An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

A thesis submitted for the degree of PhD in Education

August 2018

By

Maisoun Al-Zankawi
DECLARATION

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Maisoun Al-Zankawi
ABSTRACT

This study is the first of its kind in Kuwait. It aims to help writing curricula designers and teachers of writing at The University of Kuwait and hopefully those of the other Kuwaiti (and maybe other Arab) universities better their performance and change their approaches to L2 writing with all its details and features, to help students write better cohesive and coherent texts and improve the quality of their writing.

This study was designed to investigate the writing strategies Kuwait undergraduate students who are studying English as a foreign language (EFL) use in their writing. The study aimed to explore the theoretical framework of the sociocognitive approach to EFL writing from students’ perspective, as well as their use of cohesive devices. Specifically, the study aimed to address research questions relevant to the following areas: (a) the strategies Kuwaiti college students utilize in writing as well as any distinctions in the use of strategies by male and female students; (b) the influence of utilizing Arabic as a first language (L1) when composing in English as a second language (L2); (c) the characteristics of the texts in terms of cohesion and quality; (d) and the relationship between strategy use and text characteristics. This study is significant in that it applies the sociocognitive approach to English learning to understand the writing behaviours of students in EFL classrooms in Kuwait. The results may also generalize to other EFL students in the Arabian Gulf, because the role of English in the education systems across the Gulf area is highly similar.

The study followed a mixed methods research design utilizing the following research instruments, questionnaires, think-aloud protocols, semistructured interviews, and textual analysis of students written products for triangulation purposes. The participants in this study were 128 Kuwaiti college students of English in the first and second year of study at Kuwait University, College of Arts. The findings of the study suggest the participants of this study, who generally come from the same educational and cultural backgrounds, show similar experiences with respect to writing in English. Consistent with the sociocognitive approach, these experiences may play a considerable role in the difficulties and problems they encounter in the writing process and the strategies they utilize.

The main study findings relate to the influence of L1 on L2 writing, cohesion, gender, and the relationship between strategy use and text characteristics. To clarify, most students are proactive in taking some actions before they start writing in English (e.g., planning strategies) and in making some efforts at revision. The analysis indicated participants use their L1 in a variety of problematic ways, rather than as a potential strategic tool. Regarding cohesion, the findings revealed a notable difference in the students’ use of cohesive devices in terms of frequency. Students frequently used certain types of cohesive devices (reference, conjunction, and lexical) while neglecting to use the others (substitution and ellipsis). The analysis also revealed the correlation coefficient between writing scores and reference cohesive device is positive and statistically significant, because only the reference cohesive device was highly correlated with score. In addition, strategy use and approaches to writing vary depending on the gender of the participant. The females tended to score better on their texts than the males, as females tended to be more strategic and organized. The results suggest the participants need to be exposed to different writing skills and genres, along with the effective writing strategies, to improve their writing.

The findings of this study may result in subsequent improved student learning outcomes in the teaching and learning of L2 writing, specifically in Kuwait. The results may help writing Kuwaiti EFL curricula designers and teachers of writing change their approaches to L2
writing through integrating the cognitive and social models to writing instruction, to help students write better cohesive texts and improve the quality of their writing. Thus, support for a sociocognitive approach for the teaching of EFL writing is provided in this study. The result of the study may provide teachers with a broader context of EFL writing strategies for Arabic English language learners.

Key words: EFL writing strategies, composing process, language learning, cohesion, sociocognitive approach.
I dedicate this work

To my family

For their patience and support

To Bader, of course

To my only brother, Mishal (May his soul rest in peace)

To my friends and colleagues
ACKNOWLEDGMENT

I would like first and foremost to extend my sincere praise and gratitude to Allah the Creator who granted me patience and power to complete this work.

I would like also to express my sincere appreciation to Dr. Carmel O’Sullivan, for her much appreciated advice and support through the PhD journey.

I would like to offer my deep gratitude to my academic supervisor, Dr. Ann Devitt, for her constructive guidance, insightful feedback, and her constant support during the writing of this study.

Also, I would like to express my appreciation and great respect to my two examiners, Dr. Noel Murchadha and Dr. Veronica Crosbie, for their enlightening discussion during the viva and useful corrections.

In addition, I would extend my special thanks to the Kuwaiti students at The Public Authority for Applied Education & Training, Kuwait University, College of Arts, who participated in this study and helped in collecting the data for this research. Also, I would express my appreciation and great respect to the professors who volunteered and made the journey of data collection easy and useful.

I extend my thanks and sincere appreciation to my family, for their patience and support during this study, and to my little one (Bader) of course, as I hope he will forgive me for being totally busy with my study and not giving him the time, he deserves when being thousand miles away from home.
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<tr>
<td>CDs</td>
<td>Cohesive Devices</td>
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<tr>
<td>EFL</td>
<td>English as a Foreign Language</td>
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<tr>
<td>ESL</td>
<td>English as a Second Language</td>
</tr>
<tr>
<td>GCC</td>
<td>Gulf Cooperation Council</td>
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<tr>
<td>L1</td>
<td>First Language</td>
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<td>L2</td>
<td>Second Language</td>
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<td>FL</td>
<td>Foreign Language</td>
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<td>LAD</td>
<td>Language Acquisition Device</td>
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<tr>
<td>PAAET</td>
<td>The Public Authority for Applied Education and Training</td>
</tr>
<tr>
<td>RQ</td>
<td>Research Question</td>
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<tr>
<td>SLA</td>
<td>Second Language Acquisition</td>
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<td>SILL</td>
<td>Strategy Inventory for Language Learning</td>
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<td>SSI</td>
<td>Semistructured Interview</td>
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<tr>
<td>TAP</td>
<td>Think-Aloud Protocol</td>
</tr>
<tr>
<td>UAE</td>
<td>United Arab Emirates</td>
</tr>
<tr>
<td>STT</td>
<td>Speech-To-Text-Software</td>
</tr>
<tr>
<td>DS</td>
<td>Dictation to a Scribe</td>
</tr>
<tr>
<td>ELL</td>
<td>English Language Learner</td>
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<tr>
<td>NNES</td>
<td>Non-Native English Speaker</td>
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Chapter 1: Research Introduction and Background

1.1 Introduction

The aim of this study was to examine writing strategies of English as a Foreign Language (EFL) students in Higher Education in Kuwait, particularly with respect to the production of cohesive text. The context is native Kuwaiti EFL writers enrolled in a Kuwaiti university. In the field of EFL writing, many researchers have attempted to understand the distinct nature of composing in a foreign language (Arndt, 1987; Sasaki, 2000). Because of globalisation, many non-English speakers must learn the English language in order to enter the business world or to study in Western countries where English is the native language (Al-Amri & Zahid, 2015). However, there was a gap in the literature with respect to the use of writing strategies in EFL learning in Kuwait. Only a small number of researchers have investigated the effects of cohesion, especially for EFL students of undergraduate programs in Kuwait (Ahmed, 2010; Al-Hibir & Al-Taha, 1992).

For the purposes of this study, the focus was on cohesion and writing strategies, as well as examining the factors influencing Kuwaiti EFL students through the lens of the sociocognitive approach to EFL writing. As a distinction, EFL differs from English as a second language (ESL) in that ESL is considered as learning a language that is spoken to the surrounding community (Yule, 2010). For example, Japanese students in an English class in Japan are EFL students, whereas if those same students were in an English class in the USA, they would be considered as ESL students. Cohesion is on the macrolevel related to linking ideas, whereas on the microlevel writing cohesion is concerned with connecting sentences and phrases (Ahmed, 2010). Regarding EFL, the process of cohesion can be studied through language proficiency, writing ability, and composition strategies.

L2 writers employ several general and specific strategies in their efforts to learn to write. The learning strategies “help learners regulate or control their own learning, thus making it easier and more effective” (Oxford, 2011, p. 12). L2 writers’ strategic behaviour is heavily reliant on the internal and external variables of the learners, and the strategic behaviour of the writers is arbitrated by received instructions and can thus be modified via strategy instruction (Lee & Oxford, 2008; Manchon, Roca & Murphy, 2007). Based on a careful review of literature, the researcher chose the following strategies for examination: planning, reading, revising, evaluating, editing, re-reading, and use of L1.

The present study addressed a significant gap in the literature by highlighting the writing processes of students. Writing is one of the most difficult skills EFL students are expected to master (Marzaban & Sarjami, 2014). Marzaban and Sarjami (2014) argue that
writing in English must be emphasized within the higher level of education, given it is considered to be a vital skill among EFL students, and Madkour and Mohamed (2016) note that educators must fully understand the writing processes of EFL students to provide adequate intervention. By revealing the cohesive writing strategies currently employed by Kuwaiti EFL students, the present study may lead to a greater understanding of Kuwaiti EFL students’ writing processes and potential gaps or strengths in EFL instruction. Through identifying the writing strategies of Kuwaiti undergraduate EFL students and applying a sociocognitive interpretation of these processes, teachers can better address the challenges of teaching EFL in Kuwait and more broadly in the United Arab Emirates (UAE).

1.2 Problem of the Study

Based on increased internationalization, use of the English language has proliferated in the social, business, and educational arenas in the Arab world (Al-Rabaie, 2010). As a result, effective EFL has become essential and common to meet increasing demand for English fluency particularly among young learners (Dweik & Suleiman, 2013). (see Chapter 2 for a full discussion of the educational and social context for English in Kuwait). Mastering writing skills for EFL students of undergraduate programs is challenging, especially with EFL students who study at Kuwait University with teachers from various countries. Students are expected to improve their writing performance in a short timeframe, because English proficiency (reading, writing, listening, and speaking) is required as soon as possible to gain admission to international universities or to participate in science-based undergraduate programs within the university. However, for students in Kuwait, English is a foreign language. Consequently, they find writing in English difficult (Al Othman & Shuqair, 2013; Taqi & Shuqair, 2014), especially at the college level.

Although students study English for 12 years from primary school in Kuwait (Section 2.3), schools do not focus on writing skills (Jaffer, 2003), which is a major obstacle in their learning process. Therefore, it was necessary to carry out this study to investigate the strategies students employ in writing, and the challenges they face in this area. This study sheds light on the content of the students’ writing assignments with respect to cohesion (macrolevel), and the researcher offers suggestions regarding how to improve and develop the outcomes of students’ writing skills.

Previous researchers studying EFL writing in Kuwaiti universities suggested that students struggled with English writing. Taqi and Shuqair (2014) focus on evaluating an English program among 50 English student teachers in the College of Basic Education at the Public Authority for Applied Education and Training (PAAET) in Kuwait. The researchers
measured students’ English language proficiency level at two points: a placement test at the college entrance level, and a placement test conducted in their senior year (after 4 years). The placement test measured five main categories: reading, language use, structure, grammar, and writing. The study did not show significant differences between the pre- and post-placement results (Taqi and Shuqair, 2014). However, the results of the placement tests were not at the expected level for student teachers. Across all the five testing categories, the results indicated the writing part of the study received the worst score (see Table 1).

<table>
<thead>
<tr>
<th></th>
<th>Pretest (Average Score %)</th>
<th>Posttest (Average Score %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>51.50</td>
<td>57.08</td>
</tr>
<tr>
<td>Language use</td>
<td>51.15</td>
<td>58.84</td>
</tr>
<tr>
<td>Grammar</td>
<td>46.00</td>
<td>56.93</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>**</td>
<td>50.66</td>
</tr>
<tr>
<td>Writing</td>
<td>42.26</td>
<td>50.40</td>
</tr>
<tr>
<td>Overall Score</td>
<td>47.40</td>
<td>54.30</td>
</tr>
</tbody>
</table>

Although the study’s focus was not on evaluating writing strategies, the results showed some problems related to writing issues. Because Taqi and Shuqair’s (2014) research reveal English writing as a main problem for Kuwaiti students, they suggest the need for further investigation into the issues and intervention to improve writing outcomes. However, little attention has been given to improving students' writing through curriculum design recommendations. Writing strategy use has been linked to self-efficacy among EFL students as well as familiarity with the strategies through instruction (Lee & Oxford, 2008). Therefore, the current study focuses on writing strategies used by Kuwaiti EFL university students and provides recommendations as to how to exploit these strategies in future curriculum designs in order to improve language learning.

Previous research has investigated writing problems and strategies separately, and cohesion and coherence problems. However, to the best of the researcher’s knowledge, this is the first study in the Kuwaiti context that involves investigating both the writing strategies and the cohesion of the students’ written products; therefore, the results provide implications for L2 writing instruction and the researcher offers recommendations for writing course designers in Kuwait considering the data obtained from this study (see Section 7.3). Consequently, the findings of this study could feed into changes in the future teaching and learning of L2 English writing in Kuwait, which may result in better learning outcomes for
Kuwaiti students. These changes provide guidelines and recommendations as a part of the outcomes of the research (see Section 7.5).

1.3 Research Questions

The study aim was to explore the current approach to EFL writing by students at the college level in Kuwait. In particular, the study aims to address the following research questions:

1. What kind of strategies do Kuwaiti college students utilize for writing? Is there a significant relationship between gender and writing strategy use?
2. What is the impact of utilizing L1 when composing in English as a foreign language for Kuwaiti college students?
3. What are the characteristics of the texts produced by Kuwaiti college students in terms of cohesion and quality?
4. What is the relationship between strategy use and text characteristics in the writing of Kuwaiti college students?

In order to address these questions, the researcher conducted an in-depth inquiry into Kuwaiti students’ writing, in particular in relation to text quality and cohesion, and the writing strategies they employ in the writing process using the following data-collection methods: questionnaires, textual analysis of students’ written products, think-aloud protocols and semi-structured interviews conducted with students of English as well as some teachers of English (writing courses) at Kuwait University, College of Arts. The results of the analysis were used to generate recommendations for EFL practice and curriculum in Kuwait (see Section 7.3).

1.4 Significance of the Study

The researcher aimed to explore the writing strategies implemented by Kuwaiti college students when writing in English. The results presented the current approach to EFL writing from the students’ perspectives and the quality of their writing. The researcher also offered suggestions and recommendations related to instruction and curriculum design, in an attempt to inform pedagogical practice and learning strategies, and to help develop and improve, the writing practices of Kuwaiti college students, especially with respect to the quality of their writing skills (see Section 7.3). EFL can promote bilingualism among Kuwaiti undergraduates and bring them fluency, leading to the ability to participate in an increasingly globalized world. Furthermore, similar outcomes could be observed if the rest of the Arab world follows the same procedure (Malallah, 2000). The results of this study offer educators, teachers, and researchers’ new perspectives and a better understanding of the process of writing in English, not only in the Kuwaiti educational context, but also in similar contexts in
other Arab countries where students exploit similar writing strategies affected by the structure and grammatical rules of their mother tongue, which is Arabic. Section 7.5 presents recommendations for future researchers to further study of this topic. This study was also important for curricular specialists, because the researcher identified the most significant writing strategies implemented by students in their English writing process. It is hoped that such specialists will utilize the data from the current study when developing the curricula for writing skills in Kuwait.

1.5 Research Methodology

The present study followed a mixed methods research design for triangulation purposes, including the following research instruments: questionnaires, think-aloud protocols, semistructured interviews, and textual analysis of students’ written products. The advantage of combining these two methods is that it “can broaden the scope of the investigation and enrich the researcher’s ability to draw conclusions” (Dornyei, 2007, p. 186).

The participants in this study were 128 Kuwaiti college students of English in the first and second year of study at Kuwaiti University, College of Arts. The primary intention for carrying out this kind of research was to index academic practices regarding the process of writing for students at the college level.

1.6 Scopes and Limits

The current study took place at the College of Arts at Kuwait University. All the 128 participants were from different majors, but in the same student cohort of 3,458 (1,350 males and 2,108 females). The student participants studied English as a compulsory subject and were enrolled in the same Department of English Language and Literature, College of Arts, Kuwait University. The main study took place in the spring and fall semesters of 2013 and 2014 at Kuwait University, College of Arts. The finite amount of time used for data collection may potentially limit the study results.

This study involved participants from the first and second year at Kuwait University because these students have more exposure to the writing courses in the first two years, rather than those in third and fourth year who were nearing graduation. According to the Deputy Director of Kuwait University for Planning (2013–2014), the total number of the first and second year students at Kuwait University, College of Arts was 2,374 students, with 1,399 (653 males and 746 females) students in the first year, and 975 (346 males and 629 females) students in the second year, and a percentage of population sampled being 18.546% of the overall student body. This scope potentially limits the ability to apply the results of the present study to upper-level students.
The sample was also fairly limited in its cultural diversity. All students at Kuwait University must be either Kuwaiti citizens or children of Kuwaiti mothers (Kuwait University, 2016), which suggested participants came from similar cultural backgrounds. Demographic items in the online survey suggested participants had similar experiences in terms of native language (Arabic), age between 19 to 21 years old when enrolling at the university level, and third level degree students. The similar cultural experiences of the sample may limit generalizability of the results to farther-reaching populations, but it also allowed for a more focused interpretation of the sociocognitive factors influencing the students’ writing processes.

The student participants also reported similar previous experience in previous EFL classrooms and had similar aptitude levels in English. All students in the state of Kuwait are obliged to study English courses along with their major subjects, but their primary language is Arabic (State of Kuwait, 2014). The students are required to apply for the English placement test when entering Kuwait University (Kuwait University, 2016). All the students who volunteered to participate in this research instrument had a level of competence in English that ranged from below average to average, based on their teachers’ evaluation of the written samples through the semester. The competence was assessed by the teachers using a range of non-standardised measures.

The other group of participants was three teachers who were members of staff at the Department of English Language and Literature, College of Art, and agreed to participate in this study and to be interviewed. All the professors involved were highly qualified with doctoral degrees in literature or linguistics from different international universities. In addition, they had experience in teaching EFL in general, and teaching writing classes for Kuwaiti undergraduate students of English in particular. Additional information on both samples is available in Sections 4.6.3 and 4.6.3.1.

The researcher added samples of students’ writing assignments from first- and second-year participants at Kuwait University, College of Arts to the study in order to highlight the impact of the language background (pre-university level) on students’ English academic writing at the university level. A writing-strategies questionnaire, think-aloud protocols, semistructured interviews, as well as textual analysis of students’ written products were conducted during spring and fall semesters of the academic year 2013–2014.

1.7 Definition of Terms

Some terms used in the present study are defined in this to clarify how the researcher used the terms throughout the thesis. These terms are writing strategy, writing process, and
cohesion. These specific terms are defined because they provide the main constructs examined throughout the study.

The term writing strategy is related to the actions or behaviours consciously carried out by writers to make their writing more efficient (Cohen, 1998). This concept is further discussed in Section 3.5.1-3.5.3.

The writing process is defined as the “the cognitive activities a writer engages in to facilitate the generation of ideas from the brain, the transfer of these ideas onto paper, and the subsequent improvement of these ideas…though composing processes are mental activities and hence seen, these cognitive operations can be inferred through the analysis of writing behaviours” (Heuring, 1985, cited in Alhaysony, 2008, p. 9). This concept is discussed fully in Sections 3.4, and more specifically in relation to EFL writers in Section 3.7.

Cohesion is a semantic concept that “refers to relations of meaning that exist within the text, and that defines it as a text” (Halliday & Hassan, 1985, p. 4). In other words, cohesion involves grammatical and lexical elements on the surface of a text which can form connections between parts of the text (Connor, 1996). Halliday and Hasan (1976) identify five types of cohesion: reference, substitution, ellipsis, lexical, and conjunction. A thorough review of cohesion is presented in Section 3.9.

1.8 Thesis Outline

This study is divided into seven chapters. Chapter 1 provides the background of the research and details regarding the context undertaken within this study. The chapter also outlines the main aims and objectives of the study and its significance. Chapter 2 provides general background information about the context of the study, as well as the information related to the place of English in the State of Kuwait. This process involves discussions about Kuwait’s demographic and historical background, and the problems with writing in English. Chapter 3 presents the relevant literature in the areas of the writing process, such as second language learning, second language writing strategies and their related theories, and cohesion in EFL and ESL writing. In Chapter 4, the researcher describes the methodology implemented in this study, the instruments of research, the research procedures, and the procedures of data coding and analysis. The chapter also establishes the main research questions within the overall context of the study. Chapter 5 presents the data analysis framework as well as the strategies the students use in their writing process. Chapter 6 includes a discussion of the findings of the four research questions. Finally, Chapter 7 is a conclusion of the findings and the researcher discusses the recommendations and suggestions for future research.
Chapter 2: Research Context

2.1 Introduction

The general aim of this chapter is to provide insight into Kuwait’s social and educational context in order to present the main elements of English language teaching in the country. The chapter discusses the demographic and historical background of Kuwait (see Section 2.2), the educational system and curricular context for EFL in Kuwait (see Section 2.3), problems of English writing in Kuwait (see Section 2.4), and finally, issues in relation to Arabic to English writing for language learners in Kuwait (see Section 2.5).

2.2 Demographic and Historical Background of Kuwait

Both the geographic location and the demographic composition of the state affect the place of English language in present-day Kuwait, with implications for English language education. Arabic is the official language in the State of Kuwait. However, because of compulsory English education in primary schools, English has become increasingly prevalent in Kuwaiti society (State of Kuwait, 2014).

2.2.1 The Importance of English in the State of Kuwait

The first driver of English in Kuwait was the oil industry. After Kuwait gained independence from the United Kingdom in 1961, the oil industry saw unprecedented economic growth. This helped the country to develop economically, socially, politically, and educationally. Kermani (2005) emphasizes the special role of English as a language for specific purposes within Kuwait, as it is used in the oil-production industry—so-called “petroleum English.” The discovery of oil has promoted both formalization of the schooling system and the status of English as a lingua franca. Akbar (2007) explains that those Kuwaitis who cooperated with British expatriates at multiple oil-producing sites had to study the foreign tongue to boost the development process and share expertise.

The proliferation of the Kuwaiti oil industry also led to increased exposure to the world, which increased the need for a common language used for communicating in a more diverse populous. The increased internationalization almost instantly placed Kuwait within the global context. This catapulted Western interests in the country, provided a modern set of work ethics and business ideologies besides attracted immigrants from varied countries who served as workers in the service sector (Al-Rubaie, 2010). According to the World Population Review (2016), the population is estimated to be 4.2 million people, of which 1.3 million are Kuwaitis and 2.9 million are non-Kuwaitis. Kuwait is therefore a modern country influenced by globalization, which increased the use of English in the Kuwaiti society.
Another factor that influenced the use of English, and introduced its integration into the Kuwait educational system, was the Iraqi invasion in 1990 (Library of Congress Country Studies, 2013). The influence of the occupation has made the Kuwaiti population different from its prewar state (Mohammad, 2008). Prior to the Iraqi invasion, English functioned solely in the formal educational context as a foreign language, taught beginning in the intermediate level and then for eight consecutive years thereafter, and therefore played a minor sociocultural role for Kuwaitis (Mohammad, 2008).

The situation changed dramatically during the military operations of the Western coalition forces deployed in order to stop the aggression and restore political balance of powers in the Gulf region (Library of Congress Country Studies, 2013). The role of English within Kuwait, as well as the relationship between English language and Kuwaiti people, was forever changed during this time. Al-Yaseen (2000) states that English was viewed as an international language spoken by Kuwaiti diplomats to convey the devastation that the country persevered and was also the language utilized by Kuwaiti army when communicating with the allied troops. As a result, some Kuwaitis view the English language, and its integration into various aspects of Kuwaiti life, as an ideological power in the quest to amalgamate Arab-speaking, Islamic cultures with global, Anglophone cultures (Al-Rubaie, 2010).

2.2.2 The Place of English in the Kuwaiti Society

In current Kuwait society, English has been used in everyday communicative situations. For example, English is the primary language used for banking and business (Mohammad, 2008). English is also used in street signs, vehicle panels, and shop names, as well as restaurant menus (Mohammad, 2008). Oil companies, hospitals, banks, and technical establishments use English in communicating globally (Al Darwish, 2017). In addition, new communication technology, including different applications, such as Internet chatrooms, email exchanges, and text messages, are widely used in Kuwait, and communication often occurs in English (Salem, 2013).

For college-aged students, English has been a compulsory subject taught in their primary schools (State of Kuwait, 2014). If the individuals attend Kuwait University, courses in the colleges of science, engineering, and medicine are taught exclusively in English (Al Darwish, 2017). In his study on the impact of the widespread improvements in the field of communication technology on English language use in Kuwait, Salem (2013) used interviews conducted with 211 participants divided into two groups: 118 intermediate school students, and 93 secondary school students. Salem found that the overuse of abbreviation, clipping,
acronyms, and other abbreviated forms led to incorrect habits when using English among Kuwaiti students. Salem claimed that this has a negative impact on the formal writing task, as using these shortcuts in the formal writing task affects the standard of English that is the official form of teaching and learning. This also affects negatively the way students use language, including vocabulary, spelling and grammar, as well as language proficiency through writing skill. On the other hand, Sweeny (2011) focuses on the positive role of using instant and text messaging technologies, as providing an opportunity for socializing, sharing information and structure communication in English.

Attitudes toward English among Kuwaitis vary widely. Some researchers, such as Al-Rubaie (2010), points out that English was perceived by Kuwaitis as a negative tool for globalization after the Iraqi invasion. Conversely, the need for using English for a variety of purposes such as traveling, tourism, studying, and doing business on both regional and international levels provided a need for English language learning (Malallah, 2000). Kuwaitis further desire to be in pace with the most recent technological developments and inventions, which are mostly in English (Malallah, 2000).

Among students, most studies on the perceptions of students occurred prior to the curriculum overhaul and indicated favourable perceptions of English language learning. Malallah’s (2000) study on the attitudes to English among Kuwaiti university students reveals that the dominant attitudes in Kuwait are in favour of the English language. The results of Malallah’s study indicate that a large majority of students (79.5%) found the English language interesting; 47.5% said that they liked listening to the English language; 41.6% found the English language easy; 39.6% said that they felt sorry for those who were unable to speak English; 38.2% felt more educated when they spoke English; 36.4% hoped to send their children to private English schools, and 38.2% found speaking English prestigious. Kuwaiti undergraduate students in the sample had positive attitudes towards English and English native speakers. Malallah further determines that Kuwaiti students had high motivation to learn English because of their favourable attitudes toward English native EFL teachers. Similarly, according to Al Othman (1995), Kuwaiti college students, in general, show strong instrumental motivations towards learning English language, in order to get a job, pursue a degree, please parents, or opt for higher education. Unfortunately, few studies have been conducted to investigate Kuwaiti learners’ motivation in learning English in the wake of major political and educational changes in Kuwaiti education (Al Othman & Shuqair, 2013). The following sections present a discussion on the status of English language in the
2.3 Educational System and Curricular Context for EFL in Kuwait

The teaching of EFL has evolved during the past four to five decades in several Arab states. The advent of communication technologies, including the use of computers and Internet, has provided numerous ways to communicate, especially in educational settings. Based on increased internationalization, use of the English language has proliferated in the social, business, and educational arenas in the Arab world (Al-Rabaie, 2010). For example, English is the language used in all scientific majors at the Kuwait University, including the Faculty of Medicine, the Faculty of Engineering, and the Faculty of Experimental and Applied Sciences. Furthermore, English is widely used in the fields of trade, tourism, technology, civil aviation, banking, petroleum companies, and other trading and technical organizations in Kuwait.

As English is a foreign language in Kuwait, effective EFL has become essential and common to meet increasing demand for English fluency. In particular, learning languages has become widespread among young learners in order to meet the current needs of communication (Dweik & Suleiman, 2013). The English language was added to primary stage curricula as a main subject to ensure students are prepared to participate positively in the development and progress of the Kuwaiti society. English teachers in Kuwait aim to introduce students to the basics of the language and tune their ears to the English sound system to help them establish a new system and use it as another means of communication by practicing the four language skills: listening, speaking, reading, and writing (Ministry of Education, 2002). Embedding the subject into the primary stage curricula prepares individuals at an early age to achieve this mission. The next section highlights the position of the present research inquiry in the scope of EFL writing instruction.

Broadly, the system of education in Kuwait consists of three stages: elementary (5 years), intermediate (4 years), and secondary (3 years). English learning starts in Grade 1 and continues to Grade 12 in the public or private sector. English language is taught as a foreign language in class periods of 45 minutes per day, 5 days a week, in the three stages in public schools. Mohammad (2008) emphasizes that an English teacher is required to devote one lesson a week to enhance the writing skill among students. This practice is a result of a long history, reviewed in the following section.
2.3.1 English Language Teaching in Schools

Since the 1960s, The Kuwaiti Ministry of Education has been responsible for establishing compulsory programs provided in the public schools’ system (Kuwait Ministry of Education, Law 11, 1965; Kuwait Ministry of Education Annual Report, 2004). Accordingly, students in Kuwait must meet an English requirement either when they continue their post-secondary education at different institutes of the PAAET or when they join the university. They are required to take English courses along with other major courses.

