitted to go to university **where** they want to go. And then they quit learning by other person like a private teacher and they started to*

*study themselves. The interesting thing is that though they studied harder that before, they did not achieve anything **that** they satisfied to themselves.*

Despite student 67 showing WD 4 and WD 5, they were not part of the explicit strategy instruction. As a result, the WDs still existed in the immediate post-test. The lack of propositions for the thesis in this student's revision is apparent. In the pre-test, we can see that the student has clearly stated in the first sentence of his introduction that he prefers to learn on his own; however, he contradicts his position in the second sentence stating that it is better to learn with a teacher. His third sentence uses the pronoun "it", but it is unclear whether "it" refers to studying by himself or studying with a teacher. This confusion in his thesis statement makes it difficult for a clear proposition to be stated. Paragraph 1 and the body of the essay add further confusion with a personal experience that does not clearly relate to the thesis position. Any changes that were made in the immediate post-test are highlighted in bold. They show local level revisions only.

In comparison, if we consider the pre-test and immediate post-test of student 12 (shown on page 155), who did not achieve in the pre-test but achieved in the immediate post-test after receiving the instruction, the results are in complete contrast, thus providing another form of evidence that the instruction was successful.

5.2 Discussion of results for RQ 2a

In order to discuss the results for RQ 2a in a clear and logical manner, the discussion will be organized as follows. This section discussion begins discussion for WD 4 and WD 5 in light of earlier research (5.2.1) and discussion for WD 4 and WD 5 in regards to theory (5.2.2)

5.2.1 Discussion of results for WD 4 and WD 5 in light of earlier research

One reason some students may have still been unable to provide appropriate

propositions (WD 4) in their immediate post-test essay is a lack of ideas at both the pre-test and immediate post-test stages. Ching's (2002) study supports this assumption with data gathered from an open-ended questionnaire given at the pre-test and post-test stage of her study. Her questionnaire given at the pre-test stage revealed that 19 of the 29 (66%) students expressed problems with the generation of ideas. Additionally, her questionnaire, given at the post-test stage, revealed minimal difference between the results of the pre-test and the post-test, with 18 of the 29 students (62%) still suggesting that idea generation was problematic for them. By comparison, the strategy instruction of the current study did not address how to brainstorm a range of propositions, but rather focused on how to clearly express propositions. Therefore, if students did not have propositions at the pre-test stage, then they would most likely have struggled to write them clearly at the immediate post-test stage even when the strategy instruction had been provided.

In addition, the same line of argument can explain why some students were unable to write examples of propositions (WD 5) even after the instruction. Ching's questionnaire also revealed that 10 out of 29 (34%) students found idea development difficult for them at the beginning of her study and 12 out of 29 (41%) students said that they also had difficulty with explaining or supporting main points at the end of her study. If students in the current study had problems generating ideas, as mentioned above, then it would be difficult to provide examples of ideas.

Another reason students may have been unable to write proposition examples (WD 5) is because the strategy instruction advised them to use personal experiences to illustrate their ideas. If students did not have personal experiences to draw upon, they would have found it difficult to write about the topic.

Even though Ching's (2002) study showed similar findings to the current research, there were also a number of differences. Ching's (2002) study consisted of

students being taught brainstorming and revision strategies over a period of 7 weeks. The instruction was supplemented with two questionnaires, peer review, group discussions and a range of model essays. Students revealed that they were a lot more aware of the audience and purpose of writing at the end of seven weeks, but with so many variables other than the strategy instruction to consider, it is difficult to know whether an improved composition after seven weeks was directly related to the strategy instruction alone. Students in that study said that they liked reflecting in groups the most, but did not comment on whether the instruction was effective or not. Also, it was unclear whether they were already good at planning and revising before the instruction. This point of strategy instruction is important and has not been taken into consideration with regards to WDs and the L2 writing strategy instruction literature. If students are already proficient in the area that the strategy instruction targets, then the instruction is less likely to be beneficial.

Other empirical research also provides possible explanations for why the strategy instruction of the current research was successful. There were similarities and differences between the results of the current study and those of Sengupta's (2000) study. As far as similarities, Sengupta (2000) also reported that the strategy instruction she conducted, which taught students how to better revise their writing, was successful. Furthermore, she reported that the strategy instruction given had a measureable influence on students' writing after the instruction had been provided. This is somewhat debatable, however, when comparing the length and focus of instruction. The current study conducted a one-time explicit instruction session that targeted two elements of an expository essay and it was teacher-fronted, with no additional outside influences from tutors, teachers or other students. Because the post-test was conducted immediately after the strategy instruction, any improvement could be attributed to the instruction given. On the other hand, Sengupta's (2000) instruction consisted of three stages over a

period of one year. Each stage provided scaffolded instruction and practice in using strategies about how to better revise. Also, strategy instruction was additional to regular classroom writing instruction in between the three stages of strategy instruction. Sengupta (2000) acknowledged that her study did not control or account for additional variables such as what happened inside and outside of the classroom. Therefore, even though Sengupta's (2000) experimental groups reported considerable gains from the pre-test and post-test (in means and standard deviations), those gains may not necessarily have been attributed to the strategy instruction. On the other hand, the current study can claim that improvement in the immediate post-test was the result of instruction because it did control for other variables and the output only had the instruction as stimulus for change.

5.2.2 Discussion of results for WD 4 and WD 5 from a theoretical perspective

Metacognitive theory may provide one explanation for the explicit strategy instruction proving to be successful for both WDs. Metacognitive theory asserts that a learner needs to be metacognitively aware of what he or she is thinking about in order to strategically approach, and be successful, in his or her learning (Anderson, 2002, 2008). Because metacognition involves of critical reflection and evaluation about one's thinking, there needs to be an impetus or some motivation that prompts such thinking and which, in turn, results in changes in how one performs or learns (Anderson 2002, 2008). In the case of the current study, it would seem that the explicit strategy instruction provided the prompt that led to metacognitive reflection on the part of the learner. This was achieved by a series of cognitive and metacognitive experiences. For example, as part of that instruction (a cognitive experience), the instructor *highlighted* the primary goal of the instruction (another cognitive experience), then *guided* students through the specific steps of the strategy (another cognitive experience) and *showed*

164

examples of inappropriate and appropriate models (another cognitive experience). At different stages of the instruction, and prior to the immediate post-test, the students were constantly asked, "What did you learn?" The reason for doing this was to get them to think about their cognitive experiences in order to promote more in-depth thinking at various stages of the instruction (section 3.6.2). Taking a step back and thinking about their cognitive experiences meant reflecting and evaluating (metacognitive experiences) and this, according to Metacognitive theory, would have led to a more successful immediate post-test. At the pre-test stage, students had not been metacognitively primed by means of cognitive experiences before the immediate post-test stage.

Reflecting upon and evaluating one's actions can strengthen one's perception of one's ability to complete a task. From informal researcher observations, it was interesting to see students' reactions after they realized who had demonstrated the WD being targeted. Some student's showed that they had recognised that they had not met the criterion. As a result, they appeared to attend more to the instructor, especially when they knew they were going to be taught how to fix the WD in question. This reaction is closely related to the notion of self-efficacy theory (Bandura, 1995, 2012), described in Chapter 2, where it was explained, that a sense of belief can positively influence one's attitude and effort towards achieving a goal. This suggests that the strategy instruction was a positive contributing factor to improvements in the immediate post-tests because it directed a change of perceptions, through cognitive and metacognitive experiences. These, in turn, were likely to have influenced the students' immediate post-test performance.

5.3 Results for RQ 2b – Does the intervention have a long-term effect at delayed post-test when comparing pre-test, immediate post-test and delayed post-test?

RQ 2b investigated the long-term effect of the intervention when comparing pre-test, immediate post-test, delayed post-test performance, and when comparing control

group and experimental group performance from pre-test, immediate post-test and delayed post-test. To determine if the intervention was effective long-term, the data from RQ 2b were analysed for main effect of time (pre-test versus immediate post-test), main effect of condition (control group versus experimental group) and interaction of time and condition for WD 4 (5.3.1) and WD 5 (5.3.2).

Students wrote an essay for the delayed post-test responding to the following writing prompt:

> *Some students prefer to study alone. Others prefer to study with a group of students. Which do you prefer? Use specific reasons and examples to support your answer.*

The writing prompt was similar to the pre-test writing prompt to enable students to use the strategies from the intervention in a comparable writing task. To measure whether knowledge was retained, the researcher analyzed each essay, but only for the criteria focused on as part of the intervention (WD 4 – propositions for stated thesis position presented and WD 5 – examples of propositions presented). A trained rater rated randomly selected essays, and, in the case of discrepancies, essays were reassessed and discussed until agreement was reached.

5.3.1 What was the long-term (or retention) effect from the intervention for WD 4?

To respond to research question 2b, the analysis was the same as that carried out for RQ 2a (5.1.1), except in this case it concerned delayed post-test. The mean score for the immediate post-test ($M = .83$, $SD = 0.21$) was exactly the same as the mean score for the delayed post-test, indicating a noteworthy retention of knowledge from the intervention regarding the writing of appropriate propositions $F(1, 67) = 12.39$, $p = .001$.

A deeper analysis of the delayed post-test data illustrates the efficacy of the intervention. For instance, of the 45 students (78%) who 'achieved' (scores over 80%) in the delayed post-test for WD 4, 32 students (71%) had retained their 'achieved' status from the pre-test while an additional 13 students (29%) had improved since the immediate post-test and changed their status from 'not achieved' to 'achieved'. Furthermore, from the 13 students (22%) who received a 'not achieved' status (scores under 80%) in the delayed post-test for WD 4, three students (23%) had improved from their pre-test but it was still not enough to be awarded an 'achieved' status. An interesting statistic to note is that from the 13 students who did not achieve in the delayed post-test, six students (46%) had been awarded an 'achieved' in the immediate post-test but were unable to retain that status in the delayed post-test, indicating that the knowledge from the intervention was not able to be applied in the delayed post-test by six students. This is discussed further in the discussion of results section of this chapter (5.5.3). As previously stated, despite a number of students showing retention of knowledge in the delayed post-test, the significance of the improvement is best measured when comparing the control group and experimental group.

As previously stated, the effect of condition compares data from the experimental group and the control group at pre-test, immediate post-test and delayed post-test stages. The control group did not receive the intervention at any point before the delayed post-test. However, they were given the same amount of time as the experimental group to write their delayed post-test.

Table 5.4 presents mean and standard deviation scores for WD 4 at pre-test, immediate post-test and delayed post-test for the control and experimental group. Despite $N= 70$ at pre-test (Table 4.1) and $N=69$ at the immediate post-test (Table 5.1), there were only $N=58$ students who participated in all three tests (pre-test, immediate post-test and delayed post-test), resulting in useable data for only 58 students in

response to RQ 2b. The same information in the table below is displayed in Figure 5.3 to allow for better visualization of the data.