Following the policies of Kuwait to achieve educational integration with members of the Gulf Cooperation Council (GCC), the Kuwaiti Ministry of Education started exchanging expertise and applied educational experience with these countries. Robinson (1998) noted remarkable success occurred in 1987 in the United Arab Emirates (UAE) in regard to teaching English. Similarly, the English literacy rate of Kuwait was more than 75% in teaching English at the primary grades (Robinson, 1998), and assessment studies showed that this English literacy did not affect the teaching of Arabic as a mother language. In the 21st century, the literacy rate of Kuwait is 96.3% (Central Intelligence Agency, 2016). Consequently, education officials in Kuwait became convinced that it was important to incorporate the teaching of the English language beginning at Grade 1. The exponential rise can be attributed to the ministerial decree (61-93/94) issued on April 9, 1993, providing teaching of English must be initiated at Grade 1 in all public and private schools (The Ministry of Education, 1994). In 1993, teaching EFL in Kuwaiti public schools started with the Grammar-Translation approach and continued until the eclectic method was applied in 2005 (Al Darwish, 2017).

Essentially, the ministerial decree on English education gave EFL an impetus and further drew significant attention from government (Al-Rubaie, 2010). This informed the addition of the English language to the compulsory curriculum in Kuwait. As a member of the GCC, and as the Kuwait Ministry of Education was incapable of publishing its own English language books after the Iraqi invasion, Kuwait borrowed the UAE curriculum for English education, which was implemented in academic year 1993–1994. The English curriculum was initially aligned in accordance to the principles of Communicative Language Teaching; namely, the curriculum sought to instil four basic skills of language teaching-listening, speaking, reading, and writing-to first graders and subsequently refine those skills until secondary school graduation through the audio-lingual method owing to a number of aspects, such as the size of the class. The intensity of English language instruction stayed the same as in the prior system (45 minutes, 5 days a week) (Al-Rubaie, 2010).
Kuwait adopted the UAE curriculum because the country was incapable of publishing its own English language books after the Iraqi invasion as the infrastructure was badly damaged during the war and had to be rebuilt (Al Darwish, 2017). However, in 2002, the ministry decided to start publishing its own books according to a new curriculum for teaching English at public schools. The new English language curriculum in Kuwaiti primary schools was implemented in 2002. The Ministry of Education in Kuwait (2002) announced that the curriculum would blend communicative, audio-lingual, and grammar-translation approaches, but the approach was kept more communicative in the earliest grades. Thus, the revised curriculum excluded the skills of reading and writing in the first two grades. This curriculum has focused mainly on listening and speaking skills, whereas writing and reading skills have not been introduced until the third grade (Jaffer, 2003). There is no current documentation regarding the rationale for this change to the UAE curriculum (Al Darwish, 2017; Jaffer, 2003).

Excluding the writing skill from the curriculum at the first two grades of education has drawn the attention of educational academics and researchers as well as parents and teachers, who are concerned and upset by the new curriculum because of the lack of focus on both writing and reading skills in the first grade (Jaffer, 2003). Such stakeholders often attribute students’ writing issues to the delay of introducing the writing skill in the third grade of the educational system (Jaffer, 2003; Mohammed, 2008; Taqi & Shuqair, 2014). Parents were concerned that the new English curriculum would not help their learners determine the difficulty they face when writing in English (Jaffer, 2003).

Because of a perceived lack of adequate literacy teaching, the Ministry of Education announced in 2005 that the elementary curriculum was to be modified to give equal weight to the four skills of speaking, listening, reading, and writing (Ministry of Education, 2005). According to the Kuwait Ministry of Education, students should achieve four language-learning goals during each school level, including proficiency goals (macroskills of listening, speaking, reading, and writing); cognitive goals (knowledge of the language and culture); affective goals (arousing positive attitudes and feelings towards the use of English among students); and transfer goals (relying on specific language skills to react to emergency problems in learning; Al-Rubaie, 2010). The current curriculum of teaching English in Kuwait includes elements of different models of English language teaching, such as (a) grammar translation method; (b) audio-lingual approach; and (c) communicative teaching approach, with the goal of leading learners to use linguistic forms for multiple functions and meanings in the general flow of communication (Al Darwish, 2017). English language
instruction in school is performed in accordance with the strategic goals of education in Kuwait (Ministry of Education, cited in Al-Rubaie, 2010). Thus, by a process of experiment and adjustment, Kuwait has developed its own blend of communicative, audio-lingual, and grammar-translation techniques to teach English (Al Darwish, 2017).

Critics of the curriculum remain. According to the new model, literacy was to be introduced slowly in the earliest grades (Al Darwish, 2017). Mohammad (2008) claims that this new curriculum was more appropriate for native speakers than Arab learners who learn English as a foreign language. In 2005, the emphasis on communicative techniques and almost entirely through listening and speaking in the first grade remained (Al Darwish, 2017). In spite of the important functions of the English language in Kuwait, it appeared that most of first grade students were not hearing English outside the classroom, which is very essential for the success of the communicative method (Al Darwish, 2017). Because of the lack of focus on writing and speaking at the three stages of study in public schools, university students face real difficulty in expressing themselves in academic writing in English once they enter university (Taqi & Shuqair, 2014).

Despite the preceding discussion in reference to the education system in Kuwait and the increased use of English in everyday communication, the interest in the English education system, and in writing in general, is still quite low (Al-Rubaie, 2010).¹

In regard to the sociocultural influence, Rashed (2017) states that the conventional direct method of learning in class where students take the lesson and the writing skills immediately from the teacher without putting efforts to research the information is the common method used in traditional dictating-style schools in Kuwait. While in college, students encounter challenges with a new method of learning in class, where they have to research and study the material independently. Rashed claims that this change confuses and frustrates Kuwaiti college students as well as reduces their ability to acquire language skills or accomplish well in class. Many participants expressed a feeling of discomfort in class when being connected constantly by the teacher, which is connected to their image in front of peers (Rashed, 2017). Other participants reported that they have found difficulties and feel embarrassed to speak freely in class when they reach college level, due to the segregation between genders in classes in schools in Kuwait, as they feel a sense of pressure to participate

¹ In my experience as a former teacher in public schools within Kuwait and currently practicing as a language instructor at PAAET, both students and teachers do not take the English language with the level of seriousness it deserves. There are also some sociocultural influences that affect English language learning.
in class when making a mistake. As a result, some of them avoid participating in situations where they think they would be criticized or judged by peers or the teacher.

Kuwaiti EFL students in Rashed’s (2017) study mentioned that they experienced stress caused by course pressure, academic commitment, confusion, anxiety, lack of time management, pressure to get good grades, parents’ expectations for excellent grades and perfect performance by their children in college. Family demand has a noticeable impact on those students emotionally and intellectually, which might lead to tension (Rashed, 2017). Other potential sources of academic stress that students noted that play a role in decelerating language skills comprehension and acquisition included excessive homework and unclear assignments. Many students revealed that they had to change and evolve their studying techniques to handle increased assignments and challenging material, which is different from what they are used to receiving in schools. Al-Bustan and Al-Bustan (2009) documented that Kuwaiti students reported negative experiences with English teachers at the high school level, which negatively influenced students’ attitudes towards the English language. Untrained and inexperienced teachers in English language are common in Kuwait (Al-Bustan & Al-Bustan, 2009). The College of Education at Kuwait University was the single producer of English Language teachers in Kuwait until 2002, so in many cases, the teachers were foreign nationals sourced from Arabic speaking nations in the Middle East (Al-Bustan & Al-Bustan, 2009). This was deemed necessary given the several challenges experienced upon the integration of English as a foreign language into the primary schools’ curriculum in 1993. The Ministry of Education recruited untrained teachers who did not possess the prerequisite qualifications because of the shortage of teachers (Al-Mutawa, 1997). These shortcomings in education led to several problems of English writing, as discussed in the next section.

2.4 Problems of English Writing in the State of Kuwait

Quality and achievement are the major challenges affecting the teaching and learning of the English language in Kuwait. Al-Edwani (2005) cites the following challenges of formal learning environment in Kuwait and thus inadequate instruction: the lack of English skills among Kuwaiti EFL teachers and continued reliance on an outdated medium of instruction in schools. The following subsection discusses the EFL writing education issues at the primary and secondary levels.

2.4.1 English Writing System in Kuwait

Writing skills are neglected in both EFL and L1. In Arabic classes, students learn errors in the teaching and learning of L1 writing strategies that persist in their L2 writing (Mohammad, 2008). Mohammad (2008) criticizes the new curriculum presented by the
Kuwait Ministry of Education in 2002 as keen on advancing speaking and listening skills and neglecting the vital skills of writing and reading. English composition as a writing skill is taught once a week for 45 minutes in Kuwaiti primary classrooms (Jaffer, 2003), which presents a major obstacle in the learning process for writing (Taqi & Shuqair, 2014).

A significant gap also exists between writing instruction theory and practice of English classes in Kuwaiti public schools. In many cases, the students are passively participating in class, as the lessons are usually teacher-centred (Al-Darwish, 2006). Al-Edwani (2005) states that the drawback of the formal learning environment in Kuwait is a result of the inadequate instruction, due to the continued use of the outdated methodology, which heavily relied on the grammar-translation method, despite the current official curricular emphasis on the audio-lingual and communicative frameworks. Similarly, Al-Darwish (2006) cites the same challenges in addition to the overreliance on teacher-centred learning processes, thus having English classrooms that drill as opposed to encouraging students to practice the language.

Moreover, classroom management issues exacerbate English writing issues. Teaching of the English language in Kuwait is such that all the four major skills of learning a language—listening, reading, speaking and writing—are incorporated as one subject, and writing skills are allocated the least time during the English classes within a week (State of Kuwait, 2014). The productive skills of writing and speaking are difficult to integrate within a span of 45 minutes with such a large number of students 5 times a week. Grabe and Kaplan (1996) emphasize that teachers-in-training should be educated on writing development theories as well as on instructional techniques when it comes to writing, yet as previously noted, writing teachers in Kuwait have been underqualified for this task (Al-Mutawa, 1997).

Similarly, Mohammad (2008) noted that there were issues at the curricular level in primary schools. Specifically, Mohammad conducted a case study investigating the place of writing in first grade Kuwaiti English education. Using interviews, classroom observations, and an analysis of curriculum documents, it was found that the relationship between oral and written language is more complex than suggested by either the Kuwaiti curriculum reform, or international literature concerning the delayed teaching of writing. Three main findings emerged from the study: non-language and language goals in the context of globalization, the lack of transfer of writing skills between English language studies and other subjects of the Kuwaiti first grade curriculum, and the oral and written relationship. Based on the findings, Mohammad suggested that the social and individual needs of Kuwaitis in the context of globalization necessitated further writing instruction and integration into other coursework.
across the curriculum. Mohammed suggested an integrated, writing-intensive approach to English language, which might be more appropriate and more effective for first grade students in the current Kuwaiti context.

The exposure and negative experiences of students with English at the secondary and primary levels explains the challenges exhibited by Kuwaiti students with writing skills at the college level. Several researchers have documented the severe challenges facing the teaching and learning of college EFL writing, with situations so grave that students are incapable of writing complete sentences (Aljamhoor, 1996; Al-Semari, 1993; Alnufaie, 2014; Fageeh, 2003). Upon joining college, students in Kuwait exhibit a dismal level of awareness in writing skills (Taqi & Shuqair, 2014).

Students find the English at the University level dissimilar from the English at the high school level (Al-Bustan & Al-Bustan, 2009). The large number of students per class, typically 49 in first year College of Arts courses (Kuwait University, 2016), makes it difficult for teachers to effectively relay to the students the needed writing skills and strategies. The college level writing policy at Kuwait University (2014) demands students should generate a clear and accurate paper that can be comprehended by academic readers. The composition syllabus at Kuwait University does not require teachers to teach students how to plan, edit, or revise their writing process. Their instruction emphasizes writing summaries and imitating models of writing produced by other writers of short stories and events rather than focusing on writing techniques and strategies. In writing classes, students are assessed in non-mediated learning situations, i.e., they generate handwritten texts without the support of word processing.

Similarly, in her study on investigating the obstacles and difficulties that Kuwaiti college students encounter in English learning process in EFL classes, Rashed (2017) surveyed 500 participants studying English in Kuwait. The results showed that students were dissatisfied with the traditional method of EFL writing teaching, based on several factors that influence students’ motivation towards English learning, such as L1 influence, socio-cultural influence, academic stress, and the ability to memorize grammar structure. In regard to grammar, Rashed (2017) states that a large number of participants suggested to eliminate grammar as a skill taught independently, explaining that it should be integrated and taught with another skill, such as writing or reading. Other students proposed to open a new course of listening and speaking where grammar is taught practicing formal conversation sessions and corrected by the teacher or peers. Accordingly, in EFL learning, speaking, listening and language comprehension should mount the priorities to teachers and educators in teaching a
language (L2), because they are considered as the primer tools to acquiring a language. In
addition, 25% of participants demanded more practice on writing, to enhance their writing
skill that serves their academic life in colleges, to help them do well in English and other
courses (Rashed, 2017).

The context of English language writing instruction explains the Kuwaiti students’
problems with writing classes at the college level. Because of the lack of language
development, lack of writing experiences in both L1 and EFL writing, and lack of practice,
many Kuwaiti college students do not regard themselves as good writers, particularly in
English (Al Darwish & Sadeqi, 2016). When students join college, they also do not seem to
have a level of awareness regarding their writing skills. Hence, a need existed for the current
research to focus on the students’ processes of writing, and the types of strategies they use in
the writing process within the context of cohesion. Cohesive writing is also inhibited by
significant differences between English and Arabic (Rashed, 2017), which are reviewed in the
following section.

2.4.2 Differences between English and Arabic

Regarding the current study, prior researchers revealed development of an individual’s
literacy skills can vary depending on the sociocognitive differences in the L1 and L2 of
language learning. For example, Arabic and English are different in terms of script direction,
alphabet, and many other aspects. Arabic is a Semitic language spoken throughout the Middle
East, North Africa, and some other African countries (O’Brien, 2013). There are 28 letters in
Arabic, with only three vowels ―a‖, ―i‖, and ―u‖ compared to the English alphabet of 26
letters and a vowel system of 5 vowel symbols, which presents major problems for Arab
learners of English both in terms of pronunciation and spelling (O’Brien, 2013). Also, writing
in Arabic is from right to left, and is written in a cursive script, with no distinction made
between upper and lower case, which may cause some problems for individuals when
learning the left to right system in English (O’Brien, 2013).

In line with O’Brien’s (2013) observations about Arabic to English, the participants in
Rashed’s (2017) study reported that they find difficulties in vocabulary due to the dissimilar
nature of English and Arabic which appears in phonology, lexicon, and structure. They
mentioned that some sounds in L2 were novel to them and require effort to pronounce them
correctly, such as V (i.e., vital), P (i.e., plan), G (i.e., goat), as well as the sound SU (i.e.,
usual). In addition, some of the participants reported that they encounter difficulties with
silent letters in words like ‘often, walk, talk, debt, muscle, etc.’, because such letters do not
exist in their mother tongue (Arabic), which result in reading or writing the word exactly as is
the case in Arabic. Students also reported that they extract certain rules from their mother
tongue (L1) and utilize them in the target language (L2). According to Rashed (2017), some
students use L1 in class to assume that they understood well, or to ask for the meaning of
vocabulary, or to inquire about the complex instructions by the teacher, which affects the
amount of L2 acquisition and comprehension level. Sections 3.3.2 and 3.3.4 further
emphasize the influence of L1 on L2 learning, particularly in relation to Arabic-English
linguistic distance and transference.

2.5 Conclusion

In this chapter, the researcher discussed the general background about the context of the study, as well as the information related to the existence of English in the State of Kuwait. Topics included the demographic and historical background of Kuwait, an overview of the educational system, and the problems of English writing in Kuwait. For no obvious reason, writing skills have been given relatively less attention in research in Kuwait, even though such skills have major consequences on the educational level of L2 learners. Research studies involving students are not common in Kuwait’s cultural context, which does not help researchers to generalize their findings in relation to L2 learning because of the small size of samples, as was the case in the current study.

The next chapter expands on the literature related to SLA in general, in addition to issues related to second language writing, and writing strategies in particular. The researcher explores the problems facing Arab learners in general, and Kuwaiti students in particular, in learning writing in English, as well as problems with macrolevel cohesion use in EFL writing, to define the gap in the literature that necessitated the current study.
Chapter 3: Literature Review

3.1 Introduction

This chapter provides an overview of the literature relevant to L2 writing and language writing strategies in general, in addition to issues related to L2 writing in particular. The chapter begins with a discussion of the sociocognitive approach to L2 learning (see Section 3.2) to lay a framework for the present study. This section includes information about the general approach to L2 language learning (Section 3.2.1), then an overview of cognitive (Section 3.2.2) and sociocultural (Section 3.2.3) approaches to language learning. Finally, the framework for the present study, the sociocognitive approach, is highlighted (Section 3.2.4).

Subsequently, Section 3.3 discusses literacy development, including a definition of literacy and digital literacy. Specifically, the integration among language skills (see Section 3.3.1) and across different languages (see Section 3.3.2) with respect to literacy is included. This discussion funnels into a more specific discussion of writing as a language skill and key component of literacy.

The discussion of writing begins with an indication of the different models of writing processes in L1 (see Section 3.4.1) followed by those of L2 writing (see Section 3.4.2). These models provide the background for understanding writing and eventually the strategies writers use in language classrooms. A discussion of cohesion in L2 writing follows, and particularly, of Halliday and Hasan’s (1976) model of cohesion (see Section 3.4.3). The application of these cohesive devices in various contexts are covered in Sections 3.4.3.2 and 3.4.3.3. Finally, Section 3.4.4 discusses the influences of L1 on L2 writing. In all, Section 3.4 provides an overview of writing processes and cohesion in both L1 and L2 contexts. Section 3.5 includes information on the writing strategies employed to achieve these writing processes in L2, including their classifications (see Section 3.5.2) and the specific strategies examined in the study (see Section 3.5.3). Finally, Sections 3.6 and 3.7 include specific studies which examine ESL (3.6) and EFL (3.7) writing processes in authentic contexts.

The final major section of the literature review includes various sociocognitive factors that influence writing. These include past educational experience (see Section 3.8.1), influence of the learning situation (see Section 3.8.2), writing proficiency level (see Section 3.8.3), and the influence of the discourse and task type (see Section 3.8.4). The chapter ends with a conclusion statement.

The following literature review pertains to the aspects that address the four research questions of the study. This includes the writing strategies of SLA, with emphasis on the writing, research questions, and whether gender has an effect on the strategies selected by the
students (RQ1; see Section 3.5). The transfer between L1 and L2 writing process, which can take place if students achieved a certain level of L2 proficiency, is also given due attention (RQ2; see Section 3.4.4). The chapter also reviewed prior work by researchers who studied cohesion and quality in writing in the Arab world and in Kuwait to specify the gap in the literature filled by the current study (RQ3; see Section 3.4.3). The researcher also sheds light on L2 writing strategies adopted by EFL students, narrowing to those used by Arab students and Kuwaiti students in particular to investigate the relationship between strategy use and text characteristics in the writing of college students at Kuwait University (RQ4; see Sections 3.6 and 3.7).

3.2 Sociocognitive Approach to L2 Learning

For the purposes of the current study, the sociocognitive approach to L2 learning, specifically writing, was the theoretical framework. The following sections provide a brief overview of L2 learning as background for the study followed by a review of seminal works and tenets of cognitive and sociocultural approaches, including their individual shortcomings. The section culminates in a discussion of the tenets of the sociocognitive approach, which provided a lens for interpreting the results of the study.

3.2.1 L2 Learning Overview

To study how learners acquire an L2, a clear operational definition of what is meant by the term acquisition is needed. Unfortunately, debate exists in SLA literature regarding the distinction between acquisition and learning and between implicit and explicit knowledge (Ellis, 1994). The term acquisition refers to the gradual development of the ability to use a particular language naturally in communicative situations with others (Yule, 2010). The term learning applies to a more conscious process of accumulating knowledge of language features, such as vocabulary and grammar, in an institutional setting (Yule, 2010). According to Rieko Matsuoka et al. (2004), the field of SLA came into existence in the 1950s and was part of an effort to improve the effectiveness of L2 teaching.

Second language acquisition involves learning language after an L1 is already established. However, Krashen (1981) distinguishes between acquisition and learning of an L2, claiming acquisition refers to the subconscious process of “picking up” a language through exposure, similar to the one children use when learning their L1. On the other hand, learning refers to the conscious process of studying a language. In other words, learning is the product of formal teaching, which results in conscious knowledge about the language (Krashen & Terrell, 1983). SLA researchers favour the term acquisition opposed to learning because SLA mostly occurs as a subconscious process, as opposed to formal means usually
emphasized in language learning (Larsen-Freeman, 2007). This acquisition process emerged because of 3 decades of study in which researchers investigated how an L2 is acquired, describing different stages of development, and assessing whether SLA follows a similar route to that of L1 acquisition (Gitsaki, 1998).

In the last 50 years, theory in the field of SLA literature developed in a number of directions with no single theory providing a comprehensive explanation of the process. Two broad theoretical frameworks for research dominate the field: a cognitive perspective and a sociocultural perspective on language acquisition. Within these two competing frameworks, research studies provide different insights into the complex process of SLA. Most recently, the sociocognitive approach (Atkinson, 2002) was developed to bridge the gap between the social and cognitive approaches to writing and provide a more comprehensive view of EFL writing.

The theoretical framework for the current thesis is a sociocognitive approach to L2 learning. In the coming sections, the cognitive and sociocultural approaches to language learning are outlined individually to lay the background for the theoretical framework. Subsequently, the sociocognitive approach is proposed as a unifying framework most appropriate to both the research focus and the educational and curricular context of this study. Then, the researcher presents recent studies on L2 writers and their writing strategies explored from the sociocultural or sociocognitive perspective. This sheds light on the reasons the sociocognitive perspective is useful to the area of L2 writing strategy research, and how the approach has contributed to the field compared to the cognitive approach.

3.2.2 Cognitive Approach

The cognitive approach has dominated SLA research for many years. This approach depends “on identifying the nature and sources of the underlying L2 knowledge system and on explaining developmental success and failure” (Doughty & Long, 2003, p. 4). In other words, it focuses on the cognitive aspects of the L2 learning experience to explain how learners acquire new language and why one L2 learner may perform better than another depending on the cognitive features of each learner (e.g., mental state, learning behaviour, cognitive skills, and memory limitations).

The cognitive approach derives from the early work of Chomsky (1972) on mechanisms of language acquisition and the innate processes by which humans acquire a language, termed a language acquisition device (LAD). According to Chomsky’s theory, children acquire their L1 with no direct instruction, practice, or drills and with no apparent difficulty. The LAD predisposes all people to the acquisition of a L2 in the same manner if
provided with the correct input. Although researchers have challenged aspects of Chomsky’s theory of universal grammar, it continues to influence work in the field of SLA. Although not every theory in the cognitive approach is credited to Chomsky, these theories did open a rich and productive avenue of research regarding SLA in the cognitive domain.

In the cognitive approach, researchers view the brain as a “self-sufficient source of cognition” (Atkinson, 2010, p. 600). The brain is responsible for all the cognitive skills, potential, and motivation that help learners acquire a new language. Learners have internalized linguistic competence responsible for SLA. This cognitive competence, not external verbal behaviour, explains SLA development success or failure according to the cognitive approach (Atkinson, 2010). Language learning takes place in a certain environment, but it is the learner’s internal mental state that accounts for the whole learning process.

However, theorists have noted some deficiencies in this approach. Atkinson argued that the brain alone cannot solve many of the learning problems faced by L2 learners, as learners use the cognitive support structures internalized from their environment to access and acquire a new language. This means learners’ cognitive behaviour is partly shaped and affected by his or her settings. To clarify, the cognitive features alone cannot account for the success or failure of L2 learning process (Atkinson, 2010). For example, a learner with outstanding learning abilities cannot acquire L2 in a demotivating environment. The absence of motivation hinders the learner from an outstanding learning performance, despite the individual’s distinctive cognitive skills. However, the cognitive approach has been critiqued by proponents of the influence of culture on language use (Thorne, 2000), as discussed in the following section.

3.2.3 Sociocultural Approach

The second approach, the sociocultural approach, posits L2 learning is affected and shaped by context, at both the micro (classroom, assignment, context) and macro (cultural, demographic) level (Thorne, 2000). The notion underlying the sociocultural theory is the rejection of human actions as being controlled by the realm of rules. Sociocultural theory derives from the writings on psychological development of Vygotsky, termed cultural psychology or cultural-historical psychology (Lantolf & Beckett, 2009, p. 459). Human activity is regarded as “situated in concrete interactions that are simultaneously improvised locally and mediated by prefabricated, historically provided tools and practices” (Prior, 2006, p. 55).

Vygotsky’s sociocultural theory is based on the idea that human beings develop their mental abilities, such as speech patterns and written language, and construct their knowledge
from social interactions. Therefore, learning is “a socially situated activity” (Storch, 2013, p. 41) that occurs during the interaction between two or more people where a less knowledgeable learner gets assistance from an expert (Storch, 2013). According to Vygotsky’s perspective, learning will not be effective in cohesive activities unless the expert considers the novice’s current developmental level and potential developmental level. The gap between these two levels is called ZPD. Therefore, the goal of the interaction is to help the novice extend his or her current development level to a higher level of competence while the expert provides appropriate assistance. This assistance is called scaffolding.

For SLA theorists, a sociocultural approach begins from the starting point that all learning is social, and theorists aim to examine L2 learning explicitly using a Vygotskian conceptual framework. In the SLA literature, the seminal researchers Frawley and Lantolf (1985) proposed this “social turn” in SLA research. For example, Swain et al. (2009) emphasize the role of dialogic interaction in language learning development. Poehner (2009) pinpoints the outstanding role of teacher-fronted groups and whole-class interaction in SLA development through social learning. Additionally, Thorne and Tasker (2011) indicate that linguistic development occurs when a learner achieves increased voluntary control of his or her capacity of thinking and acting either through the proficient use of mediational resources, or through a reliance on external mediational means or intervention. In other words, linguistic and cultural factors help to encourage L2 learning processes, including interaction with the family and peer groups in addition to social activities that make learners involved in learning experiences that enhance their linguistic development.

Two key concepts in sociocultural theory of relevance to SLA research are mediation and internalization. According to Vygotsky, the former refers to the elements or components, such as “language, literacy, numeracy, categorization, rationality, logic, etc…. [that] serve as a buffer between the person and the environment and act to mediate the relationship between the individual and the social-material world” (Vygotsky, 1994, cited in Lantolf & Thorne, 2006).

Internalization refers to “the process through which cultural artefacts, including language, take on a psychological function” (Lantolf & Thorne, 2006, p. 211). It refers to the cultural development that children go through; what the child learns has social undertones that turn into psychological ones. This highlights the cognitive functions that any child learns including “planning, categorization, and interpretative strategies are initially social and subsequently are internalized and made available on the cognitive resources” (Lantolf &
Thorne, 2006, p. 211). For the current study, the social context was the Kuwaiti English and EFL learning practices, as discussed in Sections 2.3 and 2.4.

Sociocultural theorists noted that social phenomena influenced SLA (Lantolf & Thorne, 2006.). However, a difference exists between the observed phenomena and how the constraints of sociocultural theory allow researchers to study the learning process. Unlike cognitive theory, sociocultural theory is grounded in the perspective that the individual and her or his writing cannot be separated from the social world because the individual emerges from social interactions and relationships (Vygotsky, 1994, cited in Lantolf & Thorne, 2006).

Lantolf and Thorne note several tenets of the sociocultural approach parallel to SLA. The first is that a learner requires input from L2, including social interaction and exposure to the written word, to learn effectively. Social interaction is the primary vehicle for adequate exposure and accelerated learning, as the learning will primarily occur as incidental and applied exposure to L2, rather than through intensive formal learning. Further, the language learning process can be classified into various paths with specific developmental stages, which may vary significantly based on an individual’s sociocultural context. For example, the forms and the meanings of a learner’s L1 may influence the ability and process of acquiring L2; SLA theorists refer to this concept as interlanguage. If a concept or thought is difficult to translate from L1 to L2, or vice versa, it significantly influences language learning. In addition, sociocultural theorists focused on the importance of not only input from L2, but also output from L2 in the forms of speaking and writing.

However, critiques of the sociocultural approach exist. When attempting to conduct any study about SLA, researchers must account for all the components involved in the process. Consequently, any attempt to study the composing process must establish a type of coordination between linguistic, psycholinguistic, and sociolinguistic aspects (Riazi, 1997, p. 105). Therefore, a potential critique of the exclusively sociocultural approach is that it de-emphasizes the language learner as an individual agent, instead viewing them as solely a product of context. The following section represents one answer to the critique of both the sociocultural and cognitive approach and their singular focuses in the form of the sociocognitive approach to SLA.

3.2.4 Sociocognitive Approach

A recent development in the field of SLA is the use of the sociocognitive approach as a method of understanding EFL acquisition (Atkinson, 2002). Typifying the sociocognitive approach is the idea that language development is characterized by variation (Bates et al., 1995). Qualitative and quantitative variations, both biological and environmental, that exist
within and across components of early language are essential in understanding the mechanisms that underlie normal language development (Bates et al., 1995). Scholars, such as Lantolf and Frawley (1988), pioneered the sociocognitive approach, which combined Piaget and Vygotsky’s views on language. Although Piaget held the idea that thought was the foundation for language, Vygotsky held the idea that language formed thought. Tudge and Rogoff (1989) identified the social character in these views, which comprises an essential tenet of the sociocognitive approach. While there are several precursor theorists to the sociocognitive approach, Atkinson (2002) is widely accepted as the person who codified the theory.

The sociocognitive researchers view the language process as simultaneous co-occurrences of both cognitive thought and socially formed language rules. The sociocognitive approach evolved on the premise that language, culture, and society were interwoven (Atkinson, 2010). Cognitive approaches excluded SLA from the sociocultural context, which proved ineffective; however, cognitive aspects are essential for considering and understanding SLA. The ineffectiveness of an approach that is exclusively sociocultural or cognitive hinges on the fact that learners do not acquire language, especially L2, for enjoyment, but rather as a communicative tool in a society. As previously discussed in Chapter 2, in Kuwait, learning English is inseparable from the cultural context as well as the cognitive strategies and abilities of Kuwaiti EFL learners. Therefore, the sociocognitive approach was the most effective theoretical framework for this study.

The most appropriate lens through which to view the sociocognitive approach to SLA involves an ecological metaphor (Atkinson, 2013; Van Lier, 2004). The metaphor indicates how the various aspects of language learning are seen by cognitivists and social SLA researchers. According to this theory, cognitive and social factors must be considered when analysing the L2 learning process: “As such, any linguistic representation in the learner’s mind is strongly tied to the experience that a speaker has had with language and may bear little resemblance to forms that NSs employ or that fit linguists’ categories” (Atkinson, 2013, pp. 782–783). In other words, the ecological model pinpoints how the psychological, social, and environmental processes in SLA are interconnected. The idea of SLA as an ecology highlights that language learning is a human activity involving constant interaction between the individual and his or her environment (Van Lier, 2004). Thus, the ecology metaphor is used as a framework to provide a more comprehensive view of language learning where the different elements of the process (e.g., the individual, the environment, and interaction) are given attention. The ecological theory represents the culmination of the sociocognitive
approach, serving as a theoretical framework for the cognitive and social elements of L2 learning and development.

Using the ecological metaphor, theorists of the sociocognitive approach bring the sociocultural and the cognitive approaches together to understand SLA. L1 acquisition theories have paved way for systematic investigations of L2 developments (Mitchell, Myles & Marsden, 2013). Researchers combine the basic elements of both theories to account for the different stages of the L2 developmental process, paying equal attention to the cognitive processes and the sociocultural context.

In addition to the research imperatives, interaction lies at the heart of the sociocognitive approach. Interaction is the fundamental basis for human sociality, including language learning (Van Lier, 2004). This indicates that sociocognitive theorists see that interaction underlies and supports human social behaviour in intensive and complex ways. Theorists believe interaction supports language learning, too, as long as language learning is related to the form of social or sociocognitive behaviour (Van Lier, 2004). However, interaction is not confined to face-to-face interaction only, but also includes a wide range of social activities of more mediated types (Atkinson, 2010, 2013). This means that the L2 learner develops because of a combination of their interactive abilities along with her or his cognitive potentials. L2 learning is a complex process in which individual components (mainly the brain and interaction) cannot be separated from one another.

One essential component of sociocognitive language learning is the environment. As Larsen-Freeman (2007) noted, “like any infant, a person is always able to update his or her perceptual, conceptual, and linguistic systems through the environment in which he or she lives, i.e., these systems are not innate ones” (p. 784). This means that the L2 learning process takes place in a specific environment that has a deep effect on the learner and their learning process. The social context is as important as the cognitive process and as affective as the cognitive background of the learner. Friendly communication and interaction between learners further enhance the cognitive process. In addition to this, a facilitative instructor can be an essential element in enhancing the learning experience and skills of L2 learners.

Nevertheless, Larsen-Freeman (2007) noted the sociocognitive approach has been criticized because it is a theoretical construct that researchers have not fully implemented in SLA classroom research. Moreover, the approach involves intense focusing on learning processes irrespective of variability in terms of biological differences of learners or affective experiences of the learner in terms of past experiences, emotions, and motivation. The theory does not pin down the exact interplay between mental and environmental factors in describing
linguistic behaviour of acquisition; additionally, many of the important details and processes of the sociocognitive approach have not yet been clearly defined because of limited application (Larsen-Freeman, 2007). This lack of definition may prove problematic for researchers who apply it definitively, such as in quantitative studies. At present, the sociocognitive approach remains a largely theoretical construct and not clearly embedded in classroom SLA research. This presents a challenge for researchers who are trying to effectively use this approach. However, the attempt to integrate and unify cognitive and social research is a necessary addition to the field of SLA and offered a valuable theoretical frame for this study.

Despite the theory’s criticism, this approach best suits the nature of the Kuwaiti context where social factors cannot be separated from L2 learning processes. However, the educational institutions continue teaching based on a cognitive approach to learning. As discussed in Sections 2.3 and 2.4, multiple sociocultural factors exist in Kuwait that influence learners’ attitudes toward English. Such social factors have a far-reaching effect. In addition, combining both cognitive and social approaches provide a more comprehensive picture for the Kuwaiti context. However, researchers have not applied the sociocognitive approach within EFL learning in Kuwait. This approach pertains to the overall curricula and the teaching context while acknowledging the cognitive processes of the learner in conjunction with the social aspects of learning to understand and interpret writing strategies of Kuwaiti EFL students.

In the following sections, the theoretical framework will serve as a guide for the discussion of literacy and writing instruction. Cognitive and sociocultural considerations are included that may influence EFL writers, specifically those in Kuwait. This researcher will highlight the writing strategy definition and classification, studies in L2 writing strategies, and writing strategy studies in the Arab world.

3.3 Developing Literacy

This section includes a discussion of literacy development, including integration among language skills and across languages. The OECD (2016) defines literacy as “the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts.” In contrast, digital literacy involves a person’s capacity to “the ability to read and navigate autonomously digital content” (OECD, 2016, p.12). Some researchers have critiqued expectations of L2 speakers to reach L1 fluency; in fact, Cook (1999) argues that the prominence of the native speaker in language teaching has obscured the distinctive nature of the successful L2 user, and that expectations of L2 literacy
should differ from L1 literacy. August and Shanahan (2006) further note because of the issues L2 learners have with literacy, L2 instructors must detect literacy issues early to make an appropriate intervention. Developing literacy is essential to foster an individual’s full participation in daily life (OECD, 2016). Writing and language skills are intricately involved with an individual’s literacy capabilities.

3.3.1 Writing and Other Language Skills

The four language skills refer to speaking, listening, writing, and reading, with the first two being primary skills and the latter secondary skills. Of the four language skills, writing is the skill that places a greater demand on the learner (August & Shanahan, 2006). It is not surprising to find people who can speak well and perhaps read fairly well but cannot write well. L2 writing is difficult because it merges listening, speaking, and reading through the establishment of a basic knowledge of spelling, the writing system, and new language structure (August & Shanahan, 2006).

Reading and writing are closely related signs of knowledge (Reid, 1993b). L2 researchers have found a strong connection between reading and writing skills among students (Ferris & Hedgcock, 2005; Reid, 1993b). Writing enhances reading, and reading reinforces writing; writers read to find proofs and examples supporting their argument (Reid, 1993b). Grabe (2001) found that L2 reading and L2 writing are connected in five aspects: “reading to learn, writing to learn, reading to improve writing, writing to improve reading, and reading and writing together for better learning” (p. 15). Oral language abilities, fluency with print, a comprehension of print theories, a comprehension of text constructions, and knowledge attainment are the early skills associated with writing and reading (August & Shanahan, 2006). L2 writing specialists have concluded “effective writing instruction must enable students to become readers and writers” (Ferris & Hedgcock, 2005, p. 600).

However, EFL writing proves more challenging than EFL reading because it involves creating a new text rather than using pre-existing text (Ferris & Hedgcock, 2005). The writer is responsible for “originating and creating a unique verbal product that is graphically recorded” (Ferris & Hedgcock, 2005, p. 8). Writing requires effort from those attempting to learn it, and an EFL teacher must include a variety of activities in their teaching materials that enable learners to practice writing effectively (Abd El Motaal, 2001). There is a very common error among pedagogical practice of teaching reading and writing separately yet writing and reading skills establish and support literacy as L2 language learners become acquainted with the association between graphemes and phonemes and apply this awareness in their spelling and reading (August & Shanahan, 2006).
Speaking and listening are also contributors to writing because they provide an avenue for the child to learn the language and begin to relate to it as an instrument of thought. According to August and Shanahan (2006), three key phonological processing aspects are involved in literacy: (a) phonological awareness (the capacity to determinedly deal with language sounds as different from their meaning), (b) phonological recoding (procedures essential while converting a non-phonological stimulus to obtain a phonological output), and (c) phonological memory (having the information coded phonologically for provisional storage in short-term or working memory). Once a child can grasp orthography and phonemes, writing is simpler, as differentiation of pronunciation and spelling is evident.

However, writing skills are different from the other language skills, particularly speaking, in many aspects. According to Fageeh (2003), writing is a complex process that requires significant effort to learn and to teach because it must be learned through conscious exposure. Learners must be instructed and practice writing, as writing skills cannot be acquired naturally (Emig, 1997; Raimes, 1983b). Writers must depend on letters and structures to express their ideas, whereas speakers can depend on vocal intonations and gestures to communicate their messages. In addition, feedback and interaction cannot be immediate during writing, but one can immediately receive feedback while speaking. Speaking can be informal and repetitive; writing is generally formal and compact (Raimes, 1983b). Thus, L2 writing instructions and assignments must be structured differently than speaking instructions.

Writing can also fast track other skills, especially in L2 cases, because the child can relate to the usage of the L2 as a tool for expression using their garnered vocabulary, identify other things they cannot do yet with the language regarding writing, and learn again through the other language skills. Thus, while there is significant overlap among language skills, it is essential to emphasize that writing is a particular task that requires specific skills, which may prove difficult for EFL students and requires specific instruction (Raimes, 1983b). In addition to integration among language skills, there is also integration across languages, as discussed in the following section.

3.3.2 Integration across Languages / Biliteracy

This section covers how literacy skills in an L1 can and do influence literacy skills in the L2. The argument over integration across languages has seen the input of different scholars over the years. An influential scholar in this field is Jim Cummins, who developed the Linguistic Interdependence Hypothesis in 1978 in furtherance of the argument that language integration is possible. Pinter (2011) noted that there is usually an effect in L2 for
bilingual children, especially when there is significant difference in syntax and pronunciation. However, Cummins in his hypothesis posits that it is possible for certain L1 knowledge to be positively transferred during the second language acquisition process. His position suggests that the positive transfer outweighs the interference.

Cummins (1978) and subsequent researchers (Geval, 2014; Marban & Jalai, 2016; Schwartz, 2014) noted several positive outcomes related to language transference. By teaching languages partly about one another, for example, English and Irish which share similar orthography, "children can be given opportunities to reflect on the similarities and differences between the languages and to gain a greater understanding of the structure of their L1‖ (NCCA, 2012). Summarily, Cummins’ theory supports a common underlying knowledge base across languages, including reading, writing, speaking, and listening. Further, certain aspects of children’s cognitive functioning, such as metalinguistic awareness, can be potentially enhanced as a result of language integration (Cummins, 1978). Based on Cummins’ findings, cross-language transference is a major and longstanding theme in the study of language as well as literacy development in second language (L2) learners (Geval, 2014). The typological/contrastive perspective, linguistic interdependence hypothesis, and common underlying cognitive processes are some of the theoretical frameworks that influence language transference from L1 to L2 (Geval, 2014).

For positive transference to occur, the SLA instructor must emphasize the transference, rather than teaching languages in isolation; Cummins (1981) calls this emphasis “interdependence” (p. 29). Interdependence can be fostered through transfer of conceptual knowledge, of specific linguistic elements, of phonological awareness, and of metacognitive and metalinguistic strategies (NCCA, 2012). In recent research, Marban and Jalai (2016) assert that there is an interrelation among first (L1), second language (L2) skills and second language (L2) proficiency at different levels of proficiency among Iranian English language learners in advanced language learners, but not in the lower-intermediate group of language learners. Because of interdependence, immersion in L2 and continuing development of L1 within the First Language First model does not result in slowing development in bilingual children learning a second language (Schwartz, 2013).

In line with Cummins’ theory of interdependence, in L2 education, Cumming (1998) states two considerations exist for writing teachers. The first is related to biliteracy, where writing skill is influenced by the individuals' personal histories with and proficiency in L1 and L2, the uses and status of languages in different societies, and the similarities and differences between languages. Although similarities exist between L1 and L2 writing skills,
there seems to be sociolinguistic and psycholinguistic features that distinguish L2 from L1 writing (see Sections 3.4.2 and 3.6.2). Many researchers are interested in comprehending those features and their interrelations (Cumming, 1998). However, little research exists with respect to the writing strategies employed by L2 writers from this sociocognitive approach.

Recently, L2 writing researchers developed an interest in the social nature of literacy (Leki, 2000), in the vein of Cumming’s (1998) consideration of biliteracy. Social or “situated” literacies refer to “the link between the activities of reading and writing and the social structures in which they are embedded and which they shape” (Barton et al., 2000, p. 7). In addition, certain cognitive, social, and affective factors related to the L2 learning process also affect L2 writing (Myles, 2002). This sociocognitive approach provides an increased understanding of biliteracy, through an understanding of the differences between L1 and L2, but this approach necessitates study of particular contexts and their influence on EFL learning. Related to the current study, Cumming’s (1998) second consideration about writing is: “what particular teachers and students do, think, and accomplish in and through writing in relation to the setting in which they live” (p. 62).

When researching cross-linguistic affiliations in L2 literacy, Arab-Moghaddam and Senechal (2001) focused on the associations across languages that created literacy skills among young and adolescent ESL students. Arab-Moghaddam and Senechal (2001) found indicators of L1 oral ability did not correlate with or describe distinctive variance in the ability to read English words. Assessments on spelling mistakes in which researchers used between-group strategies or centred on spelling progresses showed learners’ spelling mistakes could be associated with variations between L1 (Spanish) and L2 (English) phonology, for instance, final consonant clusters’ simplification (such as han instead of hand), misspelling (/bl-/sl/) as well as some spellings (/dl/ for /dh/). The outcome of this research objective exemplified the intricacy of generalizing the studies concerning correlations between the proficiency of L1 and the English-language students’ skills because of the variance of such studies in diverse areas. Concerning L2 and L1 literacy, the researchers concentrated on the cross-linguistic effects of approaches, awareness, and processes in young students learning an L2 (Arab-Moghaddam & Senechal, 2001). The findings indicated a significant improvement in the treatment group’s achievements in all linguistic and meta-linguistic skills in all study languages after the intervention, except for orthographic knowledge in Arabic and Hebrew. In the case of oral reading, Arab-Moghaddam and Senechal found that both phonological and orthographic skills were predictors of good performance in both English and Persian. However, Arab-Moghaddam and Senechal reported that Persian children were better able to
spell words in English than they were in Persian, and that orthographic skills were a key predictor of their spelling ability. Additional considerations for understanding writing proficiency involve writing processes, discussed at length in the next section.

### 3.4 Writing Processes

This major section includes information on writing process models, both in L1 (see Section 3.4.1) and in L2 (see Section 3.4.2). The information about writing process models is followed by an introduction of cohesion (see Section 3.4.3) and the influences of L1 on L2 writing processes (see Section 3.4.4). According to Singleton (2005), writing was long viewed from a linear perspective, where writers moved from prewriting to writing to rewriting. Writing was studied, taught, and evaluated in terms of the final product. The focus mainly pertained to structural and grammatical correctness, which were regarded as the basic characteristics of good writing (Singleton, 2005). Chaaban (2010) suggests that this traditional way of thinking led to the belief that writing was a single, unidirectional practice in which writers moved from planning to writing to revision. This belief led researchers to suggest that writers knew exactly what they wanted to say before composing. Thus, all writers needed to do was find a form into which they could fit their content ideas (Chaaban, 2010).

Hyland (2002) claims the traditional view of writing considered that “texts are autonomous objects which can be analysed and described independently of particular contexts, writers, or readers” (p. 6). This implies writing is reduced to a group of words, phrases, and sentences structured according to rules of grammar, to be interpreted out of context. In addition, Cohen (1990) argues that this approach concerned the finished product of writing, and educators realized the drawbacks of this approach in that it discouraged “learners from taking their writing seriously because of its focus on instant product and on the grade that the writer receives” (p.105).

The traditional paradigm has been questioned by many researchers (see Bereiter & Scardamalia, 1987; Flower & Hayes, 1980, 1981; Perl, 1979; Zamel, 1993) and researchers have criticized its limitations as being prescriptive and concerned with correctness to the detriment of other aspects of writing. Hence, researchers developed the process approach to teaching writing. Researchers focused on what writers do when they write and the writing processes that guide decisions regarding the shapes and meanings of written texts. Some of the most important researchers who investigated the writing process were Perl (1979), Flower and Hayes (1980), and Bereiter and Scardamalia (1987).

Although it remains true that writing is a complicated process, it has been documented that the process approach to teaching writing may improve students’ attitudes toward writing.
and enable them to experience planning their pieces, drafting, and then seeing their work published (Matsuda, 2003a). In the late 1960s and 1970s, researchers of process pedagogy began to study the writing process of native English speakers to understand the writing behaviours that resulted in effective written products. This research resulted in the development of several models and conceptions of the writing process. In the following subsection, the influential L1 writing models will be presented.

3.4.1 Models of the L1 Writing Process

3.4.1.1 Stage Model

Rohman (1965) developed the first models of the composing process, including the stage model. This model exemplified a shift: researchers started viewing writing as a process. According to Rohman (1965), the writing process consisted of three stages: prewriting, writing, and rewriting. Within this model, Rohman placed emphasis on the first stage, when writers tend to think, plan, and discover what they want to say. Despite that Rohman’s model had an influence on subsequent studies, it was criticized on the basis that it was too linear, failed to account for the true complex nature of the process of writing, neglected areas related to the subprocesses included at each stage, and failed to consider the recursive decisions and choices writers make while composing (El-Mortaji, 2001).

3.4.1.2 Writing as a Recursive Process

Emig (1971) was one of the first researchers to make the shift from studying the product of the writing to studying what writers do when they write. As a critique of Rohman’s (1965) linear model, the researcher found that “while composing, students seemed to exhibit a variety of behaviours, all of which indicated the nonlinear nature of writing” (Emig, 1971, p. 98). Emig pioneered a think-aloud protocol (TAP) and used a case study methodology to observe eight 12th-grade students as they composed a piece of writing. By asking students to describe how they planned what to write, what they were thinking when they paused, and how and when they reread, revised, and edited, Emig determined the writing process was considerably more complex than previously thought. Writing is not linear, it is recursive. The writer writes, plans and revises, and then writes again. Emig identified five stages of the composing process: prewriting (generating ideas and mental rehearsal for writing), drafting (writing in progress), revision (re-see ideas), editing (error detection), and publication (public sharing of product). Emig noted writers move back and forth among the first four stages as they recognize a need to rework their written thoughts.

Perl (1979) conducted a study and revealed writing is a recursive process. The researcher used students’ written products, TAP analysis, and interviews to gather data. Perl
asked the 20 writing teachers taking a course in research and writing at New York University to verbalize their thoughts about the texts they were writing. The researcher observed the recurrence of different processes and analysed students’ thoughts and perceptions of writing by creating a list of composing styles. From the list, Perl formulated the writing strategies identified within the subjects’ writing. The researcher identified and classified three recurring elements shared by all writers. The first element was rereading, in which writers returned to the already produced written discourses. In doing so, they attempted to check the correspondence between their intended meaning and the text they produced. The second element was focusing, and Perl explained this as the writer’s recurrent move to certain key words or sentences to keep the process in motion and in the correct direction. The final element was the felt sense, which refers to the internal criterion writers use to guide them when they are planning, drafting, and revising (Perl, 1979).

By the 1980s, findings from composing studies opened the door for researchers to create effective models for the writing process. The researchers at that time believed good teaching required effective modelling and writing was a process that involved planning, translating, and reviewing the text (Murray, 1980). Murray states, “the writer is constantly learning from the writing what it intends to say” (p. 7). Murray developed another model that identified three stages that overlap and blend throughout the composing process: rehearsing, drafting, and revising. Through composing and writing multiple drafts, Murray suggested the writer moves from exploring and discovering the meaning of the text to the clarification and explanation of the ideas for the writer and the reader. During this stage, four driving forces interact and evolve: reading, writing, collecting, and connecting, which operate simultaneously in coordination with the stages of writing identified in Murray’s study (Chaaban, 2010). In this model, while composing, the writer usually retrieves previous knowledge and ideas and connects them to the current ideas collected through reading and recorded in writing (Alhosani, 2008).

Ransdell, Lavelle, and Levey (2002) support a recursive writing process and describe the effects of working memory strategies on writing performance. The researchers compared two main writing strategies: an ‘all-at-once’ strategy derived from previously-collected analyses of skilled writers, and a ‘step-by-step’ strategy derived from less skilled writers. The results of the research showed that the all-at-once strategy yielded higher writing fluency and quality than the step-by-step condition across all four subgroups of writers. The effectiveness of these strategies was tested in four different subgroups of students: advanced college students writing in L1, beginning students in L1, advanced students in L2, and beginning
students in L2. The main RQ was whether an all-at-once writing strategy (nonlinear processing) could lead to higher writing quality than a step-by-step strategy (linear processing). Non-continuous planning, text generation, and revision characterize linear processing. Poor writing involves a linear process of planning first, generating text, and revising last. The effect of a good working memory strategy was most evident on the least skilled writers in terms of both college experience and English language writing experience (Ransdell et al., 2002). Thus, the recursive model of writing is still in use. However, researchers attempted to further define and delineate writing processes, initially represented by Flower and Hayes’ (1981) cognitive writing model, as outlined in the next section.

3.4.1.3 Flower and Hayes (1981) Model of the Writing Process

Flower and Hayes (1980, 1981) approached the writing process from a cognitive perspective, in that they noted writing was a series of cognitive decisions on the part of the writer. The researchers created a model to diagnose problems faced during the process of writing in the native language (L1), by capturing the four dynamic steps writers follow to complete a written task: planning, generating ideas, translating, and editing of what has been written. Similar to the study by Perl (1979), Flower and Hayes based their model on data gathered from TAPs. Their model came as a refinement of Emig’s (1971) and Perl’s works, and marked a new cognitive shift in the way writing was studied. Their model focused on what writers do when they compose, including the three cognitive writing processes: planning (deciding what to say and how to say it), text generation (turning plans into written texts), and revision (improving existing text). According to Flower and Hayes, mature writing is a problem-solving activity in which planning, sentence generation, and revision are the main operations in achieving writing goals. The model divides the composing process into three major components: the composing processor, the task environment, and the writer’s long-term memory.

All three components of the writing process are under the constant control of the monitor (Flower & Hayes, 1981). The monitor is responsible for creating the borders between the processes and is responsible for the switch from one process to another. The function of the monitor differs from one writer to another. For example, some writers move immediately from planning to translating, but others tend to plan every part of their texts before translating their ideas into written form.

Flower and Hayes’ (1981) model of the writing process is regarded as one of the most influential models in L1 and L2 writing research (Zimmerman, 2000), but it has been criticized by many researchers, including Cooper and Holzman (1989), who argued that the
model did not account for the various activities writers engage in as they compose. Another researcher, North (1987), argued the Flower and Hayes model was too vague to form the basis from which to build a formal model of writing, and it did not clarify how texts were constructed, nor did it represent the linguistic constraints that might be forced on the text construction. Grabe and Kaplan (1996) noted “that writers are likely to be uniform with respect to their processing and cognitive abilities. Rather, writing involves numerous processing-model options” (p. 92), which suggests individuals approach writing with different processing strategies.

Considering the perceived deficiencies in the cognitive approach, theorists in the field of writing instruction debated whether researchers should regard individual cognition or social and cultural contexts as the motivating force for language acquisition (Flower, 1989). Even Flower (1989) and Hayes (1996), originators of the theory, criticize the Flower and Hayes (1980, 1981) model, suggesting that although this model indicates key places where social and contextual factors operate within the cognitive model, it failed to show the way in which the writing situation might affect composing. According to Flower, context guides cognition in many ways, and “in its least visible role, context affects us in the form of past experience that supplies a wealth of prior knowledge, assumptions and expectations” (p. 288). As far as writing is concerned, Flower and Hayes claim that the context can interact with the writer’s mind by influencing three cognitive areas of writing—goals, criteria, and strategies—which accordingly suggest the need for a model of writing that considers cognition. The following section further details the alternative to the cognitive model: the sociocultural approach to writing instruction.

More recent critics have continued to emphasize the lack of focus on sociocultural considerations in the cognitive model. One key critique was that Flower and Hayes’ model did not provide equal attention to all subprocesses, such as planning, revising, and translation, with the first being the most elaborated and the last being poorly developed in the model (Zimmerman, 2000). El-Mortaji (2001), who investigated the writing processes of multilingual EFL learners, also criticized the model based on three issues: lack of transferability to multilingual individuals; failure to undertake environmental factors, such as “affect” and “communication strategies” (El-Mortaji, 2001, p. 32); and Flower and Hayes’ choice of terminology, particularly regarding the term translation, which “creates obvious confusion when dealing with bilingual or multilingual writers” (El-Mortaji, 2001, p. 32). Despite the criticism of Flower and Hayes’ model, it created a relatively solid basis for later models to evolve and develop. The model also provided new perspectives and perceptions.
regarding the composing process and led researchers to pay attention to many important factors involved in the composing process (Grabe & Kaplan, 1996), which led to additional development of processes, like Bereiter and Scardamalia’s (1987) model.

3.4.1.4 Bereiter and Scardamalia’s (1987) Model

Another model of the L1 writing process is that proposed by Bereiter and Scardamalia (1987). These researchers argued individuals tend to write in different ways; accordingly, no single model of writing can explain the writing processes of different writers. Bereiter and Scardamalia considered reasons for differences of writing ability between expert and novice writers.

Bereiter and Scardamalia (1987) described two versions of the composing process. The first model was intended to describe the writing process of novice writers. In this model, the researchers suggested less skilled writers tended to be involved in “knowledge telling” when writing, which implies less complex problem-solving behaviours. The researchers argued this model “generates content by topical and structural prompts, without strategic formulation of goals, subgoals, search criteria, and other components of problem solving” (p. 348). The knowledge telling model presents a streamlined set of procedures that allow the writer to overcome the complex problem-solving activities often detected in skilled writers’ composing processes. According to this model, less skilled writers usually tend to simplify the writing task and decrease its complexity to successfully convert oral language into written form. Information is generated from the writing assignment, the topic, the genre, and from lexical cues in the writing assignment. Then, the writer retrieves idea identifiers and probes his or her memory for related information. According to Bereiter and Scardamalia, if the retrieved information is relevant to the writing topic, it is encoded into written form and used to search for more things to write.

The knowledge-transforming model of writing is a “think-say” technique in which the skilled writer retrieves ideas spontaneously from memory and translates them directly to text. The knowledge-transforming model is a problem-solving method of composition, where expert writers develop a highly-structured set of goals and generate ideas to accomplish these goals. This model, as opposed to the knowledge telling model, allows the elaboration of the explicit proposition that links audience and genre differences with writing task difficulties.

Similar to Flower and Hayes’ work, Bereiter and Scardamalia’s two models have been influential in the field, although criticized. The knowledge telling model does not present language knowledge as a component for less skilled writers. Moreover, it does not include any reviewing components, such as editing, which is a feature of unskilled writers. The model
also suggests unskilled writers “are sophisticated enough to identify genre” (Alhaysony, 2008, p. 37). The knowledge-transforming model has been criticized for only including elements of cognitive theory and not accounting for the influence of context and social factors on writing (Flower, 1994). This could be achieved by “elaborating on specific model components: the problem space, the organization of the content knowledge, and the organization of rhetorical knowledge and the ways the elaborated sources of information and problem representations are connected” (Grabe & Kaplan, 1996, p. 127). Finally, Grabe and Kaplan argued the model did not show how and when writers make the cognitive transition to knowledge transforming. Moreover, Grabe and Kaplan challenged whether it was possible to distinguish a stage that marked the partial development of knowledge transforming in writers. The researchers also challenged the applicability of the model and whether it could be generalized, as well as whether complex writing processes were accessible to anyone who would want to be an expert writer.