Table 5.4

Mean and standard deviation scores of WD 4 ratings when comparing control and experimental groups for pre-test and immediate post-test (N=58)

WD 4 Propositions for stated thesis position	Experimental Group (*n*=46)		Control Group (*n*=12)	
	M	*SD*	*M*	*SD*
Pre-test	**.73**	0.25	**.60**	0.32
Immediate Post-test	**.87**	0.17	**.68**	0.27
Delayed Post-test	**.86**	0.20	**.71**	0.18

As can be seen from Table 5.4, the mean scores for the experimental group in the pre-test, immediate post-test and delayed post-test were higher than the means scores for the control group at the pre-test, immediate post-test and delayed post-test stages, suggesting that the intervention had a positive long-term effect. Although there was a slight improvement in the control group's in the pre-test, immediate post-test and delayed post-test, the increase for the control group was much less than that for the experimental group. This suggests that, on average, the students who received the intervention (experimental group) improved more and retained that improvement over time more than those who did not receive the intervention (control group), demonstrating another positive effect of the intervention $F(1, 67) = 6.89$, $p = .01$ when comparing the control and experimental group. Despite the intervention showing a positive long-term effect for the experimental group in the delayed post-test, the data analysis has not yet shown whether the positive effect was significant.

The appropriate analysis to obtain this information is an ANCOVA because the delayed post-test is a different task from the pre-test and immediate post-test. However, after testing the homogeneity of slopes assumption I found that I could not run the ANCOVA and therefore it was not appropriate to use for this analysis. Consequently, I

used the mixed ANOVA to test for differences between the groups (control and

experimental) and changes from pre-test to immediate post-test to delayed post-test.

Figure 5.3

*Mean and standard deviation scores of WD 4 ratings when comparing control and
experimental groups for pre-test and immediate post-test (N=58)*
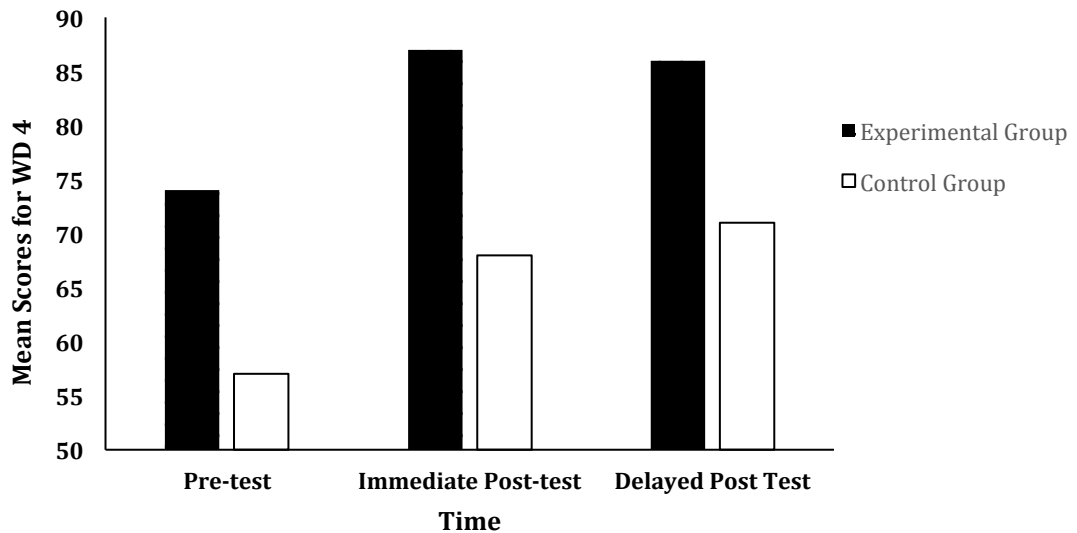
As previously stated, Figure 5.3 is a visual representation of the findings for WD

4 (propositions for stated thesis position presented), showing the experimental and

control group in the pre-test, immediate post-test and delayed post-test. The difference

between the pre-test, immediate post-test and delayed test was not significantly greater

for the participants in the experimental group than for the participants in the control

group, which means that (as shown in Figure 5.3) there was no interaction. The effect of

the intervention did not improve the writing of students in the experimental group any

more than students in the control group for WD 4 in the delayed post-test. As a result,

there was no interaction between time and group ($F(1, 67) = 0.68, p = .41$), indicating

that the experimental group did not improve any more than the control group in the

delayed post-test. Examples of texts for WD are shown in 5.3.3.

5.3.2 What was the long-term (retention) effect from the intervention for WD 5?

As previously stated, data for WD 5 were analysed differently from WD 4 because the data were dichotomous (only two categories). The analysis was the same as that used for RQ 2a but in this case, it was for the delayed post-test. Table 5.5 reports the main effect, showing descriptive statistics in the form of frequency and percentage scores for students who 'achieved' and did 'not achieve' the criterion for WD 5 in the pre-test, immediate post-test and delayed post-test. The same information is displayed in Figure 5.4 to provide a visual representation of the data.

Table 5.5

Frequency of participants who achieved and did not achieve the assessment criterion for WD 5 in the pre-test, immediate post-test and delayed post-test (N=58)

WD 5 Examples of propositions	Pre-test		Immediate Post-test		Delayed Post-test	
	f	%	*f*	%	*f*	%
Achieved	**31**	53.4	**43**	74.1	**38**	66
Not Achieved	**27**	46.6	**15**	25.9	**20**	34

Of the 38 students who 'achieved' in the delayed post-test for WD 5, 28 students (73.7%) had retained their achieved status from the immediate post-test, while an additional 10 (26.3%) students had improved and changed their statues from 'not achieved' to 'achieved'. From the 20 students who received a 'not achieved' status in the delayed post-test, eight students (40%) had received a 'not achieved' status in the immediate post-test, while 12 students (60%) had received an 'achieved' status in the immediate post-test but this status was not retained in the delayed post-test. Despite the results showing a positive effect for some students, further analysis was required to determine whether the effect was significant. To determine whether there was a significant difference between the immediate post-test and delayed post-test for WD 5, a two (pre/post-test) by two (achieved/not achieved) McNemar Chi-square analysis was run on the frequency counts. The results showed a significant effect for those who

achieved the criterion in the immediate post-test in comparison to the delayed post-test χ^2 (1, N = 69) = 18.23, p < .001 for WD 5.

Table 5.6 presents the frequency for students who achieved or did not achieve the criterion for WD 5 in the pre-test, immediate post-test and delayed post-test for both the experimental and control group reporting the main effect of treatment condition (experimental and control group).

Table 5.6

Results for experimental and control groups for WD 5 at pre-test, immediate post-test and delayed post-test (N=58)

WD 5 Examples of propositions	Pre-test				Immediate Post-test				Delayed Post-test			
	Achieved		Not Achieved		Achieved		Not Achieved		Achieved		Not Achieved	
	f	%	*f*	%	*f*	%	*f*	%	*f*	%	*f*	%
Experimental group (*n*=46)	25	54.3	21	45.7	37	80.0	9	20.0	35	76.0	11	24.0
Control group (*n*=12)	6	50.0	6	50.0	6	50.0	6	50.0	5	41.7	7	58.3

As can be seen in Table 5.7, both the experimental and control group showed similar percentages (experimental 54.3% and control 50.0%) for WD 5 (examples of proposition) in the pre-test. However, over time (immediate post-test and delayed post-test) the experimental group showed a higher percentage of people achieving in comparison to the control group. While the experimental group reported a similar number of students achieving the criterion for WD 5 in the immediate post-test and the delayed post-test, the control group slightly decreased in the delayed post-test. This suggests that students who received the intervention improved in their immediate post-test writing and most were able to retain that knowledge and use it in another task after a period of ten weeks.

For WD 5, a three (pre-test/immediate post-test/delayed post-test) by two (achieved/not achieved) McNemar Chi-square analysis was used to test for interaction (differences) between the control group and experimental group from the pre-test,

immediate post-test and delayed post-test. Figure 5.4 shows the results for WD 5

(examples of proposition) for the experimental and control group for the pre-test,

immediate post-test and delayed post-test. It can be seen that there was a small

difference between the two groups at the pre-test χ^2 (1, N = 69) = 0.13, p = 0.719

(before the intervention); however, after the intervention in the immediate post-test and

delayed post-test, the difference between the groups were significant, indicating that the

intervention was successful for WD 5 in the immediate post-test, χ^2 1, (N = 69) = 4.44,

p=.322, and retained in the delayed post-test.

Figure 5.4

Results for experimental and control groups for WD 5 at pre-test, immediate post-test and delayed post-test (N=58)
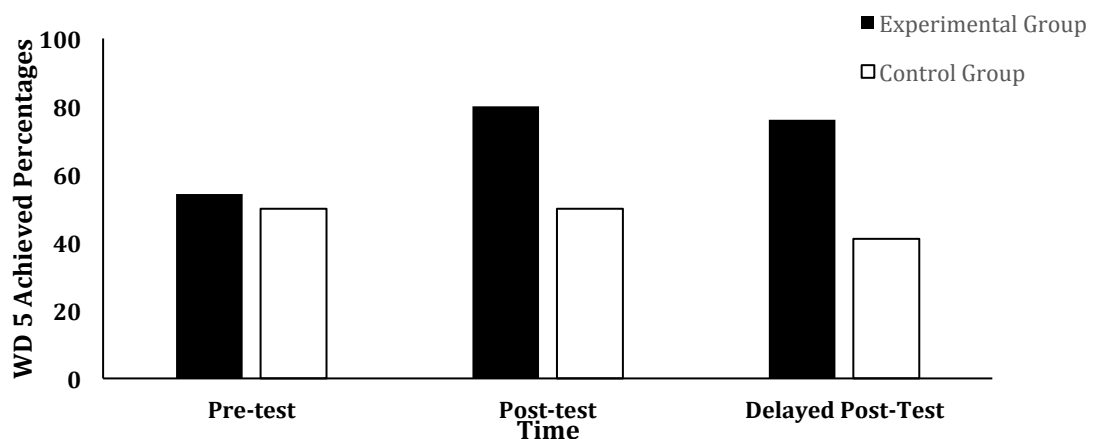
Both groups started at approximately the same level (experimental group –

54.3%, control group – 50.0%) in the pre-test for WD 5. However, the experimental

group shows an increase over time (immediate post-test and delayed post-test) while the

control group stayed the same in the immediate post-test and experienced a slight

decrease in delayed post-test. This suggests a high rate of improvement for the

experimental group in the immediate post-test and a similar high rate in the delayed

post-test in comparison to the pre-test. This indicates that the intervention caused

improvement with regards to WD 5 (examples of propositions) and that the

improvement was retained after a ten week period.

5.3.3 Examples of results for long-term effect for WD 4 and WD 5

A text example from student 12 shows how he improved from his pre-test to his immediate post-test and then retained the knowledge in his delayed post-test for WD 4. His pre-test lacked clarity of propositions for his supported thesis but his post-test, by contrast, showed improved clarity of propositions for his thesis. Therefore, there was an expectation that clarity of propositions would most likely be present in his delayed post-test, because he showed that he understood the explicit strategy instruction in the immediate post-test.

The example below shows an excerpt from the delayed post-test for student ID 12 relevant to WD 4.