3.4.1.5 Hayes (1996) Model of the Writing Process

Hayes (1996) eventually responded to criticisms, conceding that the Flower and Hayes (1981) model had its problems. The researchers then redrew the model. The major change from the 1981 model, according to Hayes, was the rearranging of the memory component to clarify its interaction with the three cognitive processes (planning, translating, and reviewing) rather than just with planning. In this model, Hayes presents writing as a social activity because “it is a social artefact and carried out in a social setting” (Hayes, 1996, p. 5). Moreover, Hayes argues that the immediate social surroundings must be taken into consideration if researchers are to understand the writing process. Despite Hayes’ acknowledgement of the effect of social environment on writing, this model does not elaborate on the social dimension of writing or try to fully account for its discrete elements. This is reflected in Hayes’ calling the 1996 model an individual-environmental model rather than a social-cognitive one.

The new model includes two major components: (a) the task environment, which includes the social and the physical environment; and (b) the individual, which includes a motivation or affect component, cognitive processes, working memory, and long-term memory. The major differences between Flower and Hayes’ (1981) model and Hayes’ (1996) model is that in the latter model, emphasis is placed on the role of working memory, which consists of special or visual and linguistic representations. Moreover, the 1996 model stresses the role of motivation and effect on the writing process. Finally, the researcher replaced
revision with text interpretation, placed planning under the more general category of reflection, and placed translation under text production (Hayes, 1996).

3.4.1.6 The Sociocultural Model of the Writing Process

Largely in response to Flower and Hayes’ (1980, 1981) cognitive model, the resurgence of the sociocultural model of writing instruction emphasizes the influence of environmental and cultural factors on writing behaviors (Wertsch, 1985). As Hyland (2003) argues, taking context and social issues into account is vital when studying the writing process. Hyland criticizes the process approach to writing pedagogy because it “represents writing as a decontextualized skill by foregrounding the writer as an isolated individual struggling to express personal meanings” (p. 19). This critique implies that although the process model informs people about what writers do when they write, it reveals much less about the reasons that made the writer make certain linguistic and rhetorical choices. Failing to consider the decision-making element of writing can negatively advise students on their writing and may not fully consider how social and contextual factors will affect writers’ practices, or indeed how these factors could affect pedagogy (Hyland, 2003).

Proponents of the sociocultural approach to writing instruction state that the writer forms interactive relationships with teachers, peers, and other contextual elements that play an important role in shaping the writer’s learning experience, which become part of the writer’s way of thinking and is reflected in the what, how, and for whom he or she writes. In short, researchers who follow this trend study writing as situated cognition (Flower, 1989; Riazi, 1997). Wertsch (1985) coins the term sociocultural to indicate the notion “that the human mental functioning results from participation in, and appropriation of, the forms of cultural mediation integrated into social activities” (p. 459). The writing process is not understood in terms of the material texts that result or the acts of inscription, but rather as a dialogic process in the sociocultural approach (Prior, 2006). Furthermore, this theory of writing regards all writing as a collaborative activity involving “divisions of labour and co-authorship” (Prior, 2006, p. 57). Even when individuals are writing in isolation, they are still in dialogue with their surroundings through an array of sociohistorically provided resources, such as the language, the genre, and the technology used for inscription. One important outcome of this view is that the teacher in any class is a co-author for the students’ texts because of the various roles a teacher assumes. It is through the teachers’ instruction, choice of topic, feedback, and evaluation that students’ texts are shaped.

As previously noted, seminal cognitive theorists, such as Flower and Hayes, acknowledged the importance of sociocultural context, but as both Flower (1989) and Hayes
(1996) individually noted, essential cognitive functions remain that shape writing, which researchers must account for in gaining a full understanding of the SLA writing processes. Silva (1990) suggests that the picture “must, at least, meaningfully account for the contribution of the writer, reader, text, and context, as well as their interaction” (p. 20).

The section presented key models of the L1 composing process and some of the criticism found in literature regarding these models. In the following section, the focus will be on presenting key studies conducted in L2 writing strategies and processes in ESL or EFL contexts to provide a background for the description and analysis of writing processes of the subjects in the current study.

3.4.2 Models of the L2 Writing Process

This section of the literature review focuses on the models and theories of the writing process related to L2 contexts. During the late 1980s and the early 1990s, L2 writing evolved into an interdisciplinary field of academic study with its own disciplinary infrastructure (Matsuda, 2003a). A solid body of literature emerged in this field from the large numbers of international students in English-speaking countries who needed further development in L2 writing research in different educational contexts.

Early researchers directed interest towards all aspects of the ESL composing process, focusing on specific behaviours that appeared to lead the successful and unsuccessful production of writing (Leki, 1995). Some researchers’ interests were directed towards investigating the ESL writing process in its entirety (Raimes, 1985; Zamel, 1983), although other researchers were keen on studying specific writing strategies and comparing strategic behaviours across languages (Jones & Tetroe, 1987). ESL writing process studies often build on approaches to L1 writing studies in terms of research questions and methods (Raimes, 1991; Silva, 1990). Researchers studying the ESL writing process have adopted the designs of L1 writing process research, benefiting from much of what has been learned from L1 literature. Moreover, researchers studying L2 have often reached findings that correspond with those of L1 studies (Cumming, 1998).

Later researchers explored the similarities and differences between the ESL and L1 writing processes; researchers dedicated their attentions to uncovering writing behaviours that were unique to ESL writers. Some researchers believe interlanguage is based on errors from the L2 or differences from the L1, although others believe it is a complete system of its own. One constant in SLA is that learners consciously and subconsciously make inferences from their L1 knowledge as they acquire L2, in a process called language transfer. The transfer can be positive when it aids learning of the L2 in terms of similarities in language, although it can
be negative when it is inhibitive in terms of differences between the two languages. In the following sections, the researcher will review the existing research on ESL writing strategies and the use of L1 in L2.

Sasaki-Hirose’s (1996) Model of L2 Composing Ability is considered as one of the attempts to build a comprehensive model of L2 writing instruction. It involves constructing and testing a process-product explanatory model of student achievement that seems to be unique to second-language writing (Cumming, 1989). This model tries to explain the main factors influencing L2 writing ability: L2 proficiency, L1 writing ability, and L2 writing meta-knowledge. One of the interesting points in this model is that the authors were not sure about composing competence as an influential factor or writing ability. In addition, the writing strategies seemed to be potential. Unlike the previous models, this model does not propose any direct interaction between strategies and writing confidence or writing affect. Sasaki and Hirose found that the writing ability of their Japanese EFL writers interacted with their L2 proficiency. The significance of this model, however, seems to be its indication that L2 writing ability and proficiency might be influenced by previous writing experience, including formal writing instruction (Cumming, 1989, p. 157).

Many L2 scholars have also expressed the usefulness of language decoding (Goodwin et al., 2013; Melby-Lervag & Lervag, 2014). According to Goodwin et al (2013), morphological awareness has an influence on phonological decoding notably in reading comprehension, word reading, as well as reading vocabulary. Goodwin et al. (2013) argue that morphological awareness particularly contributes in reading comprehension because it involves reflecting upon as well as manipulating morphemes, or units of meaning in a bid to communicate and understand meaning in both written and oral languages. Goodwin et al. (2013) further argue that first language speakers could benefit from morphological awareness in second languages in which they share many word units.

Contradicting the emphasis Goodwin et al. place on decoding, according to Melby-Lervag and Lervag (2014), problems among second-language learners should focus on language comprehension skills except in situations where specific decoding problems are detected. Melby Lervag and Lervag (2014) noted there are differences as well as similarities between first and second language learners in terms of language comprehension, decoding, and morphological awareness. Findings from a systematic meta-analytic review of studies comparing reading comprehension and its underlying components by the duo nevertheless indicated that second-language learners display a relatively large deficit in reading and language comprehension but rather a small difference in phonological awareness and
decoding unlike first-language learners. In line with this recommendation, Nguyen and Abbott (2016) suggest strategies that not only tests learners’ comprehension and decoding skills, but also teach learners how to use cognitive strategies to deal with comprehension problems, monitor their progress, recognize and interpret prosodic elements appropriately, as well as notice and acquire target language forms. Thus, while decoding is important, it seems equally important to focus on other sociocognitive behaviors in understanding L2 learning.

L2 writing can be a complex process of discovery that involves brainstorming, multiple drafts, feedback practices, revision, and final editing. In the initial phases of SLA, writing may incorporate copying precisely or writing short phrases or words from memory, particularly those with accented characters besides labelling items (August & Shanahan, 2006). Wang and Wen (2002) noted L2 writing is different from L1 writing because L2 writers have more than one language at their disposal. It is also different because individuals may not be fluent speakers of one language. Nevertheless, L2 writing research frequently draws on L1 writing research because it is generally assumed that L1 and L2 writing are similar to each other (Silva, 1993).

The next section pertains to the fundamental ideas concerning cohesion in English writing by presenting the definition of cohesion, as well as the cohesive devices (CDs). In the current study, the focus was on Halliday and Hasan’s (1976) theory of cohesion (see Section 3.4.3.1). The next section also includes information regarding studies on cohesion among EFL students in both non-Arabic (see Section 3.4.3.2) and Arabic (see Section 3.4.3.3) contexts.

### 3.4.3 Cohesion in L2 Writing

This section includes information regarding cohesion in L2 writing. Cohesion is a tool for textual analysis, as it refers to the grammatical and lexical elements on the surface of a text that form connections between parts of the text (Connor, 1996). In relation to EFL writing, cohesion on the macrolevel is related to linking ideas, whereas on the micro level, it is concerned with connecting sentences and phrases (Ahmed, 2010). Hinkel (2004) highlights the importance of text cohesion, claiming that a text stands as a text by means of cohesion; without cohesion, sentences would be fragmented and would result in several unrelated sentences.

Many researchers indicated cohesion constitutes a serious problem for Arab students (Khalil, 1989; Shakir, 1991; Qaddumi, 1995; Ahmed, 2010; Abdul Rahman, 2013; Al Sharoufi, 2014). The objective of the study was to concentrate on the macrolevel of CDs to justify students’ writing problems pedagogically. The analytical framework of the text analysis of students’ writing task was based on the framework of Halliday and Hasan’s (1976)
theory of cohesion. That framework is discussed in this section (3.4.3.1), as are studies on cohesion in non-Arabic (see Section 3.4.3.2) and Arabic (see Section 3.4.3.3) contexts.

**3.4.3.1 Halliday and Hasan’s (1976) Model of Cohesion**

Halliday and Hasan’s (1976) work on cohesion laid the groundwork for research in this area. In their classic study of cohesion in English writing, the researchers defined cohesion as the linguistic devices the writer uses to generate a textual continuum. Additionally, the researchers defined the concept of cohesion as “a semantic one; it refers to relations of meaning that exist within the text, and that defines it as a text” (Halliday & Hassan, 1985, p. 4). Following the publication of Halliday and Hasan’s study, language educators and teachers became interested in the use of CDs regarding students’ written composition. Several researchers have used the outline of cohesion in English presented by Halliday and Hasan. Their work is a reference for the analysis of various kinds of cohesive devices (Qaddumi, 1995). Thus, it is important to become familiar with the cohesion taxonomy presented by Halliday and Hasan.

Halliday and Hasan (1976) identified five types of cohesion: reference, substitution, ellipsis, lexical, and conjunction. The first three types are grammatical cohesion. Lexical cohesion refers to relations between any lexical item and a previously-occurring lexical item in the text. Conjunctive cohesions are affected by the cohesion elements called conjunctions. Conjunctions are considered grammatical devices with a lexical component. According to Halliday and Hasan, the presence of these CDs is essential for building text cohesion. Textuality and logical and semantic relations are negatively affected by the absence of, or inadequate, cohesion. Hence, without cohesion, as discussed in the next section, the whole text fails to meet the writer’s expectations.

**3.4.3.1.1 Linguistic Cohesive Devices in Halliday and Hasan's Model**

The linguistic devices of the cohesion model proposed by Halliday and Hasan (1976) include the following.

**Reference cohesion:** a semantic relationship in which one item in a text refers to another by means of identity of meanings; reference can be endophoric or exophoric. When the endophoric reference item is a personal pronoun or a demonstrative pronoun, the reference is made explicit by means of identification with the reference item. When the endophoric reference item is a possessive pronoun, an objective pronoun, or the definite article, the reference is made explicit through a comparison to the reference item (Halliday & Hasan, 1976, p. 304, p. 309). Reference cohesion can be subdivided into three groups: personal, demonstrative, and comparative reference. The category of personal reference includes:
- Personal pronouns: I, me, you, we, us, him, her, she, he, they, them, and it. e.g., Mary was sick today. What's wrong with her?
- Possessive determiners or adjectives: my, mine, your, yours, his, her, hers, their, theirs, and its. e.g., Ann published her new book.
- Relative pronouns: who and which (That is not included because it only introduces restrictive clauses). e.g., This is the lady who applied for the new job.

The category of demonstrative reference includes:
- Nominal demonstrative: the, this, these, that, and those. These demonstratives are used to refer to a person or object. e.g., I bought two shirts. These shirts are very expensive.
- Demonstrative adverbs: here, there, and then. These demonstratives are used adverbially to refer cataphorically or anaphorically to the location or space or time. e.g., Lisa went to the university to meet her new supervisor there.

The category of comparative reference can be expressed by adjectives or adverbs to compare two things that are similar or different and this is called general comparison, such as using the same. The other type of comparative reference expresses equality, superiority, or inferiority in quality or quantity between two things. It includes comparative adjectives or nouns, such as smaller, more powerful, more demanding, etc., or an adverb of comparison.

**Substitution cohesion:** Halliday and Hasan (1976) define substitution as the replacement of one item by another. It is a formal connection between linguistic forms but not between meanings. A specific linguistic structure is substituted by another identical linguistic form that is substituted for it, though their meanings are not the same (Halliday & Hasan, 1976, p. 308). Substitution is classified into nominal, verbal, and clausal:
- Nominal substitution: Nominal with one, once, and same. e.g., I bought a new house, but he bought an old one.
- Verbal substitution: Verbal substitution in English is do. This operates as head of a verbal group in the place that is occupied by the lexical verb, and its position is always final in the group. e.g., Does Jane work? No, but her sister does.
- Clausal substitution: What is presupposed is not an element within the clause but an entire clause. The words used as substitutes are so and not. e.g., She is pretty. I believe so.

**Ellipsis:** a form of substitution. According to Halliday and Hasan (1976), an ellipsis occurs when a specific structural component is left out and another component fills in the missing information (p. 142). Ellipsis refers to the absence of a word, a phrase, or a clause.
that is understood. Substitution and ellipsis are used as linguistic mechanisms that help express specific linguistic structures more economically to avoid repetitions of familiar words, phrases, or clauses within the text. Ellipsis is classified into the following:

- **Nominal**: In the following example, *the company’s* is elliptical for number. e.g., Did you get his number? No, *the company’s*.
- **Verbal**: In the following example, the word shower is elliptical for the subject and verb phrase *I have been taking a shower*. e.g., What have you been doing? Shower.
- **Clausal**: e.g., What did he write? Letter.

**Conjunctions**: Conjunctive cohesion is the type of cohesion commonly and most extensively dealt with in grammar and composition writing. According to Halliday and Hasan, conjunctions differ from CDs in that they are “cohesive by virtue of their specific meaning; …they express certain meanings which presuppose the presence of other components in the discourse” (p. 226). According to Halliday and Hasan, conjunctions are classified into the following categories:

- **Additive conjunctions**. e.g., I can’t give you the money *and* I can’t buy her a new dress.
- **Adversative conjunctions**. e.g., He paid his loan. *Yet*, the bank still owes him some money.
- **Casual conjunctions**. e.g., He didn’t study for the exam. *So*, he failed.
- **Temporal conjunctions**. e.g., He started to read the newspaper, *then* his wife entered.

**Lexical cohesion**: achieved by means of verbal and synonymic repetition using synonyms (words of almost the same meaning, e.g. commonly, popularly), subordinates or hyponyms (the semantic relation between a more general expression and related specific relations, e.g. cigarettes, cigars), and subordinates (Halliday & Hasan’s, 1976, p. 278). According to Halliday and Hasan, lexical cohesion is not associated with any special syntactic classes of elements. Lexical cohesion is achieved by the selection of vocabulary, although the four previous categories are described as types of grammatical cohesion.

Lexical cohesion is classified into four categories:

- **General nouns**: These are nouns that have generalized reference within the major noun classes, such as *human noun, place noun, fact noun*, etc. e.g., I visited my *grandmother* yesterday.
- **Reiteration**. e.g., He passed the final exam. The *task* wasn’t easy. In this example, the word *task* is cohesive as it reiterates the action of passing the exam.
- Subordinates. e.g., The dog bit the boy. The *animal* was then shot. In this example, the word *animal* is cohesive as it refers to the dog.
- Collocations. e.g., The *doctor* performed the *operation*. In this example, the word *operation* is cohesive because it collocates with *performed* and *doctor*.

The next figure summarizes Halliday and Hasan’s (1976) cohesion taxonomy at a glance (pp. 274–292)

<table>
<thead>
<tr>
<th>Cohesion Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal pronouns</td>
<td>I, me you, we, us, him, her, they, them, it.</td>
</tr>
<tr>
<td>Personal determiners (possessives):</td>
<td>My, mine, your, yours, his, her, hers, their, theirs, its.</td>
</tr>
<tr>
<td>Relative pronouns:</td>
<td>Who, which.</td>
</tr>
<tr>
<td>Determiners:</td>
<td>The, this, these, that, those.</td>
</tr>
<tr>
<td>Demonstrative adverbs:</td>
<td>Here, there, then.</td>
</tr>
<tr>
<td>Comparative Adjectives:</td>
<td>Same, identical, equal, other, different, more, better, etc.</td>
</tr>
<tr>
<td>Comparative Adverbs:</td>
<td>Similarly, differently, more, less, etc.</td>
</tr>
<tr>
<td>Nominal substitution:</td>
<td>A. Can you give me a glass? B. There is a [ ] on the table.</td>
</tr>
<tr>
<td>Verbal substitution:</td>
<td>Every child likes chocolate and I think my son does too.</td>
</tr>
<tr>
<td>Clausal substitution:</td>
<td>Latecomers will not be allowed in school after 08.00 a.m. the headmaster says so.</td>
</tr>
<tr>
<td>Nominal ellipsis:</td>
<td>These are my two dogs. I used to have four.</td>
</tr>
<tr>
<td>Verbal ellipsis:</td>
<td>Teacher: Have you done the homework? John: Yes, I have.</td>
</tr>
<tr>
<td>Clausal ellipsis:</td>
<td>Mary: Are you going to buy a new dress for my birthday? Mother: Yes.</td>
</tr>
<tr>
<td>Conjunctive cohesion:</td>
<td>Hence, so, after, and, but, then, etc. e.g. He took a cup of coffee after he woke up.</td>
</tr>
<tr>
<td>Lexical cohesion:</td>
<td>1. Repetition of a word or phrase; 2. Synonymy (e.g., commonly, popularly); 3. Antonymy (e.g., high, low); 4. Hyponymy (e.g., cigarettes / cigs); 5. Collocation (e.g., education, classroom, class, and so on).</td>
</tr>
</tbody>
</table>

Figure 1 Halliday and Hasan’s (1976) cohesion taxonomy

The following section (3.4.3.2) includes a review of the studies conducted outside Arab countries to compare the research regarding cohesive problems facing students and the relevance of these problems in the Kuwaiti context. Subsequently, Section 3.4.3.3 includes a discussion of cohesion in Arab countries.
3.4.3.2 Studies Conducted on Cohesion outside the Arab Countries

Many studies on ESL writing include a component on cohesion, as it is closely related to essay writing. Connor (1984) examined cohesion in ESL students’ writing by analysing argumentative essays of Japanese and Spanish ESL students and native speakers. Connor revealed ESL essays can be cohesive without being coherent. The ESL students seemed to have knowledge of cohesion but lacked aspects of coherent writing. Connor compared ESL writers’ essays with native speakers’ essays and discovered native speakers displayed a better vocabulary range; thus, ESL writers seemed deficient in this area because their essays exhibited less lexical variety and more conceptual redundancy. Connor concluded the use of cohesion may be developmental in ESL students’ writing; students may gradually develop to the native speaker’s level of cohesion as English language proficiency increases.

Zamel (1984) defined conjuncts as “those connectives more specifically referred to in grammars as coordinating conjunctions, subordinating conjunctions and conjunctive adverbs or transitions” (p. 110). Zamel argued meaning is unclear when these conjuncts are absent or when their use is semantically or syntactically inappropriate. Cohesion errors are the apparent result of the teaching tendency pointed out by Zamel. The researcher suggested transition markers, which are the words that signal relationships between units, can have more than one function in English: some linking devices in a list do serve similar semantic functions, but carry different grammatical weight. For example, a word like since can be used as a transition marker to signal both time and cause.

Neuner (1987) analysed 20 good essays and 20 poor essays written by first-year college students. The researcher selected samples for the study at random from a collection of 600 essays rated using a 4-point scale. The results revealed that the frequency or percentage of cohesive ties did not distinguish a good essay from a poor one and that the essays did not differ significantly in cohesive distance.

Geva (1992) investigated the influence of logical conjunctions on EFL Taiwanese university students’ comprehension. The researcher asked 100 international immigrant participants to perform several tasks, such as answering 30 multiple-choice questions on conjunction cohesion as well as discourse-level conjunction tasks and observation to check the participants’ ability to manage intersentential and intrasentential constraints within the sentence and across discourses. The analysis revealed the proficiency level of the participants affected the conjunction cohesion use, and L2 learners with a high proficiency level improved their ability to use and infer logical cohesion conjunction. The results of the study suggested the ability to realize the nature of logical relationships within a local context is necessary and
the conscious use of conjunctions can help students create logical connections in extended texts. Geva tried to discover the relationship between L2 proficiency level and the degree of using conjunction comprehension.

Hinkel’s (2001) study on academic texts of advanced students of English language showed that non-native students with a high proficiency of English still rely on a restricted repertoire of features in composing a unified text. The researcher analysed argumentative essays of English, Japanese, Korean, Indonesian, and Arabic students and concluded that regardless of their native language, the conjunctions and demonstrative pronouns were used more frequently in EFL writing than in the essays of the native speakers. The findings of this study revealed non-native speakers excessively relied on conjunctions by overusing and misusing such CDs, suggesting at advanced levels of English, learners still lack the skills to use connecting links effectively. The findings of this study confirm the use of demonstrative pronouns in some cases made the text confusing.

Liu and Braine (2005) pointed out that cohesion and coherence are both crucial textual elements and are features of good writing. The researchers stated some empirical studies indicated cohesion was of value in any type of writing and both L1 and L2 learners of English encountered difficulties in using CDs in their writing. Lie and Braine investigated EFL Chinese students and their argumentative writing. The main objective of the study was to determine how CDs are used in this type of writing and whether they are used appropriately. Liu and Braine’s findings show EFL learners have difficulty with cohesion in argumentative essay writing. These students were aware of various CDs in their writing but faced trouble applying them in their writing. Liu and Braine concluded an important relation exists between the number of CDs used and the quality of the argumentative writing by the Chinese undergraduates.

Liu and Braine analysed cohesive features in the argumentative writing of Chinese undergraduates, underscoring the role played by these features in producing a coherent text. The researchers chose 50 students randomly out of the 96 students enrolled in the basic writing course at the University of Tsinghua in Beijing as the population of their study. The students were randomly put in classes taught by one of the authors, which emphasized the first-hand information and observation that would be available to the author. Each student produced roughly 13 pieces of writing after the 16-week course on cohesion and other writing strategies. Applying Halliday and Hasan’s (1976) theory of cohesion, the two authors attempted a statistical analysis of the CDs used by the students. Liu and Braine concluded the students had apparent knowledge of CDs as shown by the variety of cohesive features they
Another finding was that the students had problems with the use of reference and lexical cohesion, leading to the conclusion that this area needs improvement and more focused instruction in the writing classes of Chinese undergraduates with non-English majors. In the pedagogical implications, the researchers suggested it is “the writing teachers’ responsibility to first comprehend and then explain the marking and assessing criteria in the class, and thereby enhance students' awareness of what contributes to the quality of writing” (Liu and Braine, 2005, p. 634). Liu and Braine suggested, “focused activities should be developed in combination with explicit instruction” (Liu and Braine, 2005, p. 634). The researchers also referred to the importance of the reading element in the writing class: “reading should be integrated in the teaching of writing” (Liu and Braine, 2005, p. 634). The researchers believed the more the students read in the writing class, the more they become sensitive and aware of the components and features of good English writing.

In another recent study, Sadighi and Heydari (2012) investigated the most frequent cohesive errors committed by Iranian undergraduate EFL learners at various levels of proficiency as well as the sources of cohesive errors. An overall number of 67 undergraduate students at Shiraz Azad University participated in this study. To classify three groups of learners with different proficiency levels, the researchers administered the Oxford Placement Test 1B1. The participants were given a writing task requiring them to write an approximately 200-word narrative composition. Then, the researchers scored the compositions based on the taxonomy developed by Halliday and Hasan (1976). Finally, the data were analysed using quantitative methods. Regarding the frequencies and percentages of errors, researchers found that low-level learners’ most frequent errors involved references, followed by errors in lexical and conjunctive cohesion. For mid-level learners, the findings showed errors in references were the most common, followed by errors in lexical, and conjunction cohesion. The high-level learners’ most frequent errors involved lexical cohesion, references, conjunction cohesion, and substitution. Accordingly, Sadighi and Heydari (2012) found errors in the use of relative pronouns, conjunctions, and different forms of repetition appeared because of the incomplete knowledge of the learners’ intralingual causes. Furthermore, the errors in the use of personal and possessive pronouns, demonstratives, and collocations were among the interlingual causes of errors.

Regarding English writing and whether it affects the students’ use of CDs, Ghasemi (2013) conducted a study to investigate the “CDs used in different genres composed by learners from around the globe and the relationship between the use of CDs and the quality of their essays” (p. 1615). The researcher reviewed many other studies related to cohesion and
its outstanding role in writing quality. Ghasemi claimed cohesion has a positive effect on the quality of writing. Ghasemi also stated writers who use CDs correctly develop a coherent text and thus get higher scores. However, this view is not wholly correct because students may use a lot of CDs in their writing but end up with an incoherent text; it is a matter of quality not quantity. This is exactly what the current study tried to prove by answering RQ3, which is related to the characteristics of the texts produced by Kuwaiti college students in terms of cohesion and quality.

In their study, Hung and Thu (2014) investigated the use of CDs in the writings of 50 undergraduate Vietnamese students (38 females and 12 males). Researchers used questionnaires and essay writing to evaluate students’ attention to the use of CDs, and to explore the CD types and how frequently they were used to achieve textual cohesion in an assigned essay. These students studied English for almost 10 years at school and three years at the university; therefore, their assumed level of proficiency was upper-intermediate, which is adequate to write a full cohesive and coherent essay. The findings of this study showed no high attention to the use of CDs. In addition, the analysis of the study revealed the use of CDs varied in students’ writing, as lexical cohesion was used more frequently than reference and conjunction cohesion. The aim of Hung and Thu’s study was similar to the aim of the current study regarding the characteristics of the texts produced by Kuwaiti college students in terms of cohesion and quality as it appears in RQ3.

The reviewed studies highlight cohesion as a fundamental problem for EFL students worldwide; Arab students are not an exception. Many researchers in Arab countries paid attention to the aspects of cohesion problems in students’ English writing processes. However, to the best of this researcher’s knowledge, no single Kuwaiti study pertained to cohesion in students’ English writing. Hence, through the current study, the researcher explored the approach to EFL writing from the Kuwaiti college students’ perspective and the quality of their writing in terms of generating a cohesive text and the problems faced in this area. Cohesion in Arabic EFL is discussed in the following section.

3.4.3.3 Studies Conducted on Cohesion in Arab Countries

This section includes studies in which researchers examined the use of CDs among Arabic students. Many researchers have used CDs, and specifically Halliday and Hasan’s (1976) model, to indicate weaknesses in Arabic students’ EFL writing. For example, using Halliday and Hasan’s (1976) model in the study of cohesion and coherence in Arab EFL students’ college writing, Khalil (1989) investigated the relationship between cohesion and coherence. The findings reveal lexical cohesion was the predominant linking device used in
the expository essay writing of Arab EFL college students. The findings of this study showed EFL students overused lexical cohesive ties, especially the repetition of the same words, and underused other linking devices. The researcher found a weak correlation between the number of cohesive ties and the coherence scores of the text. The results indicated that Arab EFL students writing expository texts faced difficulties in using a wide range of CDs. Qaddumi (1995) similarly investigated the sources and solutions to the problem of textual incoherence and lack of cohesion in the writings of a group of Arab students at the University of Bahrain in both Arabic and English. The researcher reviewed 460 composition papers and 30 texts in both languages to discover interference at the linguistic, cultural, and rhetorical levels. The analysis of texts revealed repetition, parallelism, sentence length, lack of variation, and misuse of certain CDs were major sources of incoherence and textual deviation in students’ writing. Qaddumi cited linguistic, cultural, and the rhetorical background of Arabic as variables affecting students’ performance in writing in both Arabic and English.

Similarly, in the study related to the organizational problems that Egyptian student teachers of English encountered when they write an English essay, Ahmed (2010) investigated students’ cohesion and coherence problems in EFL essay writing. The researcher used a mixed method research design, including a questionnaire and a semistructured interview. The findings revealed students encountered some problems in the cohesion and coherence of EFL essay writing. Similar to Qaddumi (1995), the researcher claimed Arabic affects the cohesion of Egyptian students’ writing. The findings were represented in literal translations and use of formulaic expressions in the students’ writing. In addition, writing run-on sentences and repetition were another two features of the Egyptian students’ poor writing style. The findings of this study highlight Egyptian students’ low proficiency in English as an influential factor contributing to their writing problems (Qaddumi, 1995).

In another study, Shakir (1991) similarly investigated the weaknesses that affect coherence and cohesion in students’ writing, yet unlike Ahmed (2010), Khalil (1989), and Qaddumi (1995), the primary focus for Shakir was on a global cohesive level. The researcher examined texts written by first-year EFL students at Yarmouk University after the texts were rated by teachers. In the study, Shakir considered coherence and cohesion in students’ written texts essential aspects to text coherence, as well as insights from text linguistic theories into coherent text. The findings revealed major weaknesses in the students’ presentation, their inability to stay with initial ideas and general statements, lack of depth of substantiation, and deviation from the intended rhetorical functions of the writing task. Qaddumi (1995) also
suggested there should be more concentration on the preservation of topic unity in teaching EFL writing to Arabic-speaking students.

The continued weaknesses regarding use of CDs seem to persist despite EFL instruction, according to Abdul Rahman’s (2013) findings comparing students across years. Abdul Rahman investigated the understanding of the use of CDs among Omani student teachers of English and native speakers. Abdul Rahman adopted the cohesion framework of Halliday and Hasan (1976) and used a qualitative research method to analyse the data collected from the writing produced by the two groups. The researcher asked the participants to write an essay of about 300 words regarding one topic, i.e., “A Day to Remember.” Although the results of the study showed significant variance between the two groups, the researcher claimed the participants’ English proficiency level did not show significant improvements (Abdul Rahman, 2013). The findings of the study revealed no differences existed between the first- and third-year students in their use of CDs. The researcher found the most improvement in the reference cohesive device. In addition, the study showed several problems related to the overuse of the CDs, the lack of balancing through the intensive use of some CDs more than others, and the improper use of cohesion. The researcher provided several recommendations to improve the recognition and the use of CDs, similar to the suggestions and recommendation of this study.

To address the issue with a lack of CD development as indicated in Abdul Rahman’s (2013) findings, Al Sharoufi (2014) attempted to create a new framework for teaching academic writing. The researcher applied the new concept of lexical cohesive trio that combines reference (anaphoric, cataphoric), lexical repetition, and lexical phrases, to 30 junior and senior university students in Kuwait, through writing a preframework and postframework essay. The SPSS data analysis showed a significant improvement in and abundance of transitional signals (lexical repetition, bundles, and phrases) because of using the framework. These results indicated using this new framework enhanced students' ability to write coherent essays. In other words, using the lexical cohesive trio increased textual and lexical cohesion at all three levels: transitionally, lexically, and rhetorically. Few researchers investigated cohesive problems because cohesive errors have been either neglected or examined incompletely in previous cohesion-related studies.

As the research reviewed in this section indicted, there seem to be some specific cohesive differences affecting Arabic EFL students. Namely, differences included cohesive issues that were global (Qaddumi, 1995; Shakir, 1991) and local (Ahmed, 2010; Qaddumi, 1995). These cohesive issues seemed to persist despite instruction (Abdul Rahman, 2013),
potentially because of interference between Arabic and English. The next section further discusses the influences of L1 on L2 writing and why they may persist, as demonstrated in this section.

3.4.4 L1 Influences on L2 Writing

Researchers have long focused on the influence of L1 on a language learners’ ability to acquire L2, specifically, the interactions between L1 and L2 because of similarities and differences (Farthing, 2015; Myles, 2002). The structural, or sociocultural, aspects influencing the probability of L2 transfer include language gap and markedness, and non-structural influencing the probability of transfer include observed linguistic gap, the learner’s expertise in L1, and cognitive development (August & Shanahan, 2006). Using this concept, Al-Sobhi et al. (2017) claim that learners’ errors result from their lack of language knowledge and awareness rather than poor performance. Conversely, Cummins’ (1979) interdependence model posits that when children, aged 3-12, develop literacy skills in a specific language, they not only learn how to read in that particular language, but they also develop a common underlying proficiency which enables them to transfer literacy skills as well as learning strategies to other languages. This, therefore, implies that L1 and L2 languages could interact, especially where the languages have different scripts, and produce different results. This linguistic interdependence also influences how learners experience the difference in form and structure as well as the conventions and level of academic formality (Farthing, 2015). Farthing (2015), Thompson-Panos and Thomas-Ruzic (1983) state that understanding the interactions L1 and L2 languages can provide increased understanding for language learners as well as for their language instructors.

In the vein of Cummins’ (1979) hypothesis, many authors have insinuated that there exist certain interaction factors that prevent or limit the successful transfer of literacy skills from an L1 to an L2. For example, Miller and Barry (2004) promote the concept of linguistic distance as a method of understanding the extent to which interaction will affect language learning. Miller and Barry argue that the extent of differences between linguistic factors, such as vocabulary, grammar, syntax, and written form, will interfere with a language learner’s ability to pick up a new language. Bacha (2017) and Myles (2002) further indicate that writing in L2, particularly, requires a learner’s thorough and comprehensive understanding of both L1 and L2, and interlanguage can influence a writer’s ability to produce coherent texts in L2.

There are also particular issues with acquiring English as an L2, especially in relation to written English. For example, English spelling has always been described as a difficult task
for learners whose first language is not English (Al-Sobhi et al., 2017), resulting in misspelled words and incoherent sentences (Hyland, 2003). In addition, according to Farthing (2015), many English language students suffer with understanding the formalities of written English, which is related to the difference of their own first language writing conventions to those in English.

Therefore, the relations between L1 and L2, including similarities and differences, are important to consider when examining EFL literacy, and writing in particular. There are particularities of English that a learner must account for, and the linguistic difference between L1 and L2 may also introduce issues. The next section discusses the specific influence of Arabic as the L1 on EFL to lay the groundwork for the present study.

### 3.4.4.1 L1 Arabic Influence on L2 English

For those whose L1 is Arabic, there may be particular difficulty in learning European languages because of linguistic distance (Connor, 2002; Thompson-Panos & Thomas-Ruzic, 1983). According to Connor, children whose L1 language is Arabic are not necessarily able to transfer such skills to learning European languages, like English. His major explanation was the fact that orality remains a huge challenge between Arabic and Western languages. Adas and Bakir (2013) opine that when children translate Arabic into English, they may use unfamiliar words that could result in misunderstanding and confusion. Combining both Adas and Bakir’s and Connor’s discussion, Thompson-Panos and Thomas-Ruzic (1983) state that Arabic and English differ in both structure and syntax.

The interaction of two languages also extends to writing. Abbas et al. (2016) indicate that there are often challenges for children to transfer the literacy skills learned from their first languages to their second language. Partially, Arabic students’ difficulty with learning European languages may stem from the differences in script. Dewaele and Nakano (2012) and Murad and Khalil (2015) agree that Arabic plays a significant role in influencing, impacting, or challenging other languages with distinct orthographic features such as Japanese, English, and Chinese. Thompson-Panos and Thomas-Ruzic (1983), as well as Murad and Khalil, opine that some of the challenges faced by native Arabic speakers learning English or other languages such as Japanese and Chinese are associated with the writing system, spelling, and vocabulary. For this reason, one potential area where Arabic EFL learners may experience issues is spelling (Alhaisoni, Al-Zuoud & Gaudel, 2015; Al-Jabri, 2006; Al-Zuod & Kablan, 2013). Al-Sobhi et al. (2017) state that the Arabic writing system, compared with English, is considered regular with consistency between sounds and letters. The lack of one-to-one correspondence between English phonemes and graphemes makes its writing system
irregular, which creates difficulty to Arab learners to spell out English words accurately (Al-Sobhi et al., 2017). Key issues observed in a study on 122 Arabic-speaking EFL university students’ writing samples from an intensive English language program were errors of omission and misspellings that stemmed from L1 interference and anomalies in the L2 (Alhaisoni et al., 2015). Beginner learners often associated a wide range of vowel and consonant combinations in an attempt to spell words accurately, and sometimes even combine two distinct lexical items by overlapping vowels when they are uncertain about accurate spellings (Alhaisoni et al., 2015). Errors of substitution and omission are the most frequent types of spelling errors indicated in previous research on Arabic EFL learners (e.g., Al-Jabri, 2006; Al-Sobhi et al., 2017; Al_zuoud & Kabilan, 2013). Despite the common experience of spelling issues among Arabic EFL learners and the importance of spelling to the clarity of writing, spelling is rarely a focus of EFL instruction (Alhaisoni et al., 2015; Al-Sobhi et al., 2017).

Grammatical differences may also influence L1 Arabic students’ EFL learning. Results from a study aimed at evaluating the influence of Arabic language rhetoric and cultural background on the use of cohesive grammatical devices in Iraqi EFL tertiary students’ argumentative essays show that Arabic has a strong influence on the participant’s use of grammatical cohesion (Abbas et al. 2016). It was particularly found that the participants of this study overused personal pronouns, demonstratives, additive conjunctions, and causal conjunctions. Adas and Bakir (2013) discuss that Arabic English learners often have limited vocabulary, different sentence construction patterns, and use the present tense exclusively because of the lack of other tenses in Arabic. Furthermore, Arabic is known to have limitations in the use of commas and periods compared to English; thus, English language learners with Arabic background struggle with punctuation in their writing (Adas & Bakir 2013). Similar to Adas and Bakir (2013), Farthing (2015) investigated the impact of L1 interference on the English composition writing of 40 second year Kurdish university students in Erbil, who were assessed using an academic writing module and a text-based error assessment on written tasks and exams to identify reoccurring problems with written composition and to analyze to what extent such errors could be attributed to the students’ first language. The findings revealed that errors directly correlated to L1 transfer include word order, punctuation and verb forms. Such challenges make it difficult for Arabic speakers to transfer their literacy skills to European languages easily (Murad & Khall, 2015), as grammatical and stylistic issues may limit a language learner’s ability to express ideas clearly (Farthing, 2015).
Arabic as an L1 may also influence more global concerns, such as organization and content development, and the attitude toward language learning. For instance, according to Murad and Khalil (2015), the major challenges faced by Arab speakers learning English were in content and organization in addition vocabulary as well as language usage. Dewaele and Nakano (2012) suggest that the first language has a way of influencing people’s perceptions, which may result in differences in what is privileged as “good writing,” and may also affect their attitude towards learning a second language. For example, many people consider their first languages to be real and natural whereas the second language is often presumed as fake (Dewaele & Nakano, 2012). This perception, however, acts as a challenge as it sometimes discourages them from learning the second language effectively. For example, a challenge for L1 Arabic students is to express their ideas clearly in the common English genre of the essay (Bacha, 2017). Bacha’s (2017) analysis of first year university L1 Arabic students’ essays shows conflicting L1 rhetorical patterns in the written essays that led to a lack of clarity in the essays. However, questionnaire findings revealed that students do not view any significant interference from L1 nor any significant problems in writing the academic essays that are contradictory to the essay scores and content analysis results. A lack of understanding of the different expectations of English writing compared to Arabic writing may therefore limit EFL learners’ literacy. In addition, researchers have also suggested that Arabic writers may have distinctive English writing strategies, such as an emphasis on planning in one’s head rather than on paper (see Section 3.7.2). Therefore, the cognitive process of writing for Kuwaiti learners of English is not only a reformulation of knowledge, but also a structural task in reformatting their writing (Farthing, 2015). The next section begins the discussion of writing strategies in L2 to lay foundation for the discussion of Kuwaiti EFL students’ writing strategies.

### 3.5 L2 Writing Strategies

This section includes a discussion of L2 writing strategies, specifically, an overview of writing strategies (see Section 3.5.1), the strategy classifications (see Section 3.5.2), and the specific writing strategies used in the present study (see Section 3.5.3). According to Rao (2007), EFL writing is an important skill in L2 learning in two respects: (a) motivating thinking, organizing, analysing, summarizing, and criticizing skills among students; and (b) enhancing students’ ability to think and reflect in the English language. In conjunction with reading comprehension, writing skills are a predictor of academic success and a basic requirement for participation in civic life in the global economy (Graham & Perin, 2007).
August and Shanahan (2006) determine through their review of literature that writing skills, particularly knowledge of the writing process, in L1 seemed to transfer to L2 writing.

According to Petric and Czárl (2003), L2 writing is a difficult area for L2 learners and therefore has become a dominant topic for L2 researchers. Writing an acceptable academic text in English is often the most challenging task that international students face (Taher, 1990). For this reason, foreign language writing instruction began with the focus on the written product and textual features. Writing teachers were mostly interested in teaching grammar rather than any other skill. Reid (1993b) claimed in the 1980s, ESL writing instruction took a new dimension as a cognitive communicative skill. Generally, these researchers used the term writing to refer to three dimensions: textual features, composing processes, and sociocultural construction (Cumming, 1998). This threefold dimension of writing represents the focus of current L2 and EFL research (Alnufaie, 2014), and is consistent with the sociocognitive framework used in this study.

In the context of the current study, writing is significant to the education of Kuwaiti college students learning English because it facilitates students’ acquisition of the basic skills needed to understand what they study and express themselves through writing. The researcher of the current study attempted to understand the approaches and attitudes of Kuwaiti undergraduate students regarding the writing process. The researcher measured the students’ type of the frequently used EFL writing strategies in terms of cohesion and quality. The researcher provided recommendations to Kuwaiti teachers to adopt a diverse view of the EFL writing instruction in their teaching approaches. The results established an understanding of current writing behaviours and strategies and how to encourage effective writing for EFL students. The next section includes a review of the literature related to writing strategies in the context of the current study.

3.5.1 Writing Strategies

Researchers interest in writers’ solutions to their learning problems, or writing strategies, have long existed in pedagogy (McDonough, 1995). This interest was promoted by the behaviourist notion of the learner as the locus of a stimulated response and the earlier discussion of strategies regarding classical writing categories, such as grammar, phonology, and semantics. Researchers began focusing on microstructures of the learners’ reactions to new languages and research extended to answer how learners found solutions to processing problems, anticipated or actual communicative problems, the learner’s need to fill the gaps in his or her knowledge, or skills needed in learning language and performing its tasks. Researchers suggest that knowing the learning strategies can be useful in understanding
language acquisition and individual differences in the rate and rote of learning (McDonough, 1995).

Several definitions of learning strategy exist. A learning strategy is defined as a conscious or semiconscious behaviour directed towards achieving a goal, is transferable to other tasks, and is at the lowest level of articulation (Macaro, 2006). Learning strategies are also defined by Oxford (1990) as “steps taken by the learner to facilitate the acquisition, retrieval, or use of information” (p. 14). McDonough’s (1995) research indicated that the term strategy has at least four meanings: (a) an articulated plan for meeting types of problems, not a piece of problem-solving in itself; (b) ploys that appear to be used when alternative methods entail penalties of cognitive overload, memory or knowledge; (c) compensation; and (d) plans for action (pp. 4–5). Regarding L2 learning, Cohen (1998) defined learning strategies as “the conscious thoughts and behaviours used by learners with the explicit goal of improving their knowledge and understanding of a target language” (p. 68).

Researchers noted learning strategies include a sociocognitive element because they involve cognitive, metacognitive, and social strategies. Cohen (1998) stated against a purely sociocultural view: “if the behaviour is so unconscious that the learners are not able to identify any strategies associated with it, then the behaviour would simply be referred to as a process, not a strategy” (p. 11). Holden (2004) defined cognitive strategies as strategies for handling the input or material or implementing a definite skill to a special task in two significant processes of bottom-up and top-down. In addition, O’Malley and Chamot (1990) defined cognitive strategies as strategies that reflect mental manipulation of tasks, such as practicing and analysing, which enable learners to understand and produce new language by many different ways that enhance learning.

It seems clear from the previous definitions that strategies include overlapping cognitive, metacognitive, social elements (Macaro, 2006). In addition, Oxford and Schramm (2007) provide two definitions of learner strategies based on psychological and sociocultural perspectives. The first defines a learner strategy as “a specific plan, action, behaviour, step, or technique that individual learners use, with some degree of consciousness, to improve their progress in developing skills in a second language” (Oxford & Schramm, 2007, pp. 47–48). The second defines a learner strategy as “a learner’s socially mediated plan or action to meet a goal, which is related directly or indirectly to L2 learning” (Oxford & Schramm, 2007, pp. 47–48).

Researchers have discussed writing strategies in L2 writing research studies. Researchers use terms that are interchangeable with the word strategies, including writing
techniques and procedures (Khaldieh, 2000), writing behaviours (Manchon et al., 2007; Zamel, 1983), and writing process strategies (Sasaki, 2004; Zamel, 1983). Sasaki (2004) defined writing strategies as “a writer’s mental behaviour employed to achieve a goal in the ill structured problem-solving […] activity of writing” (p. 541). Similarly, Wong (2005) adopted Flower and Hayes’ (1980) characterization of composing strategies as “decisions taken to cope with the problems (both linguistic and rhetorical) posed by writing task as perceived by the writer” (p. 31). However, the analytical categories established to analyse the participants’ problem-solving behaviour distinguish between problem-solving behaviour and problem-solving mechanism. Congjun Mu (2007) also defined writing strategies as methods the writer consciously uses to generate ideas, plan, draft, organize, revise, and reduce anxiety during the writing process.

On the other hand, Manchon et al. (2007) distinguished between broad and narrow conceptualizations of writing strategies. The broad conceptualization has two definitions based on two perspectives: (a) learner-internal, and (b) sociocognitive. The learner-internal perspective defines writing strategies as actions used to create a text. The sociocognitive perspective views writing strategies as actions conducted in response to the writing situation and discourse community experienced by an L2 writer. In contrast, the narrow conceptualization is a purely cognitive perspective informed by cognitive theories of L1 writing and the problem-solving paradigm in cognitive psychology, which defines writing strategies as “control mechanisms used to regulate cognitive activity [or] heuristics used when L2 writer engages in problem-solving activity” (Manchon et al., 2007, p. 235). Therefore, the sociocognitive approach, as used in the current study, combines both the cognitive approach of internal control mechanisms with sociocultural factors imposed by the writing community and context.

The definition of writing strategies used in the current study is from Cohen (1998)-actions or behaviours consciously carried out by writers to make their writing more efficient-in combination with the sociocognitive perspective stated by Manchon et al. (2007). Strategies are tools available for the writer to use during the actual writing time. These tools are selected consciously when the writer encounters a problem in communicating his or her thoughts. These choices are made in response to contextual and social factors experienced by the EFL writer in the individual’s discourse community.

In conclusion, the previous definitions indicate strategies are specific behaviours or techniques students use, often consciously, to improve language skills. Investigating the writing strategies that L2 writers use can provide insight into what writers think, thus
increasing the researcher’s understanding of the specifics of this process (Silva, 1993). Such investigation can also help develop a predictive model for the constructs of writing that can be useful for instructional, research, and educational practices and for curricular planning assessment (Grabe, 2001). In the next section, the researcher will discuss different classifications of EFL writing in detail, shedding light on the most effective writing strategies in L2 writing.

### 3.5.2 Strategy Classifications and Taxonomies

There are several categories for understanding writing strategies: strategies for learning an L2; for learning a language; for performing a language; for using a language; for communicating in the language; for compensating for the lack of linguistic knowledge; for using language in areas, such as reading, writing, talking and listening; and for coping with difficult language use situations, such as classroom instruction or examinations. Later researchers emphasized the distinction between learner and learning strategies (Cohen, 1998).

The conceptualization of writing strategies for L2 entailed a broad taxonomy of writing strategies at different levels of generality (Manchon et al., 2007). In the learner-internal perspective, the broad taxonomic list was based on identifying the macrowriting strategies, such as planning, writing, and revision. Leki (1995) provided an example of a broad taxonomy in writing strategies. Leki identified several writing strategies under 9 headings: clarifying, focusing, relying on past writing experience, taking advantage of L1/culture, using current experience or feedback, looking for models, using current or past ESL writing training, accommodating teacher’s demands, and managing competing demands. The narrow conceptualization of writing strategies, on the other hand, entails the problem-solving strategies students use while composing, such as “writing down the English word in question and circling it, leaving a blank space for a word or a phrase, or using their own native language” (Zamel, 1983, p. 175), L1 use (Cumming, 1989; Friedlander, 1990; Wang & Wen, 2002), rehearsing (Raimes, 1987), focusing on content (Sasaki & Hirose, 1996), and evaluating (Whalen, 1993).

One of the most borrowed writing strategy taxonomies was stated by Perl (1979), where the researcher distinguishes the following strategies:

- General planning (organizing one’s thoughts for writing, discussing how one will proceed)
- Local planning (talking out what ideas will come next)
- Global planning (discussing changes in drafts)
- Commenting (sighing, making a comment or judgement about the topic)
- Interpretation (rehearsing the topic to get a “handle” on it)
- Assessing (making positive or negative judgement about one’s writing)
- Questioning (asking a question)
- Talking leading to writing (voicing ideas on the topic; tentatively finding one’s way)
- Talking and writing at the same time (composing aloud in such a way that what one is saying is being written at the same time)
- Repeating (repeating written and unwritten phrases several times)
- Reading related to the topic (reading the directions, reading the questions, reading the statement)
- Reading related to one’s own written products (reading one sentence or few words, reading several sentences together, reading the entire draft through)
- Writing silently
- Writing aloud
- Periods of silence
- Editing (this includes adding syntactic markers, words, phrases or clauses, indicating concern for grammatical rule, adding, deleting, the use of punctuation, changing spelling, changing the sentence structure through embedding, coordination, or subordination, indicating concern for appropriate vocabulary or word choice, changing verb form)

Some limitations exist regarding Perl’s (1979) coding scheme on various grounds. First, it includes strategic and nonstrategic behaviours, such as planning and silence. Furthermore, regarding the strategies talking leading to writing and talking and writing at the same time, one could argue that because strategies are regarded as tools used to facilitate language learning and production, writing, whether aloud or silently, cannot be regarded as a strategy. Finally, the absence of a revising strategy that indicates changes made at the level of content and meaning is another weakness of Perl’s taxonomy.

In extension of Perl (1979), who focused on identifying behaviours, O’Malley and Chamot (1990) attempted to create categories under which these behaviours could be classified and produced another well-known strategy classification. The researchers categorized strategies as either cognitive, metacognitive, or social affective strategies. Cognitive strategies refer to the strategies the learner applies directly to the task being performed, including memorizing, taking notes, grouping, repeating, and resourcing. Metacognitive strategies include strategies learners use to regulate their learning processes,
such as planning, direct attention, selective attention, self-management, self-monitoring, problem identification, and self-evaluation. Finally, social affective strategies help learners regulate their emotions, motivations, attitudes, and strategies for reducing anxiety and for self-encouragement.

Similar to O’Malley and Chamot (1990), Oxford (1990) also developed a strategy categorization, which was highly influential. The Strategy Inventory for Language Learning (SILL) had three classes of direct strategies: memory, cognitive, and compensation strategies. The SILL also had another three classes for indirect strategies: metacognitive, affective, and social (Oxford, 1990). The two SILL categories for learning strategies were criticized for being too general, based on the criteria used for dividing and labelling the strategies. Teachers needed more specific taxonomies for strategies used in each of the four language skills (McDonough, 1999).

To address the critique of the broadness of SILL learning strategies, Manchon et al. (2007) developed a broad taxonomic list that adopted the classification system of the Oxford (1990) model and distinguished metacognitive, cognitive, compensatory, social, and affective writing strategies. In this sociocognitive model, the researcher identified writing strategies, including (a) clarifying and focusing strategies (those used to conceptualize and fulfil writing tasks); (b) relying on past writing experience, such as using past ESL training, taking advantage of L1 and culture (making use of previous knowledge and experience); (c) using current experience or feedback, looking for models, using current ESL writing training (strategies that make the most of social context); (d) taking a stance towards teachers’ demands (either accommodating or resisting them); and (e) finding ways of managing and regulating the demands (in terms of time and effort required) of their courses and assignments (Manchon et al., 2007).

As evidenced, no clear definition of strategy exists that researchers rely on when working in this field. However, researchers argue that this seems to be the nature of classifying learning strategies in general. For example, planning in Oxford’s (1990) strategic self-regulation model of L2 learning was classified as a metacognitive strategy, although when planning is used to refer to achieving one’s knowledge about the topic, it can be a cognitive strategy. Therefore, even this cognitive-metacognitive dichotomy of strategies is controversial. In the current study, the conceptualized strategies are discussed in Section 3.5.3.

The previous section indicates that writing strategies can be interchangeably classified as either process or product. Therefore, an urgent need exists for critical reassessment of
existing research on strategies; there is also a need to build a strong theory about strategies so that research can be conducted within its framework. As previously mentioned, the sociocognitive conception of writing studies is ecological, meaning it considers both sociocultural and cognitive strategies of L2 writing. This approach was used in the current study to gain a broad understanding of different writing strategies employed by Kuwaiti EFL students. The following subsection further defines the specific writing strategies examined in the present study.

3.5.3 Strategies Examined in the Current Study

From the review of the previous studies on ESL and EFL writing strategies in 3.5.1 and 3.5.2, it is evident that different researchers have used different classification criteria to classify writing strategies. After reviewing the existing literature, this researcher used seven writing strategies in the coding schema of the current study: planning, reading, revising, evaluating, editing, re-reading, and use of L1.

Planning is an important strategy throughout the writing process (Victori, 1995). Some researchers, such as Victori (1995) and Sasaki (2000), subdivided planning into substrategies, including planning overall content/idea or global planning, thematic planning, local planning, and mechanical planning. Conversely, Arndt (1987) separated planning and global planning (outlining), making them individual strategies.

Perl (1980) proposed reading and evaluation strategies, whereas Raimes (1987) and Sasaki (2000) proposed evaluating strategies. Reading refers to instances of reading different parts of the text, such as words, sentences, paragraphs as well as the whole text. Evaluating refers to the verbal judgment, positive or negative, targeting different parts of the written text. Both Perl and Raimes used the term assessment strategy instead of the term evaluating. In addition, Sasaki (2000) and Arndt (1987) proposed re-reading strategies. Re-reading refers to instances of reading parts of the already written text more than two times.

Furthermore, researchers used revising and editing interchangeably, such as Flower and Hayes (1981) who defined revising as “a thinking process that can occur at any time a writer chooses to evaluate or edit his text or plans” (p. 376). Riazi (1997) and Raimes (1987) used this classification. Some researchers tend to use the term revision to include all the changes that can occur during the writing process (Whalen, 1993). Wenden (1991) did not include revising strategies in the taxonomy.

Other researchers, such as Arndt (1987) and Perl (1980), distinguished revising from editing. Revising is as the changes made to the written text on the content level to clarify meaning. These changes include addition, deletion, and word choice. Editing is defined as the
changes made to the written text on the surface level to correct the syntax or spelling without affecting the intended meaning. The researcher of this study adopted Raimes’ (1987) subclassification of these two strategies. According to Raimes, revising accounts for changes made to the produced texts to clarify meaning. These changes include changes in content or on the structural level, such as addition, deletion, and word choice. Editing accounts for changes made to the produced texts on the surface level to correct a specific piece of information or meaning.

Finally, Cumming (1989), Wenden (1991), Victori (1995), Riazi (1997), and Sasaki (2000) proposed the use of an L1 strategy in their taxonomy of ESL writing strategies. The use of L1 refers to instances of using Arabic while composing in English to retrieve words and expressions, generate and plan ideas, and using Arabic words to verify that their English words match the intended meaning. In the following sections, the researcher will highlight the major findings of prior research to investigate writing processes and strategies in L1, ESL, and EFL contexts. Accordingly, the analysis of the think-aloud protocols and semistructured interviews reveals the coding scheme of seven categories generated from theories related to EFL writing strategies that seem appropriate to the current study (Section 4.7.2.1).

3.6 Studies on ESL Writing Processes

Continuing the discussion of writing strategies, this section includes research that reflects on the writing processes of ESL students and their effectiveness. Section 3.6.1 covers ESL writing strategies. Section 3.6.2 covers information about the use of L1 in L2 writing among ESL writers.

3.6.1 ESL Writing Strategies

As previously discussed in Section 3.5, L1 theorists created a variety of complex taxonomies for sociocognitive writing strategies, which have also been applied in L2 research. Writing strategies are followed by L2 learners to minimize errors and mistakes in their writing. The aim of this study was to explore the writing problems facing Arab learners of English, particularly Kuwaiti students learning English as an L2. Many researchers have studied the various problems of Arab learners of English, but few have focused on the solutions for these problems. Researchers have not acknowledged the development of foreign language learners’ strategic competence as a method of solving writing problems.