> *(Introduction) It is true that studying alone is good because you can try to be concentrated. However, studying with a group of students can be better for several reasons such as, asking questions to others, using others skills in order to solve some difficult exercises, and having creative ideas.*
> *(1ˢᵗ body paragraph) First of all, studying with a group of students is better because you can ask questions to others. In general, when people study in-group, there are always good results of their studies. This means that when some are struggling with the understanding of some exercises or problems, they are able to ask questions to others. Then, asking questions to others can produce a positive result. (Student ID 12)*

From the introduction, student ID 12 has clearly chosen to support and argue the thesis about studying with a group. He provides three propositions that support his stated thesis and they are reasonably clear to understand. He then begins his second paragraph by introducing his first proposition (underlined in text) and provides more sentences to explain his proposition. His immediate post-test shows evidence of what was taught as part of the explicit strategy instruction (*'why and what',* see methodology chapter for explanation of strategy).

Student 10 is an example of someone achieving in the immediate post-test and the delayed post-test. He received an 'achieved' status, for WD 5 because he stated a clear thesis position, and then provided clear propositions for his stated thesis position and appropriate examples of his propositions which supported his thesis position. The example below shows an excerpt from student ID 12's delayed post-test.

> *(Introduction) Studying with a group of students has benefits in which studying alone falls short. Not only studying alone can provide the student with different points of views, but it can also make studying more fun. Studying in groups helps students gain different points of view, answer questions that they cannot answer by themselves, and also have more fun while studying.*
> *(1ˢᵗ body paragraph)* ***Studying in groups helps students gain more points of view on different topics because they can compare their understanding with the people they are studying with.*** *This helps students have a wider knowledge about the topic they are studying.* <u>For example, if a group of students are analyzing how the solar system works, some of them may have different theories about the movement of the planets; therefore if they combine those theories, it can lead to a better understanding of the topic for every individual student.</u>

From the example, one can see that he has clearly stated the thesis he wants to argue and the propositions that support his thesis in the introduction paragraph. Then, in his first body paragraph, he further explains his proposition (bold in text) and provides an example (underlined in text) showing the development of his idea. He also uses a discourse marker (*for example*) to indicate an example of this proposition.

Both of these students did not achieve the criteria for either WD 4 or WD 5 in their pre-tests but did achieve the criteria in their immediate post-test and retained their achieved status in their delayed post-test.

5.4 Discussion of results for RQ 2b

The strategies that were taught as part of the strategy instruction were not revisited or repeated after the immediate post-test. Although regular writing class instruction was given during the 10-week, period between the immediate post-test and the delayed post-test, teachers did not revisit the explicit strategy instruction. It should

174

also be noted that the strategy instruction was not revisited mainly because the teachers of the regular writing classes were not in attendance when the strategy instruction was given to their students. After a 10-week period, a delayed post-test was given. The writing prompt was not the same one used as part of the pre-test and immediate post-test, yet it was similar enough to see if the strategies previously taught had been used and whether or not they revealed retention.

The discussion for RQ 2b is organized similarly to the discussion for RQ 2a. Therefore, this section begins with discussion for WD 4 and WD 5 in regards to other research (5.4.1) and discussion for WD 4 and WD 5 in regards to theory (5.4.2)

5.4.1 Discussion of results for long-term effect for WD 4 and WD 5 in regards to other research

There was one study discussed in section 2.6.3 that employed a delayed post-test that can explain the findings for RQ 2b (AlHassan & Wood, 2015). One reason that some students were able to show an ability to retain their knowledge of WD 4 and WD 5 in the delayed post-test was the strategy instruction focused only on two specific strategies (WD 4 and WD 5). AlHassan & Wood (2015) support this explanation that focused instruction contributes to retention of knowledge. They stated that the ability of all their participants to use the same number of targeted formulaic sentences in both their post-test and delayed post-test suggests that the "focused instruction led to the successful acquisition and internalization of the target formulaic sentences" (p. 58). Even though the current thesis cannot account for actual acquisition, it can suggest that focused targeted instruction may have been one reason for retaining improvement in the delayed post-test. Additionally, AlHassan & Wood (2015) stated that their focused instruction encouraged participants' to use formulaic sentences that were not part of the instruction showing an ability to enhance their writing further in a targeted area. This

also occurred in the current thesis where students had to think of different types of appropriate propositions (WD 4) and examples of propositions (WD 5) in the delayed post-test. Because participants were given a different topic in the delayed post-test, they could not use the examples given in the strategy instruction but they could use the knowledge and apply it to a different writing topic. This suggests that declarative knowledge for participants' who achieved the criteria in the delayed post-test, had more than likely proceduralized so that they could either draw upon the declarative knowledge more rapidly or upon the new knowledge as proceduralized implicit knowledge.

5.4.2 Discussion of results for long-term effect for WD 4 and WD 5 from a theoretical perspective

The principles of Anderson's strategy-to-skill continuum (see chapter 2) offer another reason students may have been able to show retained knowledge (see Chapter 2). Anderson (2008) explains that at one end of the continuum is a strategy and at the other end is a skill. The strategy is made conscious through instruction or self-learning and is used for the purpose of improvement in the area of the skill. The skill is mastered through practice of the strategy to the point where it is used without conscious attention (automatically) when needed (Anderson, 2008). If students in the current study had repeatedly used the strategy on their own, during the ten-week period, it may have been enough practice for the skill to have developed. The only indication that students used the strategy on their own after the immediate post-test was from a teacher of one of the classes from the experimental group. This teacher asked me what the *'why and what'* strategy entailed because she overheard one student advising two of his classmates to use the *'why and what'* strategy to help develop their paragraphs. She was particularly impressed that they knew what to do from the name of the strategy and that the student

advising them did not have to explain what the strategy was. It would seem that this was a result of the strategy instruction being explicit. As Anderson (2008) states, a strategy progressing towards a skill can be accelerated with explicit instruction. This is the type of instruction that this research employed.

So why did some students not improve? Firstly, students may have still been progressing towards the skill along the strategy to skill continuum and may not have generated their own practice opportunities as the other successful students had. Secondly, some students may not have been engaged enough during the explicit instruction because they were either unmotivated or not paying enough attention.

Another reason that students retained their strategy instruction knowledge at delayed post-test can be drawn from skill acquisition theory. Skill acquisition theory defines learning as the continuing transformation of performance from controlled to automatic and that transformation occurs through repetitive practice (Dekeyser, 2003). The continual practice allows for controlled processes (explicit instruction of strategies) to be withdrawn gradually as automatic processes take over. This process is known as automatization (or proceduralization) and involves explicit knowledge (declarative knowledge), which is, over time and with practice, converted into implicit knowledge (procedural knowledge) (J R Anderson, 1982).

With reference to the current study, the explicit strategy instruction consciously facilitated the development of explicit knowledge. After a ten-week period, students had an opportunity to show whether acquisition of the writing strategies had occurred or whether they were still in the process of developing their explicit knowledge. If students successfully converted their explicit knowledge to implicit knowledge, then they most likely achieved the criteria in the delayed post-test. However, if they were still in the process of proceduralising their explicit knowledge or they had not moved along the continuum because of a lack of practice, they were most likely to have not achieved the

criteria in the delayed post-test. Further research that includes an added self-evaluation survey or questionnaire may provide further insights into this question as well as help researchers gauge students' perceptions of the usefulness of the strategy at the end of the 10 week period.

CHAPTER SIX

CONCLUSION

6.0 Introduction

This chapter begins by presenting the aims of the research (6.1). The next section is a summary of the key findings (6.2) followed by the contributions the findings of this research make to the field of L2 writing (6.3). The chapter continues with limitations of the study (6.4), future research recommendations (6.5) and concludes with final remarks (section 6.6).

6.1 Achieving the aims of the research

This study had two main aims. The first aim was to investigate the extent to which beginning academic L2 students experience WDs when writing an expository essay. The investigation was designed to explore possible reasons why WDs occur and to contribute to an understanding of how to effectively attend to WDs. The second aim of this study was to explore the effectiveness of an explicit strategy instructional approach for treating WDs by means of an experimental and control group design.

The data for this study were collected at a large university in the USA. The participants were L2 students from academic writing classes (five classes in total) who were all of the same proficiency level according to the results of the institutional placement test. One class of students was randomly assigned as the control group, while the remaining classes were assigned to the experimental group. Both the control and experimental groups participated in the pre-test, immediate post-test, delayed post-test and survey. However, only the experimental group received the explicit strategy instruction prior to undertaking the immediate post-test. All tests (pre-test, immediate post-test and delayed post-test), the survey and the explicit strategy instruction were

administered by the researcher and designed to answer the two main research questions.

6.2 Summary of findings

RQ1: What are the writing difficulties that L2 learners experience when writing an expository essay?

This question was operationalized by means of three subsidiary questions.

RQ 1a – What are the <u>actual</u> writing difficulties?

Based on the pre-test findings, the participants had the most difficulty with communicating their ideas in complete clear sentences (WD 9 criterion from the Assessment Criteria Framework). They revealed difficulty with using a number of grammatical features correctly and appropriately, but the two most problematic grammar features concerned verb tenses and articles. Among the verb errors, a lack of agreement between the subject and verb (e.g. a singular subject used with a verb in the plural form or a plural subject used with a verb in the singular form) was revealed to be most problematic. Following subject-verb agreement errors, writing the verb in the wrong tense was revealed to be the next most problematic. With regard to articles, the participants found it difficult to use the definite article ('the') correctly, mainly with regards to omitting the definite article when it was required (e.g., omitting the definite article before *internet* when it was needed). There were other errors related to linguistic accuracy (e.g., using the passive and active voice incorrectly; pronouns used incorrectly) but they were not as prominent. In addition, participants sometimes showed a lack of appropriate academic vocabulary and a lack of knowledge about how to use punctuation correctly. These sometimes contributed to unclear sentences.

Research question 1a was also designed to establish which WDs should be targeted as part of the explicit strategy instruction. After reviewing the literature (see

Chapter 2) on local and global WDs, it was revealed that attending to global WDs would be more beneficial for developing students writing an expository essay, than local WDs. In light of this knowledge, even though WD 9 (communicating ideas in complete clear sentences) was revealed to be most problematic, it was not part of the explicit strategy instruction. Therefore, the next most problematic global WD was WD 4 (ability to clearly state appropriate propositions for a stated thesis position). In this case, the participants struggled to give clear propositions to support the thesis position they had taken. They exhibited this WD by either giving reasons that justified the opposing argument rather than the one stated or by providing a proposition that was unclear or unrelated to the topic of the writing assignment. Consequently, WD 4 was the first WD to be targeted in the explicit strategy instruction.

The next most problematic WD after WD 4 was WD 5 (ability to provide examples of propositions for a stated thesis position). For this criterion, it was expected that students would develop a paragraph by providing further details in support of their thesis and propositions in the form of definitions, explanatory details or examples. However, some students did not have the background topic knowledge or were unable to use their background knowledge to generate ideas and information for the position they had taken. As a result, WD 5 was the second WD targeted as part of the explicit strategy instruction.

RQ 1b – What are the <u>perceived</u> writing difficulties

The aim of RQ 1b was to investigate the participants' perceptions of what they believed to be their difficulties when writing an expository essay because students' perceptions have been known to influence their motivation, effort and performance on a given task. If this is true, ideally, it would be best if students' perceptions of their WDs corresponded with their actual writing performance. For example, this would be the

case if students who believed that they did not have difficulty writing an introduction also showed no difficulty writing an introduction.

The participants' perceptions were measured by means of a survey that had nine statements. Each began with "When writing an essay I have difficulty with …". They responded to each statement using the following 5 point scale: (1) Never True, (2) Usually Not True, (3) Somewhat True, (4) Usually True, and (5) Always True. Those who selected (3) somewhat true, (4) usually true and (5) always true revealed a perceived difficulty, while those who selected (1) never true and (2) usually not true did not perceive that they had a difficulty. Each of the nine statements and the nine survey criteria corresponded to the nine criteria of the Assessment Criteria Framework.

From the 60 participants who took the survey, the mean scores for each criterion showed similar results. On average, their responses were between (2) usually not true and (3) somewhat true. For example, statement 1 showed that, on average, most students responded that it was '(2) usually not true' that they perceived difficulty with understanding the purpose of a writing assignment. Additionally, there were a few students who also selected 'never true (1)' and 'somewhat true (3)', showing a marginal spread of survey responses. For most of the survey statements, most students, on average, perceived some difficulty but not a lot of difficulty.

RQ 1c – To what extent is there a relationship between students actual and perceived WDs?

The purpose of RQ 1c was to provide an understanding of whether a relationship existed between students actual and perceived WDs. By comparing the survey (perception) and pre-test writing task (actual), it was found that, on average, there was no relationship between what students perceived to be a difficulty and what they actually revealed to be causing a difficulty in their writing. After comparing the nine

statements on the survey and the nine criteria that assessed the pre-test, it was found that there were no correlations, indicating that there was no relationship between perceived WDs and the actual WDs. Despite a few individual students showing that there was a match between their perceived and actual WDs, there were not enough participants who showed this result to conclude that there was a significant relationship between actual and perceived WDs. As a result, the findings indicated that there was no correlation between the actual WDs and the perceived WDs for the participants in this study.

RQ 2: What was the effect of the explicit strategy instruction?

The purpose of RQ 2 was to determine whether there was an effect from the explicit strategy instruction for WD 4 (propositions for stated thesis statement) and WD 5 (examples of propositions). These were the two global WDs revealed as most problematic and therefore the ones targeted as part of the explicit strategy instruction. RQ 2 is separated into the immediate effect of the explicit strategy instruction (RQ 2a) and the long term effect of the explicit strategy instruction (RQ 2b).

RQ 2a– What was the <u>immediate</u> effect of the explicit strategy instruction?

RQ 2a investigated the immediate effect of the intervention when comparing data from pre-test and immediate post-test performance, and when comparing data from control group and experimental group performance from pre-test to immediate post-test.

The immediate effect of the explicit strategy instruction for WD 4 (propositions for a stated thesis statement) showed that an increased number of participants had an ability to provide appropriate proposition statements to support a thesis statement when data from the pre-test and immediate post-test performances were compared. However, when measuring for effectiveness by comparing data from the control and experimental

group, even though, on average, those in the experimental group performed better than those in the control group, the improvement was not significant, because the experimental group showed participants starting at a higher point of competence than those in the experimental group. Another statistical test was considered that would put both the control and experimental at the same starting point, but it could not be used because the data did not meet the specific criteria of the statistical test. As a result, despite a number of students improving in WD 4 (propositions for a stated thesis statement) from pre-test to immediate post-test, the effect was not significant when the experimental and control group were compared.

On the other hand, the immediate effect of the explicit strategy instruction for WD 5 (examples of propositions) showed that an increased number of paticipants had an ability to provide examples and supporting details for proposition statements when data from the pre-test and immediate post-test performance were compared and when data from the control group and experimental group were compared. As a result, for WD 5 (examples of propositions), the explicit strategy instruction was effective, and through statistical testing, the effect from the instruction was found to be significant.

RQ 2b – What was the <u>long-term</u> effect of the explicit strategy instruction when comparing pre-test, immediate post-test and delayed post-test?

The objective of RQ 2b was to determine whether there was a long-term effect (ten weeks) from the explicit strategy instruction for WD 4 (propositions for a stated thesis statement) and WD 5 (examples of propositions) when comparing pre-test, immediate post-test, delayed post-test performance, and also when comparing control group and experimental group performance from pre-test, immediate post-test and delayed post-test.

184

The long-term effect of the explicit strategy instruction for WD 4 (propositions for a stated thesis statement) showed that a similar number of students who showed an ability to write appropriate proposition statements in the immediate post-test retained their knowledge and wrote appropriate proposition statements in the delayed post-test, indicating that the explicit strategy instruction had a long-term effect when (comparing the pre-test, immediate post-test and delayed post-test). However, the effect was not found to be significant when statistical testing was performed to compare data from the control group and experimental group. Despite participants in the experimental group performing better on average than those in the control group, (when comparing the pre-test and immediate-post test and immediate post-test and delayed post-test), the improvement was not significant mainly because, as stated above in the results for RQ 2a, the experimental group and control group did not both start at the same level. As a result, despite students improving in WD 4 (propositions for a stated thesis statement) from pre-test to immediate post-test and retaining that improvement in the delayed post-test, there was no significant effect from the explicit strategy instruction when the experimental group and control group were compared.

On the other hand, however, the long-term effect of the explicit strategy instruction for WD 5 (examples of propositions) showed that an increased number of students had an ability to provide examples and supporting details for proposition statements. This result occurred when pre-test and immediate post-test performances were compared, when the immediate post-test and the delayed post-test were compared and when the control and experimental group in the pre-test, immediate post-test and delayed post-test were compared. As a result, for WD 5 (examples of propositions) the explicit strategy instruction was effective, and through statistical testing the effect from the explicit strategy instruction was found to be significant. In other words, participants

were able to retain the knowledge gained from the explicit strategy instruction at the immediate post-test to use in their writing ten weeks later in the delayed post-test.

6.3 Contribution of the thesis to the field

This section discusses the contributions of this thesis to the field. It includes contributions to empirical knowledge (6.3.1), theoretical understanding (6.3.2), methodology (6.3.3) and pedagogy (6.3.4).

6.3.1 Contribution of the thesis to empirical knowledge

The current study has further developed investigations into WDs in terms of identifying WDs that can often occur when students write an expository essay. The study also examined the effectiveness of an explicit strategy instruction for attending to the identified WDs.

With regards to WDs (RQ 1), it can be seen from previous empirical research that they have been identified and discussed in terms of why they occur, but less so in terms of how they can be addressed (James, 1984; Khansir & Shahhoseiny, 2013; Ong, 2011; Qian & Krugly Smolska, 2008; Zhang, 2000). A large number of studies have explored linguistic accuracy and lexical WDs (e.g. difficulties with tenses, articles and misuse of vocabulary) but less has looked at global writing, skill-related WDs (e.g. organization and argumentation). Furthermore, WD studies seem, in some cases, to report more about local WDs from a linguistic accuracy perspective than about global WDs from a genre perspective. A range of genre characteristics was examined in this thesis but only the WDs that were determined to be most problematic and did not meet the specified criteria of the expository genre were focused on. Also, the results of this study found that there was no relationship between what most participants perceived to

186

be difficult for them and what their texts revealed to be difficult for them. However, this occurrence may be better investigated, in the future, by comparing the experiences of the few whose perceived and actual WDs matched and those who did not. Such a comparison would be more informative about whether students' perceptions of WDs helps them understand why their WDs occur.

The current study also advanced our understanding of the effectiveness of explicit strategy instruction (RQ 2), especially strategies that targeted an identified global WD in expository writing. The majority of L2 strategy-related writing studies have confirmed the value of using strategies for planning (Ching, 2002; Rao, 2006; Panahi, 2013) revising (Ching, 2002; Creswell, 2000; Sengupta, 2000) and formulaic sentences (Wood, 2016). The current study, however, investigated the effect of an explicit strategies instructional approach for targeting the WDs that were found to be most problematic for beginning academic L2 writers. The difference between the current study and previous research is that, strategies in this study were selected on the basis of what was revealed as most problematic as opposed to the demands of L2 writing programs as with institutional curriculums that may or may not include recurrent WDs. Secondly, the strategy instruction in this study used a one-time teacher-fronted instructional approach that only targeted two problematic areas as opposed to other studies that provided several sessions of strategy instruction over a semester or school year. By having the strategies target a problematic area, one deduction that could be drawn is that students showed more motivation to follow the strategy instruction on specific difficulties they were experiencing. Therefore, the findings of this study have confirmed the value of explicit strategy instruction for attending to two of the L2 global WDs that beginning academic L2 writers experienced when writing an expository essay. It may be that other targeted areas in L2 writing can also be addressed with strategy instruction. Further research would do well to look into this.

6.3.2 Contribution of the thesis to theoretical understanding

Because the summary of findings (6.2) was reported by research question, the contribution of theory to explain those findings will be discussed research question by research question.

6.3.2.1. Research question 1a

There are three theories that can explain the results for RQ 1a. The first theory, the acquisition/learning hypothesis (section 2.2.1) explains the first finding for RQ 1a, where most participants struggled to write clear sentences (WD 9). This theory states that *acquisition* and *learning* require two different processes and therefore *learning* cannot convert into *acquisition* (non-interface position). This hypothesis claims that there is a significant difference between learning that takes place in a classroom using textbooks and decontextualized practice activities and learning that takes place in naturalistic settings. The former makes it impossible for *learning* to turn into natural *acquisition* (non-interface position). WD 9 can be explained by this theory because even though most of the participants had more than 2 years of English classroom instruction (*learning),* they struggled to develop an accurate use in written English language, suggesting therefore that they had not yet reached the type of acquisition that Krashen refers to (i.e. use of implicit knowledge).

The second theory, skill acquisition theory (section 2.2.2), explains three findings from RQ 1a where participants found difficulty with 1) writing clear sentences (WD 9), 2) writing appropriate propositions (WD 4) and 3) writing examples of propositions (WD 5). This theory states that knowledge is processed across three main stages: 1) declarative stage, 2) procedural stage, and 3) automatic stage. It also states that learning may turn into acquisition over time with practice (interface position).

However, acquisition will not occur if declarative knowledge, has not converted to proceduralized knowledge. Thus, skill acquisition theories may explain why WD 9, WD 4 and WD 5 were the most problematic. Participants' declarative knowledge of how to write clear sentences (WD 9), appropriate propositions (WD 4) and examples of propositions (WD 5) had most likely not proceduralized to the point where it could be drawn upon rapidly as declarative (explicit) knowledge or to the point where it had become implicit knowledge that could be accessed without conscious attention. Thus, WD 9 may have occurred not only because the participants had not been able to draw upon implicit knowledge of the linguistic form or structure, but also because they had not yet been able to rapidly make use of their explicit knowledge. This line of thinking can also explain why the two non-linguistic WDs 4 and 5 (e.g., appropriate propositions and examples of propositions) were difficult but in terms of writing skills.