Some researchers have focused on classifying and identifying writing processes among language learners. For example, Manchon et al. (2007) completed a synthesis of empirical research concerning lexical retrieval processes and strategies in L2 writing. The researchers highlighted the usage of L1-based and L2-based lexical retrieval strategies. This
synthesis focused on situating lexical retrieval processes in the L2 composing activity. Access to vocabulary is crucial while engaged in the various writing processes propounded in the best-known models of L1 or L2 composition. Manchon et al. assumed various processes were responsible for text construction. Planning, formulation, and revision were three basic strategies for any text construction. During planning, writers set goals and establish a plan to guide the production of a text that will meet their goals. During formulation, writers transform ideas into language. During revision, writers get a mental representation of their texts and attempt to solve the potential dissonance between their intentions and their linguistic expression. Raoofi et al. (2014) similarly analysed the writing strategies used by Malaysian University ESL students. Researchers collected data by conducting TAPs as well as interviewing 21 undergraduate students who were asked several questions about their writing skills and the strategies they used while writing. As in Manchon et al.’s study, the students reported they were aware of the prewriting stage; they used planning and outlining in their writings. The students also reported they were aware of their writing problems. The students indicated they used some metacognitive strategies such as planning, organizing ideas, monitoring, revising, and evaluating.

Manchon et al. (2007) further investigated the lexical retrieval processes during planning, formulation, and revision. First, lexical retrieval processes during planning can take two forms: “abstract planning” and “language planning.” Abstract planning leads to production of ideas, notes, and outlines that need to be expanded to produce a finished text. Language planning in text is a string of words, often a clause or two, later written down. Lexical retrieval processes during formulation need a certain degree of automatic control of their linguistic resources, which includes automatic lexical access. Manchon et al. stated revision is a writing process in which writers have a double goal. For one, they form a mental representation of the text they have produced and attempt to detect a problem in it. Second, Manchon et al. confirmed the importance of lexical retrieval processes in L2 composing. The researchers proved L2 writers tackle a variety of lexical problems where the solution requires the deployment of various lexical search strategies. The deployment of L1-based lexical search strategies is linked to the phenomenon of “strategic transfer” and refers to a problem-solving procedure intentionally used by L2 users to overcome problems in L2 learning and use. This finding of language planning being important to strong writing processes contradicted Zamel (1983), who found that weaker writers were more likely to focus on these issues, whereas stronger writers emphasized what Manchon et al. referred to as abstract planning.
Wenden (1991) investigated eight ESL students who were required to write a composition using a computer and to introspect as they wrote. The researcher studied how the students used metacognitive strategies in their writing and discussed the task knowledge they searched for before and throughout the writing process. According to Wenden, metacognitive strategies are mental operations or procedures that learners use to regulate learning. These include three main types: planning, evaluating, and monitoring, which are directly responsible for the execution of a writing task, whereas the cognitive strategies are mental operations or steps used by learners to learn new information and apply to specific learning tasks. Like Manchon et al. (2007) and Zamel (1983), Wenden attempted to create broader categorizations, unlike Sasaki (2000), who was more concerned with defining various writing strategies.

Although many of the previous researchers emphasised the consistency between L1 and L2 writing processes, some researchers argue L1 writing strategies are not similar to L2 writing strategies. Silva (1993) examined 72 studies of empirical research comparing L1 and L2 writing and found that L2 writing is different from and less effective than L1 writing. The researcher found differences in composing processes, particularly planning, writing, and revising, as well as in features of the written texts such as accuracy, quality, structure, and fluency. The findings led Silva to conclude L2 writing differs from L1 strategically, rhetorically, and linguistically. Silva attributed the lack of a coherent, comprehensive theory of L2 writing to the predominant assumption that L1 and L2 are virtually the same. Riazi (1997) commented on Silva’s findings by saying that “it seems to me that context of writing plays an important role in the probable differences of writing in L1 and L2” (p. 111). Riazi’s critique implicates the need to understand both the sociocultural and the cognitive, process-based decisions L2 writers make, as implied by the sociocognitive approach.

Contrary to Silva’s (1993) findings, Raimes (1987) found that writing processes were similar among L1 and L2. Raimes attempted to investigate the writing strategies of eight ESL student writers of different proficiency levels and compare their strategic behaviours with the behaviours of native writers. Four of the participants were enrolled in remedial ESL writing courses, and the other four were enrolled in college-level writing courses. The researcher used TAP for data collection. The findings of this study showed ESL writers are similar to L1 writers in the use of many strategies. However, Raimes found ESL writers appeared to be less inhibited by attempts to self-correct their texts, as opposed to L1 writers. The similarities between ESL and L1 writers led Raimes to suggest L1 writing instruction should be modified
rather than adopted for ESL classes. One potential teaching modification may be the use of L1 in L2 writing classrooms, which the researcher will review in Section 3.6.2.

Another vein of research acknowledges that proficiency in L1 and L2, and awareness of L2, combine to determine writing strategy use. One of the first important studies examining skilled and unskilled writers’ L1 and L2 writing was Zamel’s (1983) case study on six advanced L2 students belonging to five different language groups: Chinese, Spanish, Portuguese, Hebrew, and Persian. Zamel observed the participants while they wrote a course related assignment as an untimed task. The researcher collected the written products from the participants and conducted interviews with them after they completed their writing. The researcher intended to investigate the degree to which the ESL participants experienced writing as a process of meaning, discovery, and creation. Zamel found many differences between skilled and unskilled writers, stating skilled writers spent longer time working on their essays than unskilled writers. Moreover, skilled writers treated writing as a process and paid more attention to generating ideas and revising on the discourse level. Their writing exhibited more recursive practice and more flexibility in strategy use, unlike unskilled writers who were overly concerned about following an outline, having correct grammar and vocabulary from the beginning, and focusing on small parts of their texts. Zamel’s research therefore indicated support for the transference of the underlying cognitive writing process from L1 to L2.

Similar to the study by Zamel (1983), Sasaki (2000) compared three paired groups of Japanese ESL writers (experts, novices/learners, less skilled student writers, novices before and after 6 months of instruction) and identified dozens of writing strategies, as well as strategies employed by more and less skilled writers. The strategies Sasaki identified were planning (global, thematic, local, organizing, and conclusion planning), retrieving (plan and information retrieving), generating ideas (naturally and description generated), verbalizing (verbalizing a proposition, rhetorical refining, mechanical refining, and sense of readers), translating, rereading, evaluating (ESL proficiency, local text, and general text evaluation), resting, questioning, and impossible to categorize. The researcher found (a) before starting to write, the experts spent a longer time planning a detailed overall organization, whereas the novices spent a shorter time, making a less global plan; (b) once the experts made their global plan, they did not stop and think as frequently as the novices; (c) ESL proficiency appeared to explain part of the difference in strategy use between the experts and novices; and (d) after 6 months of instruction, novices began to use some of the expert writers’ strategies. Sasaki stated good ESL writers spent more time than novice writers planning and organizing their
writing. These findings led Sasaki to conclude higher writing proficiency leads to more frequent use of effective strategies. The categories Sasaki proposed suggest with clear instruction, writers can adopt a more effective cognitive process for producing high quality ESL writing.

Sang-Hee (2002) investigated the writing strategies of 41 graduate students of ESL (16 Korean students, 18 Asian students including those from China, Japan, and Vietnam, and seven European students including those from Spain, France, and Poland). The researcher used questionnaires in addition to interviews with some of the participants to collect data. The participants’ writing proficiencies were rated by their instructors. The focus of this study was to identify the type and number of strategies that proficient writers use. The researcher investigated the influence of variables, such as L1 background, length of residence in the L2 speaking country, the participants’ major, and use of strategies. Similar to Zamel (1983), Sang-Hee found less proficient writers focused more on grammar and vocabulary problems, whereas proficient writers were conscious of their writing strategies and recognized the importance of style and organization of the L2. Furthermore, the researcher found writers with intermediate proficiency used translation more often than their counterparts. Sang-Hee concluded no significant differences existed between proficient and less proficient writers regarding the number of strategies used, just in the types, and specifically, in the use of L1 and understanding of L2.

Like Sang Hee (2002), Raimes (1985) found that writing strategy types were specific to writing proficiency. Raimes investigated the writing process of eight unskilled university-level ESL students through TAPs produced by the writers while composing and used Perl’s (1979) coding scheme to analyse their writing strategies and processes. The researcher found some differences between L1 and L2 writing processes. Raimes stated the unskilled ESL writers used the following strategies: prewriting, planning, reading, rehearsing, writing, revising, and editing. Raimes found the writing competence of the participants did not correspond with their linguistic competence. The researcher also reported the majority of the unskilled writers spent less time on prewriting activities (planning) before or during writing and paid little attention to revising and editing. These findings regarding the emphasis on local rather than global issues among unskilled writers underscore Sang Hee’s and Zamel’s (1983) findings.

Instead of categorizing according to the writing process as in the previous studies, Abdullah (2009) adapted a similar framework to O’Malley and Chamot (1990) when investigating writing strategies used by four undergraduate engineering Malay ESL learners.
of a local private university. The researcher conducted this qualitative research study to analyse the written product as well as the writing strategies used while completing a writing task. The findings revealed that the two groups of students shared common writing strategies, mainly cognitive strategies, to generate ideas for their essay. Writers also used metacognitive and social strategies to aid in generating ideas and searching for correct words or expressions; these strategies were used in combination with one another and in a recursive manner to attain certain goals. Abdullah believed the difference in strategy use between the two groups of strong and weak students lay in the amount of strategies being used, reason for the use, and how the students regulated the strategies to solve problems concerning the writing task.

The findings related to ESL writing strategies suggest a mixed result with respect to various aspects of study. Researchers have focused on categorizing the use of strategies among ESL writers, indicating that in some cases, L2 writers are following writing processes consistent with L1 models. On the other hand, some researchers indicated profound differences between L1 and L2 writers. Such variation may be based on proficiency, since it seems that proficient writers use different strategies and focus more on global issues. The next subsection reviews literature specific to writing strategies for Arabic students.

### 3.6.1.1 ESL Writing Strategies for Arabic Students

Some researchers have specifically investigated the writing strategies of Arabic students in ESL contexts. For Arabic learners, the use of different writing strategies seemed to occur primarily in planning and revision in the ESL environment. For example, regarding planning, Aljamhoor (1996) investigated the role of instruction and how it affects the writing strategies and the process of writing. Two Saudi graduate students studying in the United States were asked to write three English essays and three Arabic essays using a case study methodology and stimulated recall instrument. Students were asked to rewrite their essays using the same topics for the essays in both languages after instruction sessions by their teachers. Aljamhoor employed this methodology to identify the areas affected by instruction and those not resolved during the writing process. The researcher interviewed the participants and their ESL teachers to learn more about the writing difficulties encountered. The findings showed students before ESL instruction could not produce well organized essays and faced difficulties during the stages of prewriting, writing, and revising strategies. The participants did not show any planning strategies in L1 or in L2 before the ESL instruction. However, after the instruction, the participants started writing without making drafts, pausing to think of ideas, considering appropriate vocabulary, or reading the entire essay.
Revision was an additional difference in Arabic and ESL writing contexts revealed in the research. Al-Semari (1993) investigated the L1 and L2 revising behaviours of eight advanced Saudi students of English studying at Michigan State University. The participants were required to write and apply TAP while composing two essays. The researcher found similarities between the revising strategies used by the participants when composing in English and when composing in Arabic. The students revised for the same purposes; most of these revisions appeared while producing drafts rather than while reading them, and they made more formal, grammatical, mechanical, and surface changes in English than in Arabic. Al-Semari stated Arab students who come from societies that teach L1 writing, without attention to the writing behaviours, are not trained or able to use effective writing strategies, such as mapping, revising, editing, rehearsing, and brainstorming. This may cause difficulties when they try to write in English.

Al-Amer (2000) investigated the effects of a word processor on revision processes and strategies of Saudi ESL students both in L1 (Arabic) and L2 (English). The researcher used interviews, TAPs, observational notes, and participants’ writing essays on videotapes and papers. The findings of the study showed significant differences between word-processed and paper essays in terms of the participant’s surface and meaning revision. The effects of writing methods on surface and meaning revisions in both languages were stronger than on language effects. One reason for this was because of the participants’ experience with word processing. The findings showed the participants benefited from the word processing environment for revision strategies in L2 more than in L1. In addition, word processing was more useful for surface revisions than meaning revisions. Therefore, researchers examining Arabic EFL students may need to focus on the planning and revising strategies employed by writers to see if the ESL variables transfer to EFL contexts. The next subsection focuses on the use of L1 in L2 writing, and on its effectiveness as a writing strategy.

3.6.2 Use of L1 in L2 Writing in ESL Classrooms

L1 use is a common topic and consideration in ESL learning (Cook, 1999). Many problems related to the strategy of using L1 are lexical. Most learners who use this strategy continue to use the L1 because of their need to organize and monitor the writing process. L2 learners use L1 in writing to plan for ideas and to evaluate the task. The use of L1 strategy often takes place during the planning process, writing, and in the revision process (Manchon et al., 2007). Multiple researchers have examined L1 use in L2 writing processes, as reviewed in the following paragraphs.
Use of L2 seems to vary depending on the stage of the writing process and writing proficiency, as indicated by Yuksel (2014). Yuksel investigated the academic writing strategy use in L1 and L2 among 253 students (from 1st, 2nd, 3rd, and 4th grades) and Turkish EFL preservice student teachers (L1 and L2 academic writing strategy uses) through a mixed method, combining qualitative and quantitative design. Yuksel collected data using a cross-section to obtain more reliable findings and to describe the overall profile of students’ writing processes and strategy use development. In the same study, Yuksel used Patric and Cz’arl’s (2003) writing strategy questionnaire to investigate the participants’ writing strategy uses. The open-ended questions helped discuss the participants’ L1 strategy use. In addition, Yuksel interviewed participants about their academic writing strategy use. Participants’ scores on a written text were evaluated as indicators of their writing proficiency. After extracting the uncompleted instruments from the results, Yuksel analysed the data collected from 229 participants. The results revealed that the use of L1 is proficiency dependent, as the students with lower proficiency tended to use writing strategies more and planning strategies were used most frequently in both languages, L1 and L2. For the planning and revising strategies, the participants reported they occasionally used them, whereas the strategies used while writing were used more frequently among the participants.

Some results suggest L1 use is a detrimental tactic employed by unskilled L2 writers. In Jones and Tetroe’s (1987) study, using the L1 in L2 writing was considered unsuccessful. These researchers examined whether L1 writing processes were transferable to L2 composing processes. After examining the writing behaviours of six Spanish-speaking adults, the researchers found “the quality . . . of planning transfers from L1 to L2” (Jones & Tetroe, 1987, p. 56) and claimed that only writing strategies students acquired in their L1 could be transferred to their L2. The researchers found the use of L1 as a strategy in L2 writing reduces the level of L2 writing performance and reduces students’ L2 vocabulary. Jones and Tetroe concluded although L2 language proficiency had an effect on the quality of L2 texts, it did not seem to constrain the planning process. In other words, writing skills are transferable from L1 to L2 writing, independent of language proficiency.

In their study of 70 Japanese students, Sasaki and Hirose (1996) further reported most of the weak ESL writers used their L1 to generate ideas and then translated them into English. In Cumming’s (1989) case study of 23 French-speaking students, it was found that unskilled students switched frequently between English and French when composing aloud on an ESL writing task. These students reported using their L1 to search out and to assess appropriate
wording, to compare cross-linguistic equivalents, and to reason about linguistic choices in the L2. This might indicate that the use of L1 in L2 writing is a characteristic of poor writing.

Conversely, Manchon et al. (2007, p. 241) stated that only skilled writers use their L1 as a strategy to overcome lexical problems and using the L1 in generating L2 texts is generally considered an asset in L2 writing. Similarly, Uzawa (1996) compared L1 and L2 writing processes in the translation from L1 into L2 of 22 Japanese students at a Canadian postsecondary institution for Japanese high school graduates. Uzawa analysed data collected from TAPs, observational notes, interviews, and written samples. The researcher found L1 and L2 writing processes are similar. The similarities were in the participants’ adoption of “what next” approach to writing both in L1 and in L2 tasks, and they used a sentence-by-sentence strategy in the translation tasks. Participants viewed translation as helpful for learning and improving L2 writing.

Several other studies have provided insights on the beneficial role of L1 use among ESL writers. Friedlander (1990) investigated the planning strategies of 28 Chinese-speaking students responding to two letters: one in Chinese and another in English. The researcher found students produce better texts when they plan in the language that matches the topic they are writing about (i.e., if writing in English about a Chinese topic, Chinese speakers would benefit if they produced a plan in Chinese and then used that plan to generate their English text, and vice versa). The findings showed varied strategies for L2 writers of different proficiency levels. Thus, Friedlander’s results coincided with Cumming’s (1989) in that lower L2 proficiency writers relied more on their L1 during the writing process to prevent a complete breakdown in language.

Unlike Yuksel (2014), Wolfersberger (2003), who studied low proficiency L2 writers using TAPs, found that writers frequently used their L1 during prewriting and made use of translating from their L1 to their L2 to compensate for their limited ability to write in their L2. Moreover, Woodall (2002) hypothesized that L1 use in L2 writing is influenced by three variables: L2 proficiency, task difficulty, and the genetic connection of the L1 and the L2. Woodall’s findings showed more L1 use in less proficient L2 writers’ processes; the more difficult the task was, the more L1 use could be detected in L2 writing. L1 use in the processes of L2 students whose L1 and L2 were cognate languages resulted in better L2 texts. Woodall concluded L2 writing instructors must take into consideration that L1 is an important resource for L2 writers to rely on. A theory for L2 writing must explain the extent to which writing in a foreign language is an L2 proficiency problem or a general composing problem. The two overviews and Woodall’s assumption confirm the notion that despite the general
similarities between L1 and L2 writing processes, several differences exist between them, which must be taken into consideration both in L2 writing research and L2 writing pedagogy. Woodall noted L1 use appeared to be positive for high proficiency writers of cognate languages (Woodall, 2002, p. 20). This is consistent with Cummins’ (1973) framework, as reviewed in Sections 3.3.2 and 3.4.4.

Although the studies reviewed in this section provided insights into the possible role L1 plays in L2 writing, the findings appear to be that the use of the L1 during L2 writing can be beneficial, but not in all situations and not for all writers. This depends on writers’ L2 proficiency (Wang & Wen, 2002; Wolfersberger, 2003; Woodall, 2002), the type of task (Wang & Wen, 2002), topic knowledge (Friedlander, 1990), and on whether the L1 and the L2 are cognate languages (Woodall, 2002). According to Cummins (1973), it may also depend on the focus of the SLA instructor, and whether and how they emphasize transference. Furthermore, the reasons for L1 use and the cognitive activities carried out in L1 remain somewhat unclear. The L1 can be used to solve linguistic problems, but is also used for activities, such as planning and preventing cognitive overload (Jones & Tetroe, 1987; Woodall, 2002).

The previously reviewed studies are important to the current research because of the similarities in the type of participants involved. The addition of L2 writers, with the use of similar methods of research, allowed a comparison between their findings and those of the current study. Although the current study focused on EFL writing opposed to ESL writing, the previously reviewed studies are relevant in the methods, such as TAPs and interviews. Moreover, the researcher compared the results of this study with the findings of ESL studies in which previous researchers found similarities between ESL writers’ composing processes and writing strategies and those of L1. The next section includes more germane EFL literature on writing processes.

3.7 Studies on EFL Writing Processes

Although research regarding EFL writing processes is less comprehensive than the existing research on ESL writing, a number of systematic studies have been conducted and yielded interesting results. This preliminary section includes information from non-Arabic settings. The following subsections cover EFL writing processes of Arabic EFL students (see Section 3.7.1), followed by Kuwaiti EFL students (see Section 3.7.2).

The ability to speak English may be a long-term priority for learners studying in an EFL context who are immersed in their home culture. However, learners studying in an ESL context, who are highly motivated to improve their speaking skills as quickly as possible out
of necessity (Thornbury, 2005), may experience a lack of focus on written English instruction. This was the case in the Kuwaiti EFL classrooms at the primary level, as discussed in Sections 2.3 and 2.4.

A growing body of literature exists regarding EFL writing. Some of the earliest studies on EFL writing processes were conducted by Arndt (1987), who conducted a protocol-based study and Perl (1979), who created a coding scheme examining the writing of six Chinese college students. Arndt reported “the composing strategies of each individual writer were found to remain consistent across languages” (Arndt, 1987, p. 257). Arndt found considerable variations existed in the way the writers approached writing tasks. The proficient writers showed similar strategies in both L1 and L2 composition; novice writers spent more time focusing on making word level changes instead of evaluating how successful they were in achieving their purpose for writing. The alternative writing strategies provide possible direction for the discussion of strategies from the results of the current study. Producing a full text requires significant cognitive resources (Torrance & Gabraith, 2006, cited in Van Der Steen et al., 2017), such as planning, retrieving information, generating text, and monitoring and revising text (Flower & Hayes, 1980). Initial research suggests that ELLs face some of the same challenges as native English speakers, but their writing is generally delayed (Beck, Llosa & Fredrick, 2013). Similarly, students writing in their L2 show delays relative to students writing in their L1 (Tillema, Van Den Bergh, Rijlaarsdam & Sanders, 2013).

Victori (1999) examined the composing processes of two skilled and two less-skilled Spanish student writers using interviews and TAPs. Victori focused on how differences in metacognitive knowledge about writing related to differences in EFL writing skills. Victori found the two skilled participants in the study appeared to focus more on global issues associated with their texts, although the less skilled writers were overconcerned with vocabulary and grammatical aspects, such as using the correct tense or the correct preposition. Victori stated one of the skilled writers made use of outlining as a form of planning, but the other skilled writer planned mentally. The less skilled writers reported they did not devise an initial plan when writing. Unskilled writers stated they started with a variety of ideas that they would organize while writing or revising. In contrast, the skilled writers seemed to follow a more flexible approach in writing as their protocols reflected their concern for organizing their ideas and the structure of their essays. The skilled writers were more flexible in changing their plans. Even though the four participants reported that when assessing their texts, they considered revising ideas, the unskilled writers seemed to reread their texts for the purpose of generating more content. When the skilled writers read their written texts, they retrieved new
ideas, assessed the degree to which their texts matched their intended meaning, evaluated their linguistic structures, and decided on better ways to connect their ideas. Victori also found the less skilled writers’ reviewing strategies simply consisted of editing surface-level aspects of their texts, such as vocabulary and grammar.

Conversely, novice writers may learn and employ ineffective writing strategies rather than gain new and more effective strategies. Wang and Wen (2002) investigated L1 (Chinese) use in the composing process of 16 intermediate and advanced EFL learners using only TAPs to quantify and explore the interaction between writing tasks and the writer’s L2 proficiency and L1 use in the composing process. The findings showed the L2 writing process is a bilingual process: “L2 writers have two languages […] at their disposal when they are composing in L2” (Wang and Wen, 2002, p. 239). Wang and Wen also found the occurrence of L1 varies in accordance with individual composing activities, as it is more likely to occur in “process-controlling,” “idea-generating,” and “idea organizing” activities than in “text-generating” activities. Furthermore, in contrast to previous studies, researchers found intermediate writers depended on L1 use more than proficient writers in EFL composing. Intermediate writers used direct translation, although advanced writers wrote directly in the L2. Wang and Wen concluded the lower proficiency writers in their study used their L1 far more than the higher proficiency writers.

These studies are relevant to the current research because prior researchers focused on participants with varying levels of writing ability and the cognitive processes they employed while composing. This information could be used in an interpretation of the results of the current study. The current researcher investigated similar cognitive strategies employed by the writers as well as potential social factors that could influence the writer’s abilities. In the following section, the focus will be on studies conducted in Arab EFL contexts. Given the focus and context of the current study, it is of importance to review relevant research achieved in other Arab countries because of existing similarities between those contexts and the context of the current study regarding teaching and learning English writing. The next section reviews research regarding the writing processes of Arab EFL writers.

3.7.1 Research into the Writing Processes of Arab EFL Writers

Several researchers investigated the writing processes and strategies used by Arab EFL students (El-Mortaji, 2001; El-Aswad, 2002; Fageeh, 2003; Mahfoudhi, 2003; Alhaysony, 2008; Chaaban, 2010; Alharthi, 2012; Alnufaie, 2014). This section sheds light on Arab students’ writing strategies, particularly those of Kuwaiti students. These studies are relevant to the current study because of the similarities between them, which include of the
type of participants involved (L2 writers), the cultural background, and the common investigation of writing strategies. For example, some students rely heavily on their L1 for prewriting activities and other students start writing without planning. The following section includes a review of studies carried out in other Arab countries to showcase the similarities and differences regarding the problems facing Arab students in general and how relevant these problems are in the Kuwaiti context.

El-Mortaji (2001) conducted a study to investigate the writing processes and strategy use of 18 multilingual Moroccan university students, who were learning English as a second foreign language. Their writing processes were compared while composing in Arabic (L1) and in English (L3). Using TAPs, interviews, and questionnaires, the researcher studied the learners’ writing proficiency in Arabic and in English. El-Mortaji took note of the participants’ gender and discourse type using frequency composing strategies and analysed the data quantitatively and qualitatively. In contrast to the ESL study conducted by Aljamhoor (1996), El-Mortaji (2001) found the Moroccan students planned and used a set of strategies to plan, organize, set goals, and evaluate, but the frequency in occurrence of these strategies between Arabic and English was subject to individual differences. In addition, students rehearsed for word choice in English more frequently than in Arabic. The researcher, however, stated this was likely a result of prior EFL teaching methods that stressed the need for outlining. These findings shed light on the influence of the context (i.e., a previous teacher’s instruction) regarding the way students write. However, the data show low-level writers did more planning than high-level writers. The high-level writers were more flexible in accommodating their teacher’s rules and expectations, and as a result, good writers were more open to changing their goal of writing during the process. Furthermore, the study revealed the participants were keen on “retrieving their prior general knowledge about English essay writing conventions and their teachers’ rules and expectations from their long-term memory” and that all the participants made use of their rich linguistic background to “retrieve L1 base knowledge, and to solve some of the linguistic difficulties and problems they encountered in the writing process” (El-Mortaji, 2001, p. 349).

One of the research questions from the El-Mortaji (2001) study addressed the relationship between gender (a sociocultural factor) and writing strategy use. According to El-Mortaji, the gender of the participants affected the writing strategies used. The results of the data analysis revealed females and males approached the writing tasks in different ways and chose different strategies. Differences were also detected in the ways males and females narrated their stories and in the quality of information they provided for their readers. El-
Mortaji also found that female writers switched language at a higher rate than male writers. The researcher’s findings stimulated this researcher to investigate whether skilled and less-skilled students used different strategies. An important aspect of El-Mortaji’s (2001) study was its use of a comprehensive methodology that included various variables, languages, gender, and discourse types. This study is important because it is the first study in this context to address the issue of writing process and strategy use in Arabic and English. However, a limitation of this study was the low number of participants. The findings of this study cannot be applied to the Kuwaiti context because the study and teaching of foreign languages receives significant attention in Morocco than in Kuwait because the background of the students is different.

Aside from cultural gender differences, prior classroom context and proficiency may influence writing behaviours. Chaaban (2010) investigated the composing processes, writing strategies, and the sociocultural factors of 11 Syrian students. Chaaban used TAPs, stimulated recall interviews with students and teachers, and classroom observations to examine how the students’ strategic behaviours changed. Based on the context, task types, and writing proficiency levels, the analysis of data revealed the development of participants’ writing skills was influenced by several sociocultural factors, which related to the participants’ past learning experiences, such as their approach to learning in general and the lack of adequate writing instruction and feedback. The results showed the participants used L1 (Arabic) while writing in L2 (English) as a tool to help generate ideas and review the suitability of vocabulary. In addition, the results of the study showed proficient writers were found to do more planning than the less proficient writers, which was consistent with many studies in the ESL literature (see Section 3.6.1). The results also confirmed the findings of other studies (Cumming, 1989; Friedlander, 1990) where L1 was found to be used more in familiar contexts than unfamiliar ones.

Also demonstrating potential issues with classroom context and EFL writing, Fageeh (2003) found Arabic EFL teachers neglected writing strategies when training their students to write. Fageeh investigated 37 male Saudi university students’ beliefs regarding their writing difficulties. The researcher used interviews, observations, and textual analysis in the study to investigate the participants’ experiences with writing both in English and Arabic, as well as their composing strategies and their attitudes toward EFL writing. The findings showed the participants reported limited chances for writing in both English and Arabic, as the writing instruction they received focused mainly on form and memorization. In addition, the findings showed the students encountered difficulties in writing mechanisms, grammar, and
vocabulary. The results indicated the participants needed to be exposed to different writing genres, skills, and strategies, and to be provided with effective feedback to improve their writing skills. Fageeh concluded the students did not use effective writing strategies and did not distinguish the writing processes from writing strategies, which led teachers to accept writing with no drafts or revisions. According to Fageeh and related to Cummins’ (1973) framework, writers may transfer the writing behaviours they developed in their L1, although Fageeh indicated some of these behaviours and strategies might be ineffective.

Alharthi (2012) further investigated the composing processes and strategies in the written composition of final-year Saudi male students majoring in English. The researcher aimed to identify and analyse the writing processes of these students to understand some of the reasons behind their poor written output. The researcher also wanted to investigate the way skilled and less-skilled students composed their English writing to classify the differences in the use of strategies between the two groups and to study the effect of using strategies on the written product. To fulfil the aims of the study, the researcher used mixed research methods, including written samples, a writing strategy questionnaire, and TAPs.

Results from Alharthi’s (2012) study indicated that students used metacognitive, cognitive, and affective strategies in their writing processes. Specifically, only highly skilled students employed written global planning as a writing strategy, as in Chaaban (2010). Regarding meta-cognitive strategies, it was found that all levels of students reported planning and reviewing their writing. However, some students reported that they only plan their introductions while others reported that they think and draw a mental plan of how to organize their writing more frequently than written planning. This finding was in line with Alhaysony’s (2008) and El-Aswad’s (2002) findings, regarding Arabic students’ reported use of mental planning. Regarding cognitive strategies, most of the students reported using a wide range of cognitive thinking before writing, checking for grammar and spelling, and using dictionary during writing. They also reported writing a draft. This echoes the findings of Alam (1993), who mentioned that students reported checking their writing and writing a draft to organize their ideas. Regarding the affective strategies, students in general reported that they try to control their emotions and regulate their writing. Half of the participants mentioned that they take a break if they feel tired. Most participants reported if they do not know the meaning of a word or the structure of a sentence, they try to avoid using it and look for a simpler alternative. This strategy of avoidance indicates that not all the students are able to respond positively to the affective strategy. Further, the students reported that they translate from their Arabic L1 if they fail to communicate effectively in English. Some of them reported that they
think all the time in Arabic, and they might write their English composition in Arabic, partially or completely. Others reported that they use only English in their writing and think in English. These findings agree with El-Aswad (2002), whose participants used the strategy of avoidance when facing language difficulty.

Contrary to Fageeh (2003), Alharthi (2012) determined that the students were conscious of writing strategies, yet cross-reference of the think-aloud protocol analysis with the writing strategies questionnaire indicated that students often claim to use the strategies, but in fact they do not always do so. Alharthi’s (2012) study is relevant to the current study because the researcher tried to capture the writing processes of the students using different tools. Although Alharthi’s study included many participants (156 students), it still had drawbacks. The first drawback of this study was similar to the drawback in El-Aswad (2002)’s research, which is the inclusion of the fourth-year undergraduate participants only.

A primary issue for Arabic EFL students is the focus on product rather than on process in writing. El-Aswad (2002) also investigated the writing processes and strategies in L1 (Arabic) and L2 (English) of 12 third-year Libyan university students. The researcher used observation, TAPs, interviews, questionnaires, and written products to gather data. The composing sessions were audio taped, then transcribed, translated, and coded for analysis, along with the drafts and final written compositions. The findings showed each participant used strategies reflecting his or her own perception of writing and the previous writing instruction he or she received before and during college. Consistent with Al-Amer’s (2000) and Al-Semari’s (1993) findings regarding Arabic ESL students, the participants did not make any final revision, as most of them were influenced by the product approach. The study demonstrated how students were product oriented in L2 writing; they had little concern for audience, had limited linguistic knowledge and writing proficiency, reviewed for grammar and vocabulary only, and applied strategies inaccurately (El-Aswad, 2002). Furthermore, the written texts showed the L2 writing instruction the participants received in college helped them improve their composing strategies and production. This indicates that through more process writing instruction, students’ writing can be improved. Based on the protocols and interview analysis, El-Aswad claimed that L1 writing knowledge and strategies were transferred into L2 EFL writing. The researcher further claimed less-skilled students tended to use L1 discourse and strategies more frequently when writing in L2.

Similar to Chaaban (2010) and El-Aswad (2002), Mahfoudhi (2003) investigated the writing processes, writing strategies, and final products of Tunisian EFL university students. The researcher collected data from audio taped TAPs followed by immediate retrospective
comments and a questionnaire administrated to the students. Results of the process analysis, using an adapted version of the coding scheme used by Raimes (1987), corroborated by the questionnaire findings, showed students wrote fluently and concerned themselves more with meaning than with grammatical correctness. However, they planned little, rarely made notes before writing, and rarely rewrote, consistent with the focus on planning and revision strategies in Arabic ESL studies (Al-Amer, 2000; Aljamhoor, 1996; Al-Semari, 1993). The students encountered difficulties in finding the appropriate word and in organizing their ideas. At a local level, products showed inaccurate use of mechanism and grammar. At a more global level, most essays lacked a clear thesis statement, substantial support of claims, adequate transitions, and hedged statements. These problems were particularly attributed to a lack of planning, not enough note-taking, and a lack of revising. Mafhoudi suggested the negative process strategies related to writing habits for which the EFL classroom context and the exam settings were partly responsible.

Like Mafhoudi (2003), Alnufaie (2014) investigated the writing strategies and apprehension of 121 second-year EFL undergraduate Saudi writers, using questionnaires, think-aloud protocols, interviews and argumentative writing task for triangulation purposes. The findings revealed that almost all of his participants were mixing the two kinds of strategies, product (i.e. following teachers rules and feedback, writing without collecting information, writing without planning, following outlines, focusing on organization, neatness and layout, constant editing of grammar, vocabulary use and punctuation) and process-oriented (i.e. free writing, planning, creating ideas, discovering meaning, groups or pair work, considering audience, context of writing, revising, drafting, and proofreading) strategies. Moreover, although the majority of the participants were average in their stress and apprehension towards writing strategies, almost a third of them were highly apprehensive. In addition, the most stressful strategies were these that involve the lack of generating ideas, ensuring accuracy, and meeting the teacher’s expectations. The results also show that the low competent writers were similar to the high apprehensive strategy users in their kinds of strategy use. Both of them tended to use more process-oriented writing strategies than product-oriented ones. On the other hand, the high competence writers and the low apprehensive strategy users tended to use mixture of both process-based and product-based writing strategies.

As in Raimes (1987) and Silva (1993), Alhaysony (2008) investigated consistency between L1 (Arabic) and L2 (English) writing processes and strategies of Saudi third-year female university students studying English. The researcher focused on the similarity of L1
and L2 writing processes, in addition to investigating the writing strategies of skilled and unskilled writers. The researcher used questionnaires, TAPs, and semistructured interviews. The findings of the study showed similarities in writing strategies between Arabic and English, consistent with Fageeh (2003), yet unlike Fageeh, Alhaysony emphasised that the connection was positive. However, Alhaysony found the participants used more writing strategies in the L2 writing task. The researcher stated skilled and unskilled writers used the same set of writing strategies, although they differed in the frequency of use: unskilled writers used their L1 to facilitate their L2 writing far more frequently than skilled writers. In addition, writers used Arabic for creating mental or written plans, for questioning about plans or vocabulary, and for creating part or all their texts in Arabic and then translated them into English. The overall findings showed writers used L1 extensively in L2 writing (see Section 3.6.2). Finally, Alhaysony found the most frequently used strategy during L2 writing was to revisit what had already been written, whereas the least used strategy was reviewing the writing plan.

The importance of Alhaysony’s (2008) study lies in the similarities to the current research in terms of the focus of the writing strategies, the Arab context, and the similarity in the methods of research. The researcher compared the results of the current study with the results of Alhaysony’s study for validation of results. Further, Alhaysony’s results, compared with Fageeh’s (2003) study, suggest a potential gender difference among Arabic EFL writers. In Kuwait, where primary and secondary education occur in gender-segregated contexts, the difference in results based on gender may result from alternate methods of EFL instruction.

This section indicated that for Arabic EFL writers, gender, classroom experiences, and proficiency may influence the writing strategies employed, particularly as it relates to the writing process. Further, a particular issue stemming from the Arabic writing context is the emphasis on product over process. Alhaysony (2008), like previous researchers in the vein of Cummins (see Section 3.4.4), noted that L1 writing context may transfer to L2. To gain additional specificity, the next section sheds light on other studies carried out in the Kuwaiti context regarding the influence of gender and use of L1.

3.7.2 Research into the Writing Processes of Kuwaiti EFL Writers

3.7.2.1 Gender and Writing Strategies among Kuwaiti EFL Students

Previous studies involving Arabic students learning English have indicated gender may be a significant factor in the choice of the appropriate writing strategy. Students in other Arab countries face the same writing problems related to the composing process, the revising stage, overall cohesion and coherence, and the development of effective writing strategies.
The results of these studies are very closely connected with the Kuwaiti students under study in the current research, with some slight variations resulting from the differences in the educational systems adopted in these countries. For example, El-Dib (2004) investigated how genre and language use affect language learning strategies by using the SILL to measure that relation in the Kuwaiti society. El-Dib claimed a contradiction in the studies researchers generalized the relation between learners’ preferences and language learning. In total, the researcher collected 504 responses (244 male, 260 female) of 750 randomly distributed questionnaires on students enrolled in four gender segregated colleges from the Public Authority of Applied Education and Training, the second highest education organization in Kuwait. The results revealed eight factors that explained 42.10% of the SILL’s 50 items. In addition, the findings of the study showed a significant amount of naturalistic language use, which led the researcher to conclude a difference between the writing styles of the two genders; males tended to use active, naturalistic language significantly more than females. However, females used cognitive-compensatory strategies and revision strategies significantly more than males. The results of this study suggest a gender-sensitive social context may play a role in the writing strategies a student applies.

Taking into consideration the application of SILL earlier in this research in the same context of El-Dib’s (2004) study, the results are not significant (see Section 4.6.1.1). Regarding demographic data differences and how they affect language learning, especially when identifying the writing strategies used by learners, the results are telling. Thus, identifying how gender differences affect English learning process is important because the educational system in Kuwait is gender segregated, which may lead to gender differences in language learning (see Section 3.8.5). The next section indicates the use of L1 among Kuwaiti students to further highlight the practices and experiences of Kuwaiti EFL students.

3.7.2.2 L1 Use among Kuwaiti EFL Students

As previously discussed (see Section 3.6.2), L1 use in L2 is a strategy that has mixed utility depending on a variety of factors. Furthering this knowledge in a study related to the Kuwaiti society, Alam (1993) investigated the writing strategies used by 15 Kuwaiti university students who used Arabic language as a writing strategy while writing in English. Participants were asked to write one essay and were also asked about their behaviour pertaining to the use of Arabic during English writing through stimulated recall method, which involved videotaping students as they wrote and playing back the recording immediately afterwards to ask the writers to comment on what was happening during the writing process. An interview followed the writing session. The researcher asked the
participants about their educational background and writing habits in both Arabic and English. The findings of the study showed students used their L1 during prewriting, writing, and revising. During the prewriting stage, most of the participants thought in Arabic. However, some participants used both Arabic and English as instruments of thinking. In the writing stage, the participants used Arabic most extensively. The participants translated Arabic words, phrases, and parts of sentences using different techniques. Alam found most of the students wrote only one short paragraph although they were asked to write an essay. Alam concluded the use of Arabic helped the students sustain their writing processes in English. However, Alam claimed using Arabic in English writing during all the writing stages might be attributed to weak language proficiency. Such a claim requires a comparison between different levels of language proficiency, which is not something Alam investigated. However, Alam’s study is significant because it focuses on the use of L1 when composing in L2.

Language proficiency plays a significant role in controlling Arab EFL writing strategies as shown in El-Aswad’s (2002) study. Moreover, writing experience and the previous writing instruction also affects students’ writing strategies (Alharthi, 2012; Aljamhoor, 1996; Chaaban, 2010; El-Mortaji, 2001; Fageeh, 2003). In some of the previous studies, researchers proved the Arabic language is useful in facilitating students’ writing process (Alam, 1993; El-Aswad, 2002; Fageeh, 2003). The studies conducted in Arab countries, specifically about Saudi students (Al-Amer, 2000; Alharthi, 2012; Alhaysony, 2008; Aljamhoor, 1996; Al-Semari, 1993; Fageeh, 2003), reveal similar research interests as the current study (revising behaviour, the role of instruction, and writing difficulties). The results also indicate Saudi students and Kuwaiti students have similar writing problems. This emphasizes the need to develop the writing curricula in the Gulf countries, particularly Kuwait, which was one of the objectives of the current study (see Section 2.3 and 2.4). The following section will present the sociocognitive factors involved in the writing process investigated further in the study.

3.8 Sociocognitive Factors and their Influence on Writing

This final major section includes information that solidifies the sociocognitive factors that influence EFL student writing. Many researchers have acknowledged the importance of studying writing from both sociocultural and cognitive perspectives to understand the process. Cumming (1998) and Roca and Murphy (2001) noted the singular focus of writing research on either cognitive or social writing theories led to a limited view of EFL writing. This lack of research constituted a significant gap in the research, which led to the development of the sociocognitive approach, a more holistic view of writing (Atkinson, 2013).
Some researchers suggest the sociocognitive complexity of the composing process renders it unable to fit into a single unifying theory (Roca & Murphy, 2001). From the cognitive point of view, the process of composing is perceived as a problem-solving task in which the complex, recursive, and individual nature of composing is emphasized, and cultural aspects are not accounted for. From the sociocultural perspective, writing is a social act that takes place within a specific context and for an audience, where all the local components of the text are controlled by the discourse within which the text is produced. However, a combination of theories, such as the sociocognitive approach, may encapsulate all the elements of L2 composing.

Researchers who examined L2 composing through a sociocognitive lens examined a multitude of factors. Roca and Murphy (2001) examined the problem-solving actions of a participant regarding their mental processes within a setting. In the same vein, Sasaki (2000) argues that writing cannot be conducted in a social vacuum. Because writing is a social construction (Cumming, 1998), researchers cannot ignore the social and the cultural contexts in which it takes place. Consequently, research in this domain must be extended to investigate broader issues, such as how writing is treated in distinct L1 and L2 cultures or the extent that cultural factors affect the learners’ and teachers’ expectations. Grabe and Kaplan (1996) emphasize that learning to write in a L2 is a complex process that involves students’ L1 background and writing expertise in addition to their L2 linguistic proficiency and factors associated with their classroom instruction. In the following section, the researcher will present some of the sociocultural factors suggested in the literature and some of the cognitive factors that influence the composing process, as well as their specific application to Kuwaiti students.

3.8.1 Past Educational Experience

The first key element that influences L2 composition is past educational experience. Roca and Murphy (2001) point out that the writer’s educational experience can affect the writing process. The researchers argue L2 writers are part of a certain educational context from which they get training and experiences. This context is related to culture and historical or institutional settings where composing processes take place. Each of these educational contexts provides a situation that presents different learning opportunities and has its own demands. The writer’s educational background also influences the type of planning strategies used. Cumming (1998) found that expert L2 writers with different educational backgrounds applied different strategies in controlling their texts. L2 writers with a background of technical writing tended to frame their compositions in advance (advanced planners),
although the writers who had literary background tended to enhance their mental representations as the composing progressed (emergent planners). Friedlander (1990) further noted ESL writers write better in matched conditions (i.e., L1-related topics written in L1 and L2-related topics written in L2) than in mismatched conditions. Similar results were reported by other researchers (Leki, 1995; Sasaki & Hirose, 1996). For example, the writer’s previous educational experience, guided through explicit instruction, has also been found to influence the organization of information in the text (Sasaki & Hirose, 1996). Moreover, Leki (1995) reported that all the ESL participants relied on previous writing experience at some point during the study.

The study by El-Mortaji (2001) provides evidence of the influence of past learning experience on the writing process. The results showed the participants relied heavily on rules and knowledge they already possessed as they applied their retrieved knowledge in various stages of the composing process. The participants depend on their previous education to decide what to include in their writing in terms of the number of lines and number of paragraphs. One participant “considered two paragraphs as sufficient for an English essay” (El-Mortaji, 2001, p. 270) because he had always been given a passing mark for essays he wrote using two paragraph structures. Another influence of prior education was evident in the participants’ dependence on the rules of grammar that their teachers stressed, particularly in relation to the use of tenses, in addition to restricting themselves to writing simple, short sentences to avoid making mistakes as suggested by their teachers. Further, El-Mortaji finds that many of the participants used planning strategies heavily because of prior teaching methods that stressed the use of outlining. However, El-Mortaji claims that this led less proficient participants to plan rigidly and inflexibly because of prior instruction to adhere to an outline.

Researchers investigated the influence of instruction on strategy use through descriptive statistics and reported how the participants’ past writing instruction shaped their deployment of strategies and interventionist studies that experimentally measured the effects of strategy training (Sasaki, 2000). According to Manchon et al. (2007), evidence indicated the positive influence of instruction regarding how students approached writing tasks (as a result of their mental models becoming more multidimensional) and how confident they became. In addition, instruction and training influences the quality of the essays produced. However, Sasaki (2004) looked at the role of instruction for a long period of time and determined that for the effect of instruction to be long-lasting, writing practice is crucial. In the longitudinal study of a group of university students, Sasaki found the effects of the
process instruction the participants received in their first year at university were neutralized by the subsequent lack of writing practice. Thus, it is exposure over time, rather than a singular writing course, that provides SLA outcomes for EFL students.

The previous studies are significant for the current research because they demonstrate the type of instruction students receive and their experience in writing classes can influence their perceptions. Previous instruction also directs their thinking, contributes to the setting of affective attitudes, and guides their utilization of types of strategies. In the current study, the researcher aimed to investigate those strategies and their relations to writing instruction—one of the affective factors in the writing process. The following subsection includes a discussion of the influence of the learning context on writing.

3.8.2 Influence of the Learning Situation

Compounding the influence of the classroom experience indicated in the previous section, the learning situation can significantly influence language learning (Riazi, 1997). Riazi (1997) studied four Iranian doctoral students of education focusing on accounting for the learners’ conceptualizations of their writing tasks, their strategies for composing, and key aspects of the academic courses they were participating in as the immediate context of their writing and their personal perceptions of their own learning. Riazi grouped the composing strategies to fit into four categories: cognitive, metacognitive, social strategies, and search strategies. According to Riazi, participants’ cognitive strategies led them to work with, think about, and manipulate materials required for task completion. Strategies included such specific strategies as note taking, inference, and elaboration. A relationship was found between the participants’ L1 and ESL in the specific context of their graduate studies. The participants did not put their previous experience aside and did not start again in their ESL. Instead, in a dynamic and interactive process, they were using their previous knowledge, skills, and strategies. The metacognitive strategies, such as self-regulatory strategies, helped the participants exercise control of their performance on the writing tasks, thus reducing their anxiety about not knowing what to do. Social strategies included those practices and activities in which participants interacted with their professors and other members of their academic community to clarify a task, or to discuss comments they had received about their learning. The participants in Riazi’s study used a variety of strategies similar to those identified and classified by other researchers (O’Malley & Chamot, 1990b; Oxford, 1990). Thus, Riazi’s study indicated support for a sociocognitive view of L2 writing.

The importance of this study is that the researcher focuses on the contextual elements of the immediate learning situation that controls the participants’ perception of the task, the
goals they were assigned, and the strategies they employed to accomplish these goals. Riazi’s (1997) study revealed that the participants perceived writing tasks in a way that made clear the influence of their context. Riazi argued that the participants were involved in a series of actions that moved from interpreting to representing and performing the tasks. The writers’ representations determined the form, substance, and style of the content to be written. Their perceptions of the task were influenced by the environment they were working in and channelled their thinking in a direction that contributed to the setting of particular goals and guided their utilization of particular sets of strategies. In Riazi’s study, the participants’ perceptions, understanding, and goals interacted with the specific local culture of writing in which the study took place. Hence, Riazi stated, “the type of knowledge and learning participants believed they acquired denoted the disciplinary literacy required for writers in specific context, making them functional and helping them produce their academic text” (Riazi, 1997, p. 134).

Researchers can conclude that studying the composing process must not be done in isolation from social and cultural dimensions. Researchers must also integrate and develop cognitive and sociocultural theories into new research. This need for sociocognitive consideration is further reflected in the following discussion of instructional techniques, a vital component of the learning environment.

3.8.2.1 The Effectiveness of Instructional Techniques in Enhancing Students’ Writing

Instructional theories of practice are essential to understanding and enacting effective EFL writing (Nouraldeen & Elyas, 2014). Alhaysony (2017) defined theory of practice as a type of theory of action taken by a teacher in response to a situation, or “vehicles for explanation, prediction, or control” of a given situation (p. 70). Alhaysony further explained that people operate based on innumerable theories they use to respond to all kinds of situations they encounter in life.

In relating definitions of theory of practice to teacher pedagogy through a sociocognitive lens, teaching practices may reflect the individual teacher’s theories, or may reflect other philosophies, theories, and even other beliefs. Actual practice is a product of a negotiation between many elements undergirding the teacher's beliefs about individual practices and what influences beliefs in the classroom. Teachers often struggle to attain a sense of congruence between what they feel strongly about doing and what they are required to do. Theory of practice is a tool to analyse the way a teacher rationalizes pedagogy and could assist in comparing teacher explanations to the behaviours observed.
Researchers have sparsely investigated theory of practice (Nouraldeen & Elyas, 2014). Current researchers found complex links between teachers’ ethnic and social backgrounds and their practices. This research showed teachers reflect degrees of sensitivity to the Kuwaiti ESL class students, thereby influencing teaching practices. Other research pertaining to an ESL teacher’s theory of practice showed a teacher’s theory of practice could be difficult to change by introducing new information (Al-Ahdal & Al-Awaid, 2014). According to Al-Ahdal and Al-Awaid, the new information conflicted with the teacher’s established views and the researchers found this conflict to interfere with a theory of practice. Al-Ahdal and Al-Awaid concluded that although the teacher did not change a personal view about an ESL practice, the teacher did demonstrate reflectiveness because of exposure to an alternate idea. In a third case, a teacher placed in a new language education situation similar to that of the teacher’s students changed instructional practices as a result, suggesting the teacher’s theory of practice was also changed (Abdelgafar & Moawad, 2015).

Pertinent to theory of practice is for researchers to develop a clear, unifying understanding of the best practices for specific cultural contexts. McMullen (2009) stated that positive effects were associated with Arab Gulf students’ English writing when they used the writing strategy instruction. Drawing from the research by Al-Sudies (2005), the positive effects aligned to use of metacognitive awareness training to enhance the EFL writing skills of Saudi student teachers are realized when the writing instruction changes and the teachers alter their beliefs in pedagogy. Teachers use direct correction to relay feedback more frequently than they use any other techniques. In this regard, Daoud and Al-Hazmi (2003) indicated that surface-level aspects, including grammar, mechanics, and vocabulary, were the most integrated type of feedback received from teachers. The least frequent feedback given by teachers was about organization. Mohammad (2005) indicated that students in Yemen preferred indirect feedback opposed to direct feedback from instructors. Al-Shumairi (2008) noted that Yemeni students were more responsive to instructional comments as opposed to evaluation or questioning of comments. However, Al-Qurashi (2005) found no significant effect of peer feedback on Saudi students’ perceived support in English writing classes. A subsequent study by Al-Qurashi (2009) indicated that positive peer feedback improved writing of texts. A reflection on the evaluation of teaching practices of English writing to Arab Gulf students revealed a need for transformation of the existing practices. In this regard, Muhammad (2008) stated that it would be more effective and appropriate if an alternate approach to teaching English writing in classrooms existed (i.e., a new curriculum for the students in Kuwait in regard to this study).
Alam (1993) studied Kuwaiti students; the results indicated the students used Arabic in all the stages of writing and attempted to make more frequent use of the language at the vocabulary level. This was similar to a study by Fageeh (2003) among Saudi students who were reliant on L1 (Arabic) in the construction of ideas as well as in rehearsal of texts written in English. Preplanning writing tasks were more effective among Saudi students opposed to using the within-tasking planning approach (Al-Humaidi, 2008).

Several challenges for the Gulf students occur when it comes to the EFL composing processes. Lack of writing challenges and grammar knowledge and frequent mechanical and vocabulary difficulties are some of the challenges (Aljamhoor, 1996; Fageeh, 2004). Other challenges include the inability to effectively employ the process of writing with self-regulation (Al-Humaidi, 2008). Additionally, some similarities were identified between Gulf students’ process of composing and revising in the Arabic and English languages (Al-Semari, 1994; Alhaysony, 2008). After comparing the writing mistakes, Al-Semari (1994) noted that the Saudi students tended to make more formal, mechanical, grammatical, reorganization, and deleting revisions in English writing as opposed to Arabic writing. However, it is not yet known whether and how instructional strategies, such as writing assignments, influenced Kuwaiti students and their chosen writing strategies. This investigation was the purview of the current study. The following subsection includes a discussion on writing proficiency level and its influence on writing.

### 3.8.3 Writing Proficiency Level

L2 proficiency plays a central role in L2 writing because some degree of L2 proficiency is obligatory for producing an L2 text, and it is generally recognized that differences in language proficiency distinguish L1 writers from L2 writers (Grabe, 2001). As previously discussed (see Section 3.3.2), interdependence, in the vein of Cummins (1978) can emphasize previous skill in L1 in SLA, but only to the extent that such skills are developed in L1. This is a central cognitive aspect of understanding L2 learning. Research in the field of writing processes and strategies has shown that the writing level of proficiency affects the writing processes. Bereiter and Scardamalia (1987) stated that the composing process of skilled writers is different from those of unskilled writers; the notion of skill is the underlying assumption of their knowledge transforming and knowledge telling writing models (see Section 3.4.4). Researchers who examined this variable reported the writer’s proficiency affects the quality and quantity of the strategies applied.

Flower and Hayes (1980) analysed the pauses to examine the content and nature of planning. The researchers found that the quantity and quality of goal plans differentiated good
and poor writers. Although poor writers concerned themselves with issues related to the participants, good writers seemed to create a rich and elaborate network of goals and subgoals that helped generate more content. Alhaysony (2008) and Sasaki (2000) reported similar results. Moreover, Grabe and Kaplan’s (1996, p. 240) research pertaining to writing suggests good writers (a) plan longer, (b) have more elaborate plans, (c) review and reassess plans on a regular basis, (d) consider more kinds of situations to rhetorical problems in writing, (e) consider the reader’s point of view in planning and writing, (f) incorporate multiple perspectives into the drafting, (g) revise in line with global goals rather than merely editing local segments, and (h) have a wide range of writing and revising strategies to call upon. The conclusion drawn from these studies and many others is that the writer’s proficiency level significantly influences his or her composing process.

One element that might also influence proficiency levels is the use of computer word processors to compose. In the last two decades, students’ academic writing is increasingly performed using electronic devices, such as computer and text processing software, which may influence writing processes. In general, researchers have found that word processing has medium-sized positive effects on writing quantity, as students writing with a keyboard produce longer texts, and small-to medium-sized positive effects on writing quality (Goldberg, Russell & Cook, 2003). Research on the development of the writing skills of young language learners has been limited (Cumming, 2016), although previous research has shown that both dictation and speech-to-text software (STT) can increase the quality of writing for native English speakers (Arcon, Klein & Dombroski, 2017). In a study of 54 graduate students’ handwritten and electronically written essays, Van der Steen, Samuelson and Thomson (2017) similarly indicate a beneficial effect of text processing software, in terms of both qualitative and quantitative writing output. A hierarchical cluster analysis was used to detect distinct performance groups in the sample, who mapped onto three differing working memory profiles. The groups with higher mean working memory scores manifested superior writing complexity using a keyboard, in contrast to the cluster with the lowest mean working memory. The findings also revealed that more revision during the writing process itself does not necessarily reduce the quality of the final output.

One key difference between online and handwriting is in revision, according to the research. Goldberg et al. (2003) indicate using text processing software stimulates revision, which potentially results in higher quality writing compared to revisions made using pen and paper, which suggest the effectiveness of word processing software for academic writing. Moreover, Li (2006) found that his participants revised their writing significantly more using
electronic programs than they did when replying on handwritten samples. However, few studies explore the use of technology to support language development and writing proficiency among EFL learners (Moore, Rutherford & Crawford, 2016).

Considering the positive influences of word processing software on native speakers’ writing (Goldberg et al., 2003), it may be that EFL students would experience similar improvements. Some researchers have conducted some limited research in this avenue; for example, in their study to investigate the effect of STT software on the written composition and cognitive load of elementary school English language learners (ELLs), through a within-subject experimental design, Arcon et al. (2017) revealed that 21 ELLs completed persuasive texts in 3 modalities: handwriting, dictation to a scribe (DS), and dictation to STT, compared to handwriting resulted in significantly higher text quality, word count, and fluency and a lower error rate and required effort. Students and text characteristics associated with text quality in each modality was examined. STT compared to handwriting resulted in significantly higher holistic text quality and a lower error rate and effort. STT appears to have the potential to reduce the demands of transcription (both spelling and handwriting), allowing students to focus on text production (Arcon et al., 2017). However, it may be that encouraging such software will limit ELLs’ abilities to produce written texts in situations where they would have to do so, in turn making them rely on software to develop effective texts.