The third theory, genre theory (section 2.3), may also provide an explanation for why WD 9, WD 4 and WD 5 were difficult for participants. Genre theory states that a type of writing has certain conventions and characteristics that need to be present in order for the type of genre writing to be typical of that particular genre. Even though every text produced within a genre is not going to be exactly the same, the main characteristics should still be evident. Therefore, regular users of a genre should be able to easily recognize the genre, based on an understanding of what is expected regarding language and content. Therefore, genre theory may explain why writing clear sentences (WD 9), writing propositions (WD 4) and examples of propositions (WD 5) were difficult for students because they did not know the expected characteristics for an expository essay in terms of language (WD 9) and content (WD 4 and WD 5) expectations.

6.3.2.2 Research question 1b and 1c

Besides looking at why WDs occur from a language and skill-related perspective, this study went further and explored why WDs occurred from an affective perspective. Self-efficacy theory explains the findings for RQ 1b and 1c. In relation to RQ 1b, participants' survey findings indicated what they perceived to be difficult for them when writing in English. Some students believed they did not have difficulty with some of the criteria (e.g., writing an introduction) and this was evident in their pre-test writing. However, some students believed they did not have difficulty (e.g., writing propositions) but showed a lot of difficulty in their pre-test writing. Also, whereas some students believed they have a lot of difficulty and showed in their pre-test that they did have a lot of difficulty, others believed that they have a lot of difficulty but did not show this in their pre-test writing. Self-efficacy theory, therefore, explains these findings for some of the students. Self-efficacy theory proposes that students with a high belief in their ability to write are more than likely to show no difficulty and that those with a low belief in their ability to write are more than likely to show difficulty. This was the case for some students but not all of the students. As a result, the findings of this study showed no consistent relationship between students' self-belief and their performance (RQ 1c). Because most students did not show a relationship between their perceptions and their actual writing, then self-efficacy may not necessarily be a key factor when investigating WDs or maybe more focus is needed on why some participants' perceptions matched and why some did not.

6.3.2.3 Research question 2a and 2b

There are three theories that explain the findings for RQ 2a and 2b. The first theory is skill acquisition theory. While the findings for RQ 1 (the identification of WDs) can be explained by the non-interface position, the findings for RQ 2a and 2b

190

(the effectiveness of the explicit strategy instruction) can be explained by the interface position (skill acquisition theory), which argues that learning may turn into acquisition with practice over time. The findings of the current study showed that for some students, the *learning* of two strategies that targeted only two WDs, may have converted to the *acquisition* of the two problematic areas as revealed in the delayed post-test. However, the study was not designed to investigate the conversion to acquisition construct so it is not possible to know whether they were drawing upon implicit knowledge (suggesting acquisition) or upon rapidly accessed explicit knowledge. The skill acquisition theory does, however, suggest that explicit strategy instruction, was one reason for the students improving in the immediate post-test (RQ 2a) and retaining knowledge in the delayed post-test (RQ 2b) because the instruction required conscious attention.

A second theory that can explain the findings for RQ 2a and 2b is metacognitive theory (section 2.5.2.2). Metacognitive theory states that when students are encouraged to think deeper and reflect on how they learn and accomplish tasks, it will lead to an improved performance. Therefore, students need to understand what is involved in metacognition and engage in metacognitive experiences. The explicit strategy instruction incorporated metacognitive moments whereby students were asked to think about what they were trying to achieve, monitor how well they were doing and reflect on what they could do better. Having students reflect and ask themselves metacognitive questions, experience metacognition as part of the instruction is one explanation for their improvement in the immediate post-test. Additionally, knowing how to metacognize from the explicit strategy instruction may also explain why participants retained their level of improvement in the delayed post-test.

The last theory that may explain the findings for RQ 2a and 2b is genre theory. According to the genre theory, mentioned above, participants found WD 4 (appropriate

propositions) and WD 5 (examples of propositions) difficult because they did not know that these were expected genre characteristics. As a result, the explicit strategy instruction targeted those two genre characteristics, and this explains why participants improved for WD 4 and WD 5. Once they had gained this genre knowledge about what was expected for WD 4 and WD 5, and about how to address it, they were able to provide appropriate propositions and examples of propositions.

6.3.3 Contribution of the thesis to methodology

The research questions of this study had not been the focus of earlier research and so it was necessary to decide which methodological approach would be most suitable and appropriate for finding answers to the research questions. Despite a number of previous studies (Berman, 1994; Ching, 2002; Rao, 2006; Wood, 2016), providing strategy instruction (using a pre-test/post-test methodology), their post-tests were not administered immediately after the instruction so this did allow for other factors to potentially influence students' improved writing. Therefore, the methods employed in the current research were sufficient to gain answers to the research questions of the study. The writing samples, using the assessment criteria framework, revealed students' WDs and the survey revealed students' perceived WDs (RQ 1). The comparison of the pre-test and immediate post-test for the two targeted WDs was also sufficient to determine the extent to which the explicit strategy instruction was effective because the immediate post-test was conducted directly after the instruction. This allowed for no other variables to influence the students' writing except for the strategy instruction.

Reflecting on the contribution of this study to the field, a replication would be enriched with the use of additional self-report data. If students provided further self-report data at delayed post-test, there would be more information available to determine if *learning* had truly converted into *acquisition*, because as previously mentioned

(6.4.2), the current findings do not clearly reveal *acquisition*. Additionally, a self-report data method would possibly explain whether participants drew upon their declarative knowledge more rapidly or upon their new knowledge as proceduralized implicit knowledge. Also, self-report data can possibly inform whether students were still progressing along the strategy to skill continuum and reveal what challenges are occurring and that are hindering progress.

6.3.4 Contribution of the thesis to pedagogy

The study has shown that when students are given targeted explicit strategy instruction, especially to address a WD, they can improve. Therefore, when necessary, teachers should aim to understand what explicit instruction consists of and ensure that they understand what strategies their learners could benefit from being taught. The contribution to pedagogy that this thesis makes is that strategy instruction is best utilized when it is explicit, when it uses a step-by-step process, and when it employs strategies that target specific WDs. In order to determine what specific WDs to focus on, this study used a genre-based framework to assess whether students wrote according to the expected characteristics of the genre. The two characteristics of the genre-based framework that students found most problematic were the two WDs that the strategy instruction targeted. Therefore, teachers may feel confident to also design and use a genre-based framework to identify what is likely to be most difficult for students when writing various types of text. Doing so would enable them to clearly identify and understand the expected characteristics of the genre and identify which characteristics were more difficult for students. For example, from the genre framework in this study, it was revealed that the most challenging characteristic for students was writing appropriate propositions for the thesis of the essay. As a result, the first strategy specifically targeted how to write appropriate propositions. Discussion that took place

as part of the strategy instruction revealed that most of the students were unfamiliar with that characteristic of the genre, which is why it was most difficult. Most students were familiar with writing introductions and conclusions so those characteristics were not part of the strategy instruction. Therefore, for L2 students to develop their writing, as they were seen to do in this study, teachers are advised to target strategy instruction in areas of weaknesses (e.g. genre characteristics that are not being met). Additionally, from the current study, teachers should feel confident to teach strategies in an explicit teacher-fronted manner because the explicit strategies instructional approach used for writing propositions and examples of propositions in the current study was effective.

6.4 Limitations

While this study has provided a deeper understanding of WDs and the effectiveness of explicit strategy instruction as a means of attending to WDs, there are some limitations.

The first limitation concerns the use of a primarily quantitative approach. Qualitative data tends to make it possible to probe for further insights than is possible with a quantitative approach. Using only a quantitative methodology in this research limited the opportunity to probe for further evidence of students engagement in metacognitive experiences and to explore their personal views on the effectiveness of the strategy instruction in the immediate post-test and delayed post-test.

Another limitation of this study is that no added attention was given to the students who did not improve after the strategy instruction. If the instruction was successful for a number of students, then why did it not work for all students? To identify what WDs students experienced and why they regularly occurred, a deeper analysis of those who had not improved after the strategy instruction would have been beneficial to further understand why the strategy instruction was not useful. Further

investigation of whether students learned better with another type of instruction (e.g. one-on-one scaffolded) would have also been beneficial. Case studies may have addressed this limitation.

Another potential limitation was that only the researcher conducted the explicit strategy instruction. It is therefore not known if the instruction would have been as effective if teachers had been given training and then conducted the instruction themselves. Because the researcher was personally invested in this study, she was highly motivated to conduct the explicit strategy instruction. However, it is unknown if the same motivation would be experienced by other teachers after receiving strategy training on how to teach explicit strategies.

6.5 Future research

This section begins by referring to specific aspects of further research that have arisen from the limitations. The first recommendation for future research is to investigate the effectiveness of explicit strategy instruction for targeting WDs by using a mixed methodology (e.g., quantitative and qualitative data). Adding a mixed method design may better reveal what specific parts of the instruction were more effective than others. For instance, maybe some students would find that when the teacher consistently prompts them to think about what they are doing (e.g. metacognitive theory) they perform better or give more attention to the point being taught. Qualitative data could be used through self-report surveys or in-depth interviews to determine this.

The second recommendation for more research is in regards to students who do not improve in the immediate post-test. More research should be conducted to focus on specific reasons why those students did not improve. The questions to be investigated could be 'Do such students merely require one-on-one instruction or additional

scaffolded instruction in order to improve or is there another issue related to why they did not improve after the explicit strategy instruction?'

Another recommendation for future studies is that they could involve teacher training on how to teach explicit strategies effectively. If explicit strategy instruction targeting WDs is effective, then it should be more widely used in L2 writing classes. Additionally, it would be advantageous to know whether certain characteristics and pedagogical practices of individual teachers generate results that are as effective or more effective and if so, what those characteristics and practices are. This would be useful to know in order to determine what other variables could be considered when teaching explicit strategies.

Furthermore, there are other considerations that can be given to future research. For example, providing targeted instruction for more authentic tasks that are not conducted under controlled conditions. Also, looking at other aspects of argument that are difficult and could occur in other university writing genres.

6.6 Final Remarks

The aim of this study was to investigate whether explicit strategy instruction would be effective in treating WDs in expository essay writing. It was exciting to see that explicit strategy instruction was effective in immediately treating WD 4 (stating appropriate propositions for stated thesis statement) and WD 5 (providing explanation and examples to further develop propositions) for a number of students. It was also exciting to see that a large number of students were also able to apply those strategies after a period of ten weeks to a similar writing task from the same genre (exposition).

This research advances knowledge in the areas of L2 theory, L2 writing research and L2 writing pedagogy. As a teacher of L2 students in an undergraduate university context, I am encouraged to consider theories when planning writing instruction after

conducting this research. I am also motivated to construct genre frameworks to better understand the writing tasks I assign my students and to have the students better understand the writing genre they are writing within. Because this study has heightened my passion to teach L2 writing, I cannot wait to be back in the classroom as a positive and important force of L2 students writing development.

REFERENCES

Alarcon, J. B., & Morales, K. N. S. (2011). Grammatical cohesion in students' argumentative essay. *Journal of English and Literature*, 2(5), 114-127.

Al-Abed Al Haq, F., & Ahmed, A. (1994). Discourse problems in argumentative writing. *World Englishes*, 13 (3), 307-323.

Alhasan, L. & Wood, D. (2015). The effectiveness of focused instruction of formulaic sequences in augmenting L2 learners' academic writing skills: A quantitative research study. *Journal of English for Academic Purposes,* 17, 51-62

Allington, R. L. & Strange, M. (1980). *Learning through reading in the content areas*. Lexington, MA: Heath.

Anderson, J. R. (1976). *Language, memory and thought.* Hillside, NJ: Lawrence Erlbaum

Anderson, J. R. (1982). Acquisition of cognitive skill. *Psychological Review*, 89, (4) 369-390

Anderson, J. R. (1983). A spreading theory of memory. *Journal of verbal learning and verbal behavior.* 22 (3) 261-295

Anderson, N. J. (1991). Individual differences in strategy use in second language reading and testing. *Modern Language Journal* 74, (4), 460-472

Anderson, N. J. (2002). The role of metacognition in second/foreign language teaching and learning. ERIC Digest. Retrieved 9 November 2015

Anderson, N. J. (2008). Metacognition and the good language learner. In C. Griffiths (Ed.) *Lessons from good language learners* (pp. 99-109). Cambridge: Cambridge University Press.

Anderson, N. J. (2012). Metacognition: Awareness of language learning. In S. Mercer, S. Ryan and M. Williams (Eds.) *Psychology for language learning: Insights from research theory and practice* (pp. 169-187). Basingstoke, UK: Palgrave

Altarriba, J., & Basnight-Brown, D. M. (2009). An information-processing approach to

    second language acquisition. In Ritchie, W., & Bhatia, T. (Eds) *The new*

    handbook of second language acquisition. Bingley: Emerald Group, 115-36

Archer, A. L. & Hughes, C. A. (2011). *Explicit Instruction: Effective and Efficient*

    Teaching. The Guilford Press

Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft

    composition classroom: Is content feedback followed by form feedback the best

    method? *Journal of second language writing.* 9, 227-257

Bacha, N. N. (2010). Teaching the academic argument in a university EFL

    environment. *Journal of English for Academic Purposes,* 9, 229-241

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioural change.

    Psychology Review, 84, (2), 191-215

Bandura, A. (1986). *Social foundations of though and action: A social cognitive theory.*

    Englewood Cliffs, NJ: Prentice Hall

Bandura, A. (1995). *Self-efficacy in changing societies.* Cambridge: Cambridge

    University Press

Bandura, A. (2001). Social cognitive theory: an agentic perspective. *Annual Review of*

    Psychology, 52, 1-26.

Bandura, A. (2012). On the functional properties of perceived self-efficacy revisited.

    Journal of Management, 38 (1), 9-44.

Basturkmen, H. & Randow, J. (2014). Guiding the reader (or not) to re-create

    coherence: Observations on postgraduate student writing in an academic

    argumentative writing task. *Journal of English for Academic Purposes*, 16, 14-

    22

Belcher, D. (1994). The apprenticeship approach to advanced academic literacy:

    Graduate students and their mentors. *English for Specific Purposes,* 13, 23-34

Bereiter, C. & Scardamalia, M. (1987). *The psychology of written composition.* Hillsdale, NJ: Lawrence Erlbaum Associates.

Berman, R. (1994). Learners' transfer of writing skills between languages. *TESL Canada Journal, 12, 1,* 29-46

Bitchener, J. (2008). Evidence in support of written corrective feedback. Journal of Second Language Writing, 17 (2), 69-124.

Bitchener, J. & Barsturkmen, H. (2006). Perceptions of the difficulties of postgraduate L2 thesis students writing the discussion section. Journal of English for Academic Purposes, 5, 4-18.

Bitchener, J., & Ferris, D. (2012). *Written corrective feedback in second language acquisition and second language writing.* New York: Routledge

Bitchener, J. & Storch, N. (2016). *Written corrective feedback for L2 development:* Clevedon, UK: Multilingual Matters.

Byrne, D. (1986). *Teaching Oral English*. Harlow: Longman

Casanave, C. & Hubbard, P. (1992). The writing assignments and writing problems of doctoral students: Faculty perceptions, pedagogical issues and needed research. *English for Specific Purposes*, 11, 33-49.

Chamot, A. U. (2004). Issues in language learning strategy research and teaching. *Electronic Journal of Foreign Language Teaching*. 1 (1), 12-25

Chamot, A. U. (2005). Language Learning Strategy Instruction: Current issues and research. *Annual Review of Applied Linguistics,* 25, 112-130.

Chandler, J. (2003). The efficacy of various kinds of error feedback for improvement in the accuracy and fluency of L2 student writing. *Journal of second language writing*, *12*(3), 267-296.

Ching, L. C. (2002). Strategy and self-regulation instruction as contributors to improving students' cognitive model in an ESL program. *English for Specific Purposes, 21*, 261–289.

Cohen, A. D. (2003). The learner's side of foreign language learning: Where do style, strategies, and tasks meet? *International Review of Applied Linguistics*, 41 (4), 279-291.

Cohen, A. D. (2007). Coming to terms with language learner strategies: surveying the experts. In A. D. Cohen & E. Macaro (Eds.), *Language learner strategies: Thirty years of research and practice*. Oxford University Press (pp. 29-46).

Cohen, A. D. (2010). Focus on the language learner: Styles, strategies and motivation. In N. Schmitt (Ed.), *An introduction to applied linguistics* (pp. 161-178). 2nd ed. London: Hodder Education

Cohen, A. D. & Macaro, E. (2007). *Language learner strategies: Thirty years of research and practice.* Oxford University Press

Cooley, L., & Lewkowicz, J. (1995). The writing needs of graduat students at the University of Hong Kong: A project report. *Hong Kong Papers in Linguistics and Language Teaching,* 18, 121-123.

Cooley, L., & Lewkowicz, J. (1997). Developing awareness of the rhetorical and linguistic conventions of writing a thesis in English: Addressing the needs of ESL/EFL postgraduate students. In A. Duszak (Ed.), *Culture and styles of academic discourse* (pp. 113-140). Berlin: Mouton de Gruyter.

Cresswell, A. (2000). Self-monitoring in student writing: developing learner responsibility. *ELT Journal* 54, 3, 235-244.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches*. (3rd ed.). Sage Publications

Crossley, S. A. & McNamara, D. S. (2012). Predicting second language writing proficiency: the roles of cohesion and linguistic sophistication. *Journal of Research in Reading*. 35, (2), 115-135

DeKeyser, R. (2003). Implicit and explicit learning. In C. Doughty & M. Long (eds), *Handbook of Second Language Acquisition*. Oxford: Blackwell, 313-343

DeKeyser, R. (2005). What makes second-language grammar difficult? A review of issues. *Language Learning* 55, Supplement 1, 1-25

Diehl, W. A. (1980). *Functional literacy as a variable construct: An examination of attitudes, behaviors, and strategies related to occupational literacy.* Indiana University. (Unpublished Ph.D. Dissertation.)

Ding, Y. (2007). Text memorization and imitation: the practices of successful Chinese learners of English. *System*, 35(2), 271-280.

Dornyei, Z. (2007). *Research methods in applied linguistics: Quantitative, qualitative and mixed methodologies*. Oxford: Oxford University Press.

Feng, T. (2003). *An investigation of cohesive errors in the writing of first-year NUS students from PRC.* Unpublished master's thesis, National University of Singapore, Singapore

Ferris, D. (2002). *Treatment of error in second language writing*. University of Michigan Press.

Ferris, D. R. (2006). Does error feedback help student writers? New evidence on the short- and long-term effects of written error correction. In K. Hyland & F. Hyland (Eds.), *Feedback in second language writing: Contexts and issues* (pp. 81– 104). Cambridge: Cambridge University Press.

Flavell, J. H. (1987). Speculations about the nature and development of metacognition. In F. E. Weinert & R. H. Kluwe (Eds.), *Metacognition, Motivation and*

Understanding (pp. 21-29). Hillside, New Jersey: Lawrence Erlbaum
Associates.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive
– development inquiry. *American Psychologist*, 34, 906-911

Flower, L. (1990). The role of task representation in reading-to-write. In L. Flower, V.
Stein, J. Ackerman, M. J. Kantz, K. McCormick & W. Peck (Eds.), *Reading to
write: Exploring a cognitive and social process* (pp. 35-75). New York, NY:
Oxford University Press.

Flower, L. & Hayes, J. (1980). The dynamics of composing: Making plans and juggling
constraints. In L. Gregg & E. Steinberg (Eds.), *Cognitive processes in
writing* (pp. 31-50). Hillsdale, NJ: Lawrence Erlbaum Associates.

Flower, L., & Hayes, J. (1981). A cognitive process theory of writing. *College
Composition and Communication, 32*, 365-387.

Foin, A. & Lange, E. (2007). Generation 1.5 writers' success in correcting errors
marked on an out-of-class paper. *CATESOL Journal*, 19, (1), 146-163

Fraenkel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in
education*. New York, NY: McGraw-Hill.

Grenfell, M., & Harris, V. (1999). *Modern languages and learning strategies: In theory
and practice*. London: Routledge.

Griffiths, C. (Ed) (2008). *Lessons from good language learners*. Cambridge: Cambridge
University Press.

Gu, Y. (2002). Gender, academic major and vocabulary learning strategies of Chinese
EFL learners. *RELC Journal*, 33 (1) 35-54

Hamp-Lyons, L. (1991). Pre-text: Task-related influences on the writer. In L. Hamp-
Lyons (Ed.), *Assessing second language writing in academic contexts* (pp. 87-

107). Westport, Connecticut: Ablex.

Harris, V. (2004). Language learning strategies: A case for cross-curricular collaboration. Paper presented at the American Educational Research Association (AERA) annual conference: San Diego, CA. April 12-16

Hartshorn, J. K., Evans, N., Merrill, P. F., Sudweeks, R. R., Strong-Krause, D. & Anderson, N. J. (2010). Effects of Dynamic corrective feedback on ESL writing accuracy. *TESOL Quarterly*, 44, 84-109

Heath, S. B. (1980) The functions and uses of literacy. *Journal of Communication.* 30 123-133.

Hinds, J. (1983). Contrastive Rhetoric: Japanese and English." *Text 3.* 183-195.

Hinds, J. (1984). Retention of Information Using a Japanese Style of Presentation. *Studies in Language,* 8, 45-69.

Hinkel, E. (2002). Second language writers' text: Linguistic and rhetorical features. Lawrence Erlbaum Associates

Hinkel, E. (2004). Teaching academic ESL writing: Practical techniques in vocabulary and grammar. Lawrence Erlbaum Associates

Hinkel, E. (2011). What research on second language writing tells us and what it doesn't. In E. Hinkel (Ed.), *Handbook of research in Second Language Teaching and Learning,* Volume 2, Routledge, (2011) pp. 523 – 538)

Hirano, E. (2014) Refugees in first-year college: Academic writing challenges and resources. *Journal of Second Language Writing,* 23, 37-52.

Hirose, K. (2003). Comparing L1 and L2 organizational patterns in the argumentative writing of Japanese EFL students. *Journal of second language writing.* 12, 181-209

Hyland, K. (1990). A Genre Description of the Argumentative Essay. *RELC Journal,* 21, 66-78

Hyland, K. (2002). Genre: Language, context and literacy. *Annual Review of Applied Linguistics*, 22, 113–135.

Hyland, K. (2007). Genre pedagogy: language, literacy and L2 writing instruction. Journal of Second Language Writing. 16 (3): 148-164.

Hyland, K. (2008). Genre and academic writing in the disciplines. *Language Teaching.* 41 (4), 543 - 562

James, K. (1984). The writing of theses by speakers of English as a foreign language: A case study. In R. Williams, J. Swales, & J. Kirkman (Eds.) *Common ground: Shared interests in ESP and communication studies, ELT documents* 117 (pp. 99-113). Oxford: Pergamon Press.

Johns, A. (2008). Genre awareness for the novice academic student: An ongoing quest. *Language Teaching,* 41(2), 237-252

Kamel, S. A. (2000). Categories of comprehension in argumentative discourse: a cross-linguistic study. In I. Zeinab, S. Aydelott, & N. Kassabgy (Eds.), *Diversity in language: Contrastive studies in Arabic and English theoretical and applied linguistics* (pp. 193-235). Cairo: The American University in Cairo Press.

Kay, H., & Dudley-Evans, T. (1997(. Genre: What teachers think. *ELT Journal,* 52(4), 308-314.

Khansir, A. A. & Shahhoseiny, H. (2013). The study of written errors of EFL pre-university learners. *Journal of Language Teaching and Research*, 4(6), 1253-1258.

Krapels, A. R. (1990). An overview of second language guage writing process research. In B. Kroll (Ed.), *Second language writing research*: Insights for the classroom (pp. 37-56). New York: Cambridge University Press.

Krashen, S. (1982). *Principles and practice in second language acquisition.* Oxford: Pergamon

Krashen, S. (1985). *The input hypothesis: issues and implications.* Harlow: Longman

Krashen, S. (2003) Explorations in Language Acquisition and Use: The Taipei Lectures. Portsmouth, NH: Heinemann.

Kroll, B. (1990). *Second Language Writing: research insights for the classroom*. New York: Cambridge University Press.

Lea, M. R. & Street, B.V. (1998). Student writing in higher education: An academic literacies approach. *Studies in Higher Education, 23(2),* 157-172.

Leki, I., Cumming, A., & Silva, T. (2008). *A synthesis of research on second language writing in English*. New York: Routledge.

Macaro, E. (2006). Strategies for language learning and for language use: revising the theoretical framework. *Modern Language Journal,* 90 (3), 320-337.

Mackey, A. and Gass, S. M. *(2005). Second Language Research.* Lawrence Erlbaum Associates Inc.

McLaughlin, B. (1978). *Second-language acquisition in childhood*. Hillside, N. J.: Lawrence Erlbaum Associates

McLaughlin, B. (1987). *Theories of second langauge learning*. London: Edward Arnold.

McLaughlin, (1990). Conscious vs unconscious learning. *TESOL Quarterly,* 24, 617-634.

McLaughlin, B. & Heredia, R. (1996). Informatin-processing approact to research on second language acquistion and use. In Ritchie, W. & Bhatia, T. (Eds) *Handbook of second language acquisition.* San Diego: Academic Press, 213-228

McNamara, D. S., Crossley, S. A. & McCarthy, P. M. (2010). The linguistic features of quality writing. *Written communication*, 27 (1), 57-86

Mikuleeky, L. (1982) Job literacy: The relationship between school preparation and work place actuality. *Reading Research Quarterly* 17, 400-419.

Northcutt, N. (1975). *Adult functional competence: a summary*. Austin, TX: University of Texas Press.

O'Malley, J. & Chamot, A. (1990). *Learning Strategies in Second Language Acquisition.* Cambridge: Cambridge University Press.

Ong, J. (2011). Investigating the use of cohesive devices by Chinese EFL learners. *Asian EFL Journal Quarterly,* 13(3), 42-65.

Oxford, R. L. (1986). *Development and Psychometric Testing of the Strategy Inventory for Language Learning.* ARI Technical Report 728. Alexandria, VA: US Army Research Institute for Behavioral and Social Sciences.

Oxford, R. L. (1990). *Language learning strategies: What every teacher should know.* Boston: Heinle & Heinle.

Oxford, R. L. (2011). Strategies for learning a second or foreign language. *Language Teaching* 44 (2), 167-180

Pajares, F. & Valiante, G. (2006). Self-efficacy beliefs and motivation in writing development. In MacArthur, C. A. & Graham, S. & Fitzgerald, J. (Eds) *Handbook of writing research.* New York: Guilford Press

Paltridge, B. (2004). Academic Writing. *Language Teaching,* 37 (2), 87-105

Panahi, R. (2013). The effects of task type planning on students' essay writing: A study of Iranian EFL learners. *Journal of Language Teaching and Research* 4 (5), 1106-1116

Plonsky, L. (2011). The effectiveness of Second Language strategy instruction: A meta-analysis. *Language Learning* 61(4), 993-1038.

Qian, J. & Krugly-Smolska, E. (2008). Chinese graduate students' experiences with writing a literature review. *TESL Canada Journal,* 26 (1), 68-87

Rao, Z. (2007). Training in brainstorming and developing writing skills. *ELT Journal, 60,* 100-106.

Roehr, K. (2008). Linguistic and metalinguistic categories in second language learning. *Cognitive Linguistics,* 19, 67-106.

Rubin, J. (1975). What the "good language learner" can teach us. *TESOL Quarterly, 9,* 41-51

Samaraj, B. (2004). Discourse features of the student-produced academic research paper: variations across disciplinary courses. *Journal of English for academic purposes,* 3, (1) 5-22

Sasaki, M. (2000). Toward an empirical model of EFL writing processes: An exploratory study. *Journal of Second Language Writing, 9*, 259–291.

Schmitt, N. & McCarthy, M. (Eds.). (1997). *Vocabulary: Description, acquisition and pedagogy.* Cambridge, UK: Cambridge University Press

Sengupta, S. (2000). An investigation into the effects of revision strategy instruction on L2 secondary school learners. *System, 28*, 97–113.

Shiffrin, R. M. & Schneider, W. (1977). Controlled and automatic human information processing. II: perceptual learning, automatic, attending and general theory. *Psychological Review* 84, 127-190

Silva, T. (1990). A comparative study of the composing of selected ESL and native English speaking freshman writers. Dissertation Abstracts International, 51(10), 3397A.

Silva, T. (1993). Toward an Understanding of the Distinct Nature of L2 Writing: The ESL Research and Its Implications. *TESOL Quarterly, 27*(4), 657-677.

Sommers, N. (1982). Responding to student writing. *College Composition and Communication,* 33(2), 148-156.

Storch, N. & Tapper, J. (2009). The impact of an EAP course on postgraduate writing. *Journal of English for Academic Purposes,* 8, 207-223

Swales, J. M. (1984). Research into the structure of introductions to journal articles and its application to the teaching of academic writing. *Common ground: Shared interests in ESP and communication studies,* 77-86

Swales, J. M. (1990). *Genre analysis*. Cambridge: Cambridge University Press

Swales, J. M. (2004). *Research genres: explorations and applications*. Cambridge: Cambridge University Press

Tardy, C. M. (2009). *Building genre knowledge.* West Lafayette, IN: Parlor Press.

Tardy, C. M. (2017). The challenge of genre in the academic writing classroom: Implications for L2 writing teacher education. In Bitchener, J., Storch, N. & Wette, R. (Eds) *Teaching writing for academic purposes to multilingual students: Instructional approaches.* New York, NY: Routledge, 69-83

Thompson, C., Morton, J. & Storch, N. (2013). Where from, who, why and how? A study of the use of sources by first year L2 univeristy students. *Journal of English for Academic Purposes,* 12, 99-109.

Truscott, J. & Hsu A. Y. (2008). Error correction, revision, and learning. *Journal of Second Language Writing,* 17, 292-305.

Wang, A. (2007). Teaching aviation English in the Chinese context: Developing ESP theory in a non-English speaking country. *English for Specific Purposes,* 26, 121-128.

Wette, R. (2010) Evaluating student learning in a university-level EAP unit on writing using sources. *Journal of Second Language Writing,* 19, 158–177

Wingate, U. (2012). Argument!' helping students understand what essay writing is about. *Journal of English for academic purposes* 11, 145-154

Wolfersberger, M. (2007). *Second Language Writing From Sources: An Ethnographic Study of an Argument Essay Task* (Unpublished doctoral dissertation). Auckland University, Auckland, New Zealand.

Wood, D. (2006). Uses and functions of formulaic sequences in second language
speech: an exploration of the foundations of fluency. *Canadian Modern
Language Review*, 63(1), 13-33.

Wray, A. (2002). Formulaic language and the lexicon. Cambridge: Cambridge
University Press.

Yang, L., & Shi, L. (2003). Exploring six MBA students' summary writing by
introspection. *Journal of English for Academic Purposes, 2*, 165-192.

Zamel, V. (1983). The composing processes of advanced ESL students: Six case
studies. *TESOL Quarterly* 17(2), 165-187.

Zamel, V. (1985). Responding to student writing. *TESOL Quarterly* 19(1), 79-101.

Zhang, M. (2000). Cohesive features in the expository writing of undergraduates in two
Chinese universities. *RELC Journal,* 31, 61-94

Zhu, W. (2001). Performing argumentative writing in English: Difficulties / processes /
and strategies. *TESL Canada Journal*, 19 (1), 34-50.

Appendix A

WRITING DIFFICULTIES QUESTIONNAIRE

Student ID: _____

1. Gender (please circle):   **F**   **M**

2. What is your native language?   _____

3. How many years have you been studying English?   _____

4. Have you ever attended a course in writing in English before this semester?

    Y   **N**

    If yes, what was the main focus of the course?   _____

5. What types of writing do you generally write in English (please circle all that

    apply):e-mails   letters   notes   essays reports   research papers   creative

    writing   other

6. Do you like writing in English? (please select one)

    I don't like it at all   I don't like it   I have no feelings about it   I like it

    I like it a lot

7. Please explain why or why not   _____

WRITING AN ESSAY IN ENGLISH

In this part, you will find statements about the difficulties students have with their writing. Please read each statement and circle the number indicating **how true of you the statement is.**

1. <u>Never</u> or <u>almost never</u> true of me
2. <u>Usually not</u> true of me (less than half of the time)
3. <u>Somewhat</u> true of me (about half of the time)
4. <u>Usually</u> true of me (more than half of the time)
5. <u>Always</u> or <u>almost always</u> true of me

EXAMPLE

	never true	usually not true	somewhat true	usually true	always true
I have difficulty reading while watching TV. If you **can** read while watching TV then circle **1.** If you **can't** read while watching TV then circle **5.**	1	2	3	4	5

Please <u>circle</u> the appropriate number.

WHEN WRITING AN ESSAY IN ENGLISH I HAVE DIFFICULTY …	never true	usually not true	somewhat true	usually true	always true
1. Understanding the purpose of a given writing assignment.	1	2	3	4	5
2. Writing the first sentence of a paragraph.	1	2	3	4	5
3. Knowing how to introduce my essay.	1	2	3	4	5
4. Writing a strong opinion or argument.	1	2	3	4	5
5. Developing and supporting my ideas.	1	2	3	4	5
6. Knowing how to conclude the essay.	1	2	3	4	5
7. Connecting my sentences together so that they make sense.	1	2	3	4	5
8. Linking my paragraphs together so that they flow logically.	1	2	3	4	5
9. Writing sentences that are clear for the reader to understand.	1	2	3	4	5

Appendix B

Assessment criteria framework scoring sheet

Assessment Criteria	Explanation of assessment	Measurement Achieved / Not Achieved
Focus / Relevance		
1. Thesis position argued	Ability to argue a clear position arguing one side showing a sound understanding of the writing assignment.	**A –** Student has taken a side to argue and clearly reiterated it throughout the essay. The opposite side may have been used but only to justify their position. **NA –** Student has not met the above measurement
Development of Ideas and Organization		
2. Topic sentence stated	Ability to construct a topic sentence that clearly indicates the central focus of each paragraph.	**A –** Student has shown ability to construct a topic sentence that clearly indicates the central focus of two or more body paragraphs (excluding introduction). **NA –** Student has not met the above measurement for two or more body paragraphs (excluding introduction)
3. Introduction presented	**3a.** Ability to present an introduction with a clear thesis statement. **3b.** Ability to present an introduction with contextualization	**A –** Student must a) state a clear thesis position and b) provide contextualization that is more than a single stated thesis position in the introduction. **NA –** Student has not met the above measurements, or only met one of the above measurements.
4. Propositions for stated thesis position	Ability to clearly state appropriate propositions that are sufficiently well explained for stated thesis position.	**A –** Total number of clearly explained propositions divided by total number of propositions presented. Score must be more than 80% to receive an achieved. **NA** – Student has not met 80% of the above measurement.
5. Examples of propositions	Ability to state examples of propositions that are sufficiently well explained which provides added clarity to appropriateness of proposition and stated thesis position. All paragraphs must be given achieved status for this criterion to be awarded an "achieved" status.	**A –** Student must have at least one clearly stated example that connects to a proposition within a body paragraph. If example is present, clearly stated and showing development of idea then achieved status is given. **NA –** Student has not met the above measurement.
6. Conclusion presented	**6a.** Ability to present a conclusion that reiterates the stated thesis position without restating verbatim previous information. **6b.** Ability to present a conclusion with appropriate contextualization.	**A –** Student must a) reiterate the stated thesis but not verbatim from the introduction and b) provide appropriate contextualization. **NA –** Student has not met the above measurements, or only met one of the above measurements.
7. Interparagraph links	Ability to link relevantly between paragraphs within the essay with the use of discourse markers and other techniques.	**A –** Student has shown a link between paragraph more than two occasions **NA –** Student has not shown a link between paragraph on two more occasions
Cohesion and Coherence		
8. Intersentential links	Ability to provide cohesion between sentences within the paragraph with the use of discourse markers and other techniques. Verbal and logical connections must be present to justify sentence linking.	**A –** Total number of sentences that **are** linked to their preceding sentence divided by total number of sentences (-1). Score must be more than 80% to receive an achieved. **NA –** Student has not met 80% of the above measurement.
9. Coherence maintained	Ability to communicate each point of information completely in clear, unambiguous sentences. This includes spelling, punctuation and any forms of grammar errors.	**A –** Total number of coherent sentences divided by total number of sentences. Score must be more than 80% to receive an achieved. **NA –** Student has not met 80% of the above measurement.

Appendix C

Project title: Research of the effect of a strategies instructional approach on the treatment of second language writing difficulties and quality text construction

Project Supervisors: Prof. John Bitchener, Prof. Neil Anderson

Researcher: Nancy Tarawhiti

○   I have read and understood the information provided about this research project in the Information Sheet dated 30 August, 2012.

○   I have had an opportunity to ask questions and to have them answered.

○   I understand that notes will be taken during the interviews and that they will also be audio-taped and transcribed.

○   I understand that I may withdraw myself or any information that I have provided for this research at any time prior to completion of data collection, without being disadvantaged in any way.

○   If I withdraw, I understand that all relevant information including tapes and transcripts, or parts thereof, will be destroyed.

○   I agree to take part in this research and allow what I say and the information I provide in it to be used for the second language teaching and learning study.

○   I understand only the researcher and the supervisors have access to the recordings and they will always be kept confidential.

○   I agree to volunteer to be part of this research.

○   I wish to receive a copy of the report from the research (please tick one): Yes○ No○

Participant's signature: ....…..……………...   Date : ……………

Participant's name : ....…..……………………………………..

Appendix D

Participant Information Sheet for Student Participants

Date Produced: 30 August, 2012

Project Title: Research of the effect of a strategies instructional approach on the treatment of second language writing difficulties and quality text construction

Investigator Nancy Tarawhiti   **E-mail** nancytarawhiti@gmail.com

An Invitation
I'm a PhD student at Auckland University of Technology (AUT) in Auckland, New Zealand and I am conducting research under the supervision of Project Supervisors, Prof. John Bitchener, AUT and Prof. Neil Anderson, BYU. I will be looking at the writing difficulties that students experience and the use of writing strategies to fix the writing difficulties. This information sheet will describe the purpose of the study and what you will do if you agree to take part in this study. The decision to participate or not is yours. You may withdraw yourself or any information that you have provided for this project at any time before the completion of collecting information for this research. If you withdraw, your writing essays and survey will be destroyed.

What is the purpose of this research?
This research will look at the writing difficulties that second language learner's of English experience. I am interested in providing strategies to help fix writing difficulties and to see whether the strategies are effective or not. Reports and papers may be published in the future, but without reference to you as a participant.

How was I identified and why am I being asked to participate?
You have been asked to participate in this study because you are a student in Academic A or C writing class at the ELC.

What are the benefits?
There are no direct benefits at this time

What will happen during this research?
- Questionnaire - You will complete a questionnaire. This will be done during class. (10 – 15 minutes)
- Writing Essay - You will be given a topic and you will write an essay at the beginning of the semester. This will be done during class. (40-45 minutes)
- Instruction - You will receive instruction on how to use strategies to fix problems that occurred in your writing and then you will immediately revise your writing. This will be done during class. (40-45 minutes)
- Interview - You will take part in an interview. This will be done outside of class time. (10-15 minutes)
- Writing Essay – You will be given another topic and you will write an essay at the end of the semester. This will be done during class. (40-45 minutes)
- Non participants will work on their current class essay assignment.

Are there risks?
There are minimal risks associated with this research.
How will my privacy be protected?

215

Your questionnaire, writing and interview recording will have your student ID number on it for the purpose of linking your work together only. Once your work is linked your student ID will be removed. Your name, student ID and recording of your voice will not be used in any presentations or published data.

What opportunity do I have to consider this invitation?
You will have two days to decide if you want to participate in this study. Participation in this study is strictly voluntary. That means you do not have to be a part of the study. Your decision to participate or not participate will not affect your grade or standing at the ELC or BYU.

How do I agree to participate in this study?
If you do decide to participate, you must first complete a consent form. If at any point you change your mind and no longer want to participate, you can tell your teacher.

What do I do if I have concerns about this research?
Any concerns regarding this research should be notified in the first instance to the Project Supervisor, Prof. John Bitchener, *john.bitchener@aut.ac.nz +64 921 9999 ext 7830*. Concerns regarding the conduct of the research should be notified to the Executive Secretary, AUTEC, Dr Rosemary Godbold, *ethics@aut.ac.nz* +64 921 9999 ext 6902.

Whom do I contact for further information about this research?
If you have any other questions about the research, you can contact me, Nancy Tarawhiti, at nancytarawhiti@gmail.com
You can also contact Institutional Review Board for Human Subjects, A-285 ASB Provo, Utah 84602, (801) 422-3841 and fax (801) 422-0620

Appendix E

AUT
U N I V E R S I T Y
TE WĀNANGA ARONUI O TAMAKI MAKAU RAU

M E M O R A N D U M
Auckland University of Technology Ethics Committee (AUTEC)

To: John Bitchener
From: **Dr Rosemary Godbold** Executive Secretary, AUTEC
Date: 28 October 2011
Subject: Ethics Application Number 11/210 **The effect of a strategies instructional approach on the treatment of second language writing difficulties and quality text construction.**

Dear John

Thank you for providing written evidence as requested. I am pleased to advise that it satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC) at their meeting on 22 August 2011 and I have approved your ethics application. This delegated approval is made in accordance with section 5.3.2.3 of AUTEC's *Applying for Ethics Approval: Guidelines and Procedures* and is subject to endorsement at AUTEC's meeting on 14 November 2011.

Your ethics application is approved for a period of three years until 28 October 2014.

I advise that as part of the ethics approval process, you are required to submit the following to AUTEC:

- A brief annual progress report using form EA2, which is available online through http://www.aut.ac.nz/research/research-ethics/ethics. When necessary this form may also be used to request an extension of the approval at least one month prior to its expiry on 28 October 2014;

- A brief report on the status of the project using form EA3, which is available online through http://www.aut.ac.nz/research/research-ethics/ethics.   This report is to be submitted either when the approval expires on 28 October 2014 or on completion of the project, whichever comes sooner;

It is a condition of approval that AUTEC is notified of any adverse events or if the research does not commence. AUTEC approval needs to be sought for any alteration to the research, including any alteration of or addition to any documents that are provided to participants. You are reminded that, as applicant, you are responsible for ensuring that research undertaken under this approval occurs within the parameters outlined in the approved application.

Please note that AUTEC grants ethical approval only. If you require management approval from an institution or organisation for your research, then you will need to make the arrangements necessary to obtain this. Also, if your research is undertaken within a jurisdiction outside New Zealand, you will need to make the arrangements necessary to meet the legal and ethical requirements that apply within that jurisdiction.

When communicating with us about this application, we ask that you use the application number and study title to enable us to provide you with prompt service. Should you have any further enquiries regarding this matter, you are welcome to contact me by email at ethics@aut.ac.nz or by telephone on 921 9999 at extension 6902.

On behalf of AUTEC and myself, I wish you success with your research and look forward to reading about it in your reports.

Yours sincerely

Dr Rosemary Godbold
Executive Secretary
Auckland University of Technology Ethics Committee
Cc: Nancy Tarawhiti nancytarawhiti@gmail.com