Institutions are increasingly paying attention to the possible ways to support and help develop their non-native English speaker (NNES) students’ writing abilities, because academic writing is critical to the students’ ability to adjust to their new environment and the academic success (Moore et al., 2016). Tibi, Stall, Joshi and Park (2016) point out that academic writing at the university level can be a difficult task for many native-Arabic students, especially in L2 writing, as the higher-level processes expectedly from the university students are integral to the development of their understanding of the complex concepts that will add to their knowledge in their field of study. Moore et al. (2016) state that the integration of technology into non-native English speakers’ language development programs approach could efficiently support their language and writing needs, as well as promoting their independence. According to Tibi et al. (2016), ELLs in university settings in UAE tend to rely on their instructors’ face-to-face explanations to better understand the academic English content, and often seek assistance in their writing from a writing centre or editor. This face-to-face instruction and support could be supplemented with technology; for example, according to Moore et al. (2016), writing productivity software is as assistive technology through which users input text into a computer or a mobile device, which in turn offer various
features to support the process of writing, such as word production, dictionaries, and speech-to-text ability. The findings of Moore et al.’s (2016) study revealed that students frequently use technological tools to enhance learning and that technology-based supports such as writing productivity software can complement face-to-face supports.

The present study assessed students in non-mediated learning situations, i.e., creating handwritten texts without word processing (see Section 4.4.4). This context indicates EFL students’ abilities without supports from technology, although this context may be decreasing in authenticity given the rise of word processing software and may also not allow them to show their full abilities in scenarios where they can use technology to generate text. In line with factors that influence writing processes, the following subsection highlights the influence of the discourse and task type on the writing process.

3.8.4 Influence of the Discourse and Task Type

In addition to writing proficiency, the discourse and task type may influence EFL writing. Many composing process studies have dealt with different types of writing, mostly expository (Zamel, 1983), narrative (Raimes, 1987; Jones & Tetroe, 1987), and argumentative (Raimes, 1987; Cumming, 1989). Cumming (1989) stated that two variables exist within L2 writing: writing expertise and L2 proficiency. Cumming defined writing expertise as one’s ability to weigh the writing context with its multifaceted social constraints and bring the appropriate process and strategies to bear on the writing task to produce a piece of writing that is well-suited to the audience and purpose of the writing context. The roles of L2 proficiency and writing expertise within L2 writing were influenced by two general theories that affected the transfer of writing expertise across linguistic boundaries: the linguistic interdependence hypothesis and the linguistic threshold hypothesis. The linguistic interdependence hypothesis states writing in an L2 uses the same core processes as writing in L1. However, the linguistic threshold hypothesis states a writer must reach a minimum level of L2 proficiency before writing performance in the L1 and L2 correlate (Cumming, 1989).

According to Cumming (1989), differences in writing tasks can affect the composing behaviours of writers. In Cumming’s study of writing expertise and L2 proficiency, the researcher asked the participants to compose three types of writings: an informal letter, an expository argument, and a summary of a booklet. Cumming’s findings suggest different writing tasks impose different cognitive loads on writers and consequently lead to different composing habits. According to Cumming, the “more cognitively demanding expository argument and summary tasks produced significantly different behaviours from a less cognitively demanding letter task” (p. 81). For example, Myles (2002) suggests that
formulating new ideas in writing can be difficult because it involves information transformation, which is considered more complex than writing as telling.

Some researchers focused on the possible effect of task features, such as topic knowledge or cultural factors, on L1 use during L2 writing and text quality, but failed to find a significant effect of planning during prewriting (Friedlander, 1990). However, Friedlander did find that writers wrote their best texts on familiar topics related to their L1 cultural background, regardless of whether the plans for those texts were produced in their L1 or their L2. Friedlander suggested that a significant sociocognitive aspect of the EFL writing process includes the development of the assignment and the writing subject, which the researcher in the current study investigated.

In another study on the influence of discourse on students’ writing, El-Mortaji (2001) reported the participants exhibited different writing behaviours across two composing tasks: expository and narrative writing. Participants used more writing strategies on the narrative task, such as planning, rehearsing, reading, questioning, assessing and commenting. Moreover, El-Mortaji’s interview data revealed writers’ different reactions and preferences based on the participants’ perceptions of how challenging they considered the writing task, their knowledge, and the amount of text they felt they could produce. Most of El-Mortaji’s participants felt more comfortable working on the narrative task because they were asked to compose a story about something that happened to them; the participants felt they had sufficient access to knowledge in this case, as well as to literary theory and the expository essay, which they studied in prior classes. However, from the expository task in which they were asked to compose an article, the participants did not have any prior knowledge to retrieve because they had no exposure to this genre in any of their previous classes.

The findings of this study are of importance to the current study because both studies involved a narrative writing task. Accordingly, the researcher compared results from the current study with the results from the El-Mortaji study. Such an analysis contributed to a better understanding of the nature of L1 use as well as its strategic use in the teaching of L2 writing. The studies in this section clarified that the writing tasks and the context in which individuals write are significant in understanding EFL writing. Thus, the current researcher included both elements through an analysis of the writing assignments in the given course. The researcher also included gender, which is discussed in the following section.

3.8.5 Influence of Gender in Language Learning

A substantial amount of research has been carried out regarding gender differences in language learning, as both biological and social-cultural perspectives have tried to consider
the observable differences in male and female linguistic competence and performance; however, much of the discussion from the biological perspective focuses on L1 acquisition (Poham, Farley & Ramonda, 2015). Previous research has found that males tend to be more visually and spatially oriented when employing vocabulary-learning strategies, while females generally rely more on auditory techniques (Catalan, 2003, cited in Pahom et al., 2015). On the other hand, other research has suggested that females use more general language learning strategies overall (Green & Oxford, 1995). In their study on gender differences in proficiency scores in L2 Dutch, Van Der Slik, Van Hout, and Schepens (2015) analyzed gender differences across countries of origin and continents, and across other tongues and language families, using a large-scale database containing information on 27,119 adult learners of Dutch as a second language. Their study revealed that female learners consistently outperformed male learners in speaking and writing proficiency in Dutch as a second language. For reading and listening skills in Dutch, no gender gap was found. Moreover, female language learners’ profit more from higher educational training than male learners do in adult second language acquisition. Van der Slik et al. therefore conclude that there seemed to be a biological advantage for language learning among women. Contrarily, in their study of 46 Spanish participants, Pahom et al. (2015) examined the effect of Spanish learners’ gender on the rate of recall of abstract and concrete words via an instructional treatment based on L2-L1 and L1-L2 translations. The results of the immediate and delayed posttest showed no effect for gender on the recall of abstract and concrete words separately, but males did significantly better on the overall recall of all words. The results of their study suggest gender differences in recall, but opposed to Van der Slik et al., the advantage was for men.

Researchers further indicate that gender may influence learners’ affective variables towards second language acquisition. Studies examining factors such as culture, background, and gender have been shown to have an impact on motivation, attitude and L2 learner beliefs and outcomes (Kobayashi, 2002). Kobayashi’s (2002) study reveals more positive attitudes towards L2 learning in Japanese female participants overall. Kobayashi suggests that the male-female differences in attitude might be related to other societal factors, such as the study of English in Japan perceived to be a feminized field of study. According to Kobayashi (2002), the perception of English study as a feminized subject could tie into other motivational factors related to gender.

However, recent researchers of second language acquisition have paid little attention to the role of learners’ gender. The lack of focus on gender might result from the ingrained assumption as a matter of fact that female L2 learners do better than male learners when
learning second languages (Van Der Slik et al., 2015), an assumption which stems from the early research on the topic. Sociolinguistic investigations during the 1970s, which focussed on syntactic, phonological, and morphological variations, regarded gender as a sociolinguistic variable (Sheikhzadeh, 2016). Gradually, the study of language began to move towards understanding gender as a constitutive factor in building social identities (Sheikhzadeh, 2016). Sheikhzadeh (2016) argues that the main principle of social constructivist gender theory is that gender is a social construct/construction which is performative in nature. Thus, research on identifying differences between males and females needs to move to instances where there are both similarities and differences in the speech of them, which would move research in the field of language use to understanding how and when language use constructs gender differences as a social category (Sheikhzadeh, 2016). Specifically, Sheikhzadeh states that gender is dynamic and is negotiated according to the activity or context, thus males and females negotiate a continuum of femininity and masculinity which is determined by its linguistic marking. In other words, the idea that gender is dualistic category that exists prior to and outside talk should be suspended, and sociocultural examinations of gender explore the uncountable ways in which gender, and gender difference, are constructed, oriented to, and used in language (Sheikhzadeh, 2016). Poham et al. (2015) argues that research focusing on sociocultural perspectives of gender differences in linguistic ability can also influence second language acquisition; for example, language learning strategies and gender-related subject matter likely also play a role in gender related learner outcomes (Pahom et al., 2015; Sheikhzadeh, 2016). Thus, the bent of research calls for a thorough consideration of gender, and encourages a sociocognitive perspective, as used in the present study.

3.9 Conclusion

In this chapter, the researcher provided a discussion of predominant SLA theories, including sociocultural and cognitive approaches, as well as the theoretical framework for the current study, the socio-cognitive approach. The socio-cognitive approach was appropriate for this study in that it accounts for social and environmental influences in conjunction with cognitive factors (Atkinson, 2002, 2010). The current study is the first sociocognitive approach to EFL in the Kuwaiti context and contributes to the field of L2 writing. Thus, support for a sociocognitive approach for the teaching of EFL writing may provide curricula designers and teachers of writing with a broader context of EFL writing strategies for Arabic English language learners, through integrating the cognitive and social models to writing instruction. Literacy and L2 writing strategies were discussed, as well as research and models of writing. The chapter also included a discussion of key studies in the field of L1, ESL, and
EFL writing strategies. The second half of the chapter was dedicated to reviewing several researchers who adopted the socio-cognitive approach of writing and presented research findings from the area in addition to highlighting some of the sociocultural and cognitive factors previously reported. These factors revealed socio-cognitive factors that might influence L2 learning. The next chapter presents the methodology used to objectively and systematically collect and analyse data.
Chapter 4: Research Methodology

4.1 Introduction

In the previous chapter, the researcher reviewed the literature in the areas of second language writing, especially the L2 writing processes and strategies, and the characteristics of students’ texts in terms of cohesion and quality. The study followed a mixed methods research design, utilizing questionnaires, think-aloud protocols, semistructured interviews, and written products of students as research instruments.

This chapter sets out the research design of the current study, deriving from and building on the literature. In Section 4.2, the researcher restates the research questions of the current study from Chapter 1, and then discusses the key principles of the research design adopted to answer these research questions. Section 4.3 presents the key methodological principles underpinning the research design and research instruments. Sections 4.4 and 4.5 specify the research instruments used in answering the research questions. Section 4.6 presents the process of data collection, the nature of the data, the participants, and the methods of data analysis. Section 4.7 presents the data analysis techniques employed in the current research. The ethical issues throughout the research process are presented in Section 4.8. The researcher triangulated the findings of the four research methods of data collection, as presented in Section 4.9, to achieve a high level of reliability and to provide depth and breadth of the analysis in the present study.

4.2 Research Questions

The researcher investigated the writing strategies of Kuwaiti college students of English. The study aim was to explore the current approach to EFL writing in Kuwaiti third level education from the students’ perspectives, and the quality of their writing in terms of cohesion and the challenges they face in this area. Another aim of this study was to inform pedagogical practice and learning strategies of these students especially in respect to their writing skills.

The researcher answered the following research questions:

1. What kind of strategies do Kuwaiti college students utilize for writing? Is there a significant relationship between gender and writing strategy use?
2. What is the impact of utilizing L1 when composing in English as a second language (L2)?
3. What are the characteristics of the texts produced by Kuwaiti college students in terms of cohesion and quality?
4. What is the relationship between strategy use and text characteristics in the writing of Kuwaiti college students?

Because the researcher investigated the writing strategies in an EFL classroom and the quality of students’ writing in terms of cohesion, a mixed methods research design utilizing the four research instruments was optimal to answer the four research questions.

4.3 Principles of Research Design

This study followed a mixed methods design to collect both qualitative and quantitative data. The data were merged, and the results elucidate the research problems to address the research questions. The data were collected with questionnaires, semistructured interviews, think-aloud protocols, and textual analysis of students’ written products for triangulation purposes.

In investigating writing strategies and processes, previous ESL and EFL researchers used either introspective data, such as think-aloud protocols (Arndt, 1987; Jones & Tetroe, 1987; Raimes, 1987); retrospective data, such as interviews (Silva, 1992; Zamel, 1983); and questionnaires (Oxford, 1990). Petric and Czárl’s (2003) study was based on the validation of a strategy writing questionnaire. In other studies (Alharthi, 2012; Alhaysony, 2008; Al-nufaie, 2014; Chaaban, 2010; El-Aswad, 2002; Raimes, 1987; Wang & Wen, 2002), researchers combined the two kinds of data sources. Because of the quantitative nature of the research methodology, questionnaires were used as the main instrument for investigating the participants’ writing strategies.

The justification for using a mixed methods design for the full exploration of the research questions is detailed in the following sections. Based on contradictions between think-aloud protocols and quantitative survey data within a sample, Alharthi (2012) indicates that the writing strategies questionnaire alone cannot be considered a reliable research method and has to be supported by the think-aloud protocols to give a more accurate account of the use of strategies. Drawbacks of previous researchers also included the lack of collecting writing samples from students in different years might be a more representative sample of the target population and interviews (El-Aswad, 2002). The researcher attempted to explore the current approach to EFL writing in Kuwaiti third level education from the students’ perspective and the quality of their writing, particularly in terms of generating a cohesive text, while also attempting to investigate the strategies exploited in writing, challenges faced in this area, and the effect of gender on using those writing strategies. In addition, the researcher investigated the effect of using L1 when composing in L2.
The initial plan was to apply an action research in the current study. According to Dick (1997), action research is usually described as cyclic, with action and critical reflection taking place in turn. The reflection is used to review the previous action and plan the next one. On the other hand, Dick (2000) rejects the view that action research must be participative, or qualitative or published. However, undertaking an action research usually proves difficult to conduct as compared to the conventional research (Dick, 1993). Another disadvantage of doing action research is that it is too involved and sometimes the researcher can even fail to retrieve the accurate data or sufficient credit for the research. Consequently, action research typically fails to accord several expectations of the examiners. This is because it generally ignores the fundamental requirements which form the critical parts of the ideologies of any conventional study. In addition, some researchers fear to undertake action research because it automatically leads to a lower grade irrespective of the effort used in conducting it (Dick, 1993).

To minimize the effects of those problems, the present study adopts a mixed methods design to yield detailed information on EFL writing-strategy type, and the cohesive devices that EFL Kuwaiti undergraduate students use in their writing. This was done to avoid the researcher’s bias and overcome assumed drawbacks. Thus, qualitative and quantitative methods were carefully combined for more validity and reliability.

According to Creswell (2008), the combination of both quantitative and qualitative forms of data provides a better understanding of research problems than either form of data by itself. “Mixed methods designs are procedures for collecting, analyzing, and mixing both quantitative and qualitative data in a single study or in a multiphase series of studies” (p. 62). Creswell (2008) states that quantitative data, such as scores on instruments, yield specific numbers that can be statistically analysed, can produce results to assess the frequency and magnitude of trends, and can provide useful information when describing trends about a large number of people. Qualitative data, such as open-ended interviews that provide actual words of people in the study, offer several perspectives on the study topic and provide a complex picture of the situation. In addition, researchers may conduct a mixed methods study when one type of research (qualitative or quantitative) is not enough to address the research problem or answer the research questions. Furthermore, Johnson and Christensen (2008) state that mixed methods design serves not only to improve the quality of research by strengthening the validity of the findings, but also to build on the strength of different methods and highlight their weaknesses. Therefore, a mixed methods design was the most suitable approach for achieving the current research goals and yield detailed information on investigating EFL
writing strategies that Kuwaiti college students exploit in their writing, exploring the current approach to EFL writing from the students’ perspective, the quality of their writing, in terms of generating cohesive text, as well as investigating the impact of using L1 when composing in L2.

This study was based on both qualitative and quantitative designs that derived data from multiple sources. This multiapproach technique helps develop and improve the learning outcomes of these students, specifically regarding their writing skills. The reason for adopting this approach is its reliability, which has led to its use by other researchers conducting similar studies (Alharthi, 2012; El-Aswad, 2002; El-Mortaji, 2001; Mohite, 2014; Yuksel, 2014). Further, to achieve valid and reliable results, a descriptive approach has been implemented in the process of collecting and analysing data from the participants in this study. Hence, the researcher analysed the contents of the samples of students’ writing assignments in terms of the degree of macrolevel cohesion.

In subsequent sections of this chapter, the researcher distinguishes between both qualitative and quantitative research. Highlighting these differences enabled the researcher to differentiate the methods when conducting educational research.

4.3.1 Differences between Qualitative and Quantitative Research

According to Draper and Brown (2004), qualitative research can be described as a naturalistic approach to understanding social phenomena in their natural settings to produce “thick description” (p. 643). This methodology is an inquiry process of understanding based on traditions that explore social human problems within a natural setting (Creswell, 2008). According to Mackey and Gass (2005), qualitative research provides a rich description that is not possible in quantitative methods. Furthermore, qualitative researchers consider certain behaviours or phenomena specific to the context under study (and not to other contexts).

A qualitative approach is an open-ended process that provides the advantage of allowing the researcher to study subjects, activities, or any phenomenon as an observer paradox to achieve a more natural and holistic picture of the phenomenon and to highlight its sociocultural context. This is because qualitative researchers go to the people they are investigating rather than extricate people from their everyday world (Rossman & Rallis, 2003). Another characteristic of the qualitative approach is that it makes use of a small number of participants; hence it is not concerned with generalization. Furthermore, qualitative research adopts an ‘emic perspective’ in the sense that it aims to “interpret phenomena in terms of the meanings people attach to them” (Mackey & Gass, 2005, p. 163). Developing an emic perspective usually means being “in the field, face to face with real people” (Rossman &
Rallis, 2003, p. 9) and using the participants’ terms and concepts to describe their world when analysing the data and presenting the findings.

Qualitative approaches involve a wide variety of data collection methods, such as observations, interviews, open-response questionnaire items, verbal reports, diaries, and discourse analysis. The data that could be gathered from these methods “make the world visible in different ways” (Denzin & Lincoln, 2005, p. 4). The data gathered allow the researcher to richly describe the participants themselves, the setting, and the events that happen. This gives the reader a sense of entering the participants’ realities and sharing their experiences. Thus, a qualitative approach is useful to help the researcher explore social or human problems and then build a complex picture, analyse words, report detailed information, and conduct the study in a natural setting.

According to Anderson (2010), a qualitative research design has its own disadvantages: First, research quality is heavily dependent on the individual skills of the researcher and more easily influenced by his or her own personal biases. Second, the volume of data makes analysis and interpretation time-consuming. Third, the researcher’s presence during data collection, can affect the subjects’ responses. Finally, problems may occur with issues of anonymity when presenting findings.

Creswell (2008) states that a quantitative study is an inquiry into an identified problem based on testing a theory using statistical techniques. Furthermore, the theory is composed of variables, measured by numbers, and analysed by statistical measures to determine whether the predicted generalizations are true. Consequently, the reason for using the quantitative approach is that it entails a deductive approach to the relationship between theory and research, and also embodies a view of social reality as an external, objective reality (Bryman, 2004).

Because measurement is one of the quantitative methodology features, this facilitated the researcher’s goals in measuring the dominant type of EFL writing strategies of Kuwaiti college students and the challenges they face in this area through the problems and difficulties encountered when composing in English. The researcher was interested in describing how students write and the strategies they use when they write (in terms of their writing skills). Another reason for choosing the quantitative method is that in quantitative research, the researcher is usually concerned with being able to say that the results are not unique to the individuals who respond to the study and to be able to generalize the findings beyond the cases that make up the sample (Bryman, 2004). In addition, the results in quantitative research are less affected by the researcher’s expectations. Therefore, the results and the procedures of
the study in quantitative research can easily be replicated by others, which will enhance its validity and reliability (Bryman, 2004). Moreover, data analysis in quantitative research is less time consuming as it uses statistical software such as SPSS (Connolly, 2007).

Despite the advantages of the quantitative method of research, conducting a study using a quantitative method has some disadvantages. Yates (2004) states that quantitative methods are artificial ways of exploring social life because researchers collect data from situations that differ from everyday social activity. Moreover, quantitative methods impose a researcher’s assumptions on the respondents by providing only limited responses through closed questions. In addition, in the quantitative method, the research questions may not be related to the respondents’ interests or to their everyday lives (Bryman, 2004). Besides, the quantitative research paradigm overlooks the participants’ experiences and perspectives in highly controlled settings, due to the lack of a direct connection between researches and the participants when collecting data. As a result, the data obtaining method becomes objective (Ary, Jacobs, Sorensen & Walker, 2013).

Therefore, a mixed methods design of both qualitative and quantitative methodologies was used in the current study to yield detailed information and to overcome assumed drawbacks. For example, in terms of establishing validity and reliability, the researcher used methodological triangulation through combining both qualitative and quantitative data, which resulted in a more complete picture of students’ attitudes towards the writing process. Furthermore, as suggested by Hodder (2003), “Texts can be used alongside the other forms of evidences so that the particular biases of each can be understood and compared” (p. 156).

The researcher employed questionnaires, think-aloud protocols, semistructured interviews, and students’ written products. The researcher discusses each of these methods in more detail in following sections of this chapter.

4.4 Research Instruments

In investigating writing strategies and processes, previous ESL and EFL researchers used either introspective data, such as think-aloud protocols (Arndt, 1987; Jones & Tetroe, 1987; Raimes, 1985); retrospective data, such as interviews (Silva, 1993; Zamel, 1983); and questionnaires (Sasaki & Hirose, 1996). Other researchers (Alharthi, 2012; Alhaysony, 2008; Alnufaie, 2014; Chaaban, 2010; El-Aswad, 2002; Raimes, 1987a; Wang & Wen, 2002) combined the two kinds of data sources. In this study, the main research instruments used for investigating the writing strategies Kuwaiti college students exploit in the writing process were questionnaires, think-aloud protocols, semistructured interviews, and written products of students for triangulation purposes. The results helped to understand the research problem and
explore the research questions. The following subsections outline each of the research instruments.

4.4.1 Questionnaires

To provide evidence and support for the first research question (see Sections 4.2 & 4.5), the data were collected using questionnaires. The use of this instrument was to reflect on the writing strategies participants use in their writing process.

The questionnaire research method was administered to 100 participants, the target population. Generally, the questionnaire is a relatively popular means of collecting data, as it enables the researcher to collect data in field settings (Nunan, 1992). Questionnaires have been widely used as a research instrument to investigate ESL and EFL writing processes and strategies (Alhaysony, 2008; Uzawa & Cumming, 1989). The questionnaires were used to explore the writing strategies of Kuwaiti college students of English. Using a questionnaire as a research instrument has many advantages. First, questionnaires are cheap and relatively easy to conduct and administer (Bryman, 2004). Second, this instrument enables the researcher to collect data in field settings where the data can be quantified to produce the responses required for analysis (Petric & Czárl, 2003). Also, researcher bias is less likely to affect the results of the questionnaire because self-completion questionnaires do not suffer from asking questions in different orders or in different ways and the respondents share the same questions and instructions. In addition, questionnaires are more convenient for respondents to complete when they want and at their own pace (Bryman, 2004).

Questionnaires must be piloted before implementation, principally to increase the reliability, validity, and practicability. According to Mackey and Gass (2005), questionnaires should be piloted in advance. Wilson and McLean (1994) stated, “A pilot has several functions.” According to the researchers, the pilot is used to check the clarity of the questionnaire items as well as instructions and layout. Pilots are also used to gain feedback on the validity of the questionnaire items and the purpose of the research. Pilots also eliminate ambiguities, difficulties in wording, check readability levels for target audiences, provide feedback on what types of questions would work best and in what format (e.g., rating scale, multiple choice, open, and closed). The pilot helps to check the time taken to complete the questionnaire and provide feedback regarding whether the questionnaire is too long or too short, too easy or too difficult, and based on the experience of the respondents. Finally, the pilot helps to try out the coding or classification system for data analysis.

Cohen, Manion, and Morrison (2007) identified two types of self-administered questionnaire: those completed in the presence of the researcher and those filled in when the
researcher is absent (e.g., at home, in the workplace). According to Cohen et al., (2007), the presence of the researcher is helpful because “it enables any queries or uncertainties to be addressed immediately with the questionnaire designer” (p. 344). Furthermore, the questionnaire ensures all questions are completed and filled in correctly. However, having the researcher present may be threatening and exert a sense of compulsion, in which respondents may feel uncomfortable about completing the questionnaire and may not want to complete it or even start it. Respondents may also want extra time to think about and complete the questionnaire or to complete it at home.

Although many advantages of using questionnaires exist, a number of disadvantages exist as well. Bryman (2004) states that questionnaires may cause poor and low response rates because although some respondents would return the questionnaires immediately after several weeks, some would not even return them. A questionnaire can be read as a whole, so the problem of question-order effects may occur. Moreover, it is difficult to collect additional data or to ask as many questions as one would like. In addition, the response to a question may be influenced by the response to other questions. And if respondents are having difficulty answering a question, they may not have help to overcome their difficulties. Finally, questionnaires can reflect the typical strategies generally used by a particular population (Bryman, 2004). Questionnaires are particularly useful for exploratory studies regarding writing attitudes and behaviours and for identifying issues that can be followed up later by more in-depth methods (Hyland, 2003).

Initially, Oxford’s (1990) SILL questionnaire was carried out in the current study as a preliminary survey. This questionnaire is related to the general strategies ESL students use (see Appendix A, Section 4.6.1.1). The researcher used this questionnaire because it has been widely used and proven reliability (see Petric & Czárl, 2003). The purpose of using Oxford’s strategy questionnaire is to obtain knowledge of the types of strategies students use in language learning in general. As a result, the outcome of this preliminary survey was not relevant to the research focus, so it was decided to replace the SILL questionnaire by the writing strategies questionnaire (see Appendix C, Sections 4.6.1.1 & 4.6.1.1.1). A need existed to provide more insight into the writing strategies Kuwaiti students of English employ in the writing process, and the participants needed to be exposed to different writing skills and strategies. Thus, the writing strategies questionnaire by Petric and Czárl (2003) was more relevant to the nature of the writing problems of Kuwaiti college students.

In addition, a mixture of both closed and opened questions was used in the questionnaire. According to Nunan (1992), questionnaire items can be relatively closed or
open ended. A closed item is one in which the range of possible responses is determined by
the researcher, whereas an open item is one in which the subject can decide what to say and
how to say it. These questions also enable respondents to answer as much as they wish, and to
write a free account in their own terms to explain and qualify their responses. Open questions
can lead to irrelevant and redundant information (Cohen, Manion, & Morrison, 2007).

Finally, the researcher fully understands that using a questionnaire as a research
instrument does not provide a complete understanding of participants’ strategy use. The aim
of using the questionnaire was to gain some insight regarding the writing strategies Kuwait
students of English exploit in the writing process. The researcher decided to use other
research instruments to obtain more details about the research population. Therefore, the
following subsection details the think-aloud protocols.

4.4.2 Think-Aloud Protocols

The think-aloud protocol method was administered in the present research to examine
the writing strategies participants used during the writing process. Linguists use this
procedure to collect data pertaining to participants’ cognitive processes in certain fields, such
as writing and testing (Abdel Latif, 2009). The aim of such a research method is to make the
implicit procedures and mental activities of a certain task explicit. It provides researchers with
the most detailed information about writers’ behaviours and strategies (Abdel Latif, 2009).
This method also enables researchers to observe the approach of writers towards a writing
task rather than the final product (Alharthi, 2012). Therefore, the participants are expected to
verbalize their thinking while writing in a way that enables the researcher to monitor their
behaviours. By analysing the protocols, researchers infer the strategies or behaviours used by
writers while performing the task (Abdel Latif, 2009). According to Alharthi (2012),
participants verbalize everything that goes through their minds as they write. This method
provides a detailed picture of the writer’s composition process. The technique of this method
has been used as a research instrument in ESL and EFL writing strategies since the 1980s.
With such a technique, subjects are supposed to be able to verbalize their cognitive processes
for more depth and detailed information (Green, 1998). The think-aloud protocol is a
qualitative data collection method in which participants are instructed to think aloud and
verbalise their inner speech while completing a task. This process of verbalisation can provide
detailed information of the concurrent reasoning used (Atkinson et al., 2011).

I selected a research instrument that would allow access to the writers’ mental
processes to explore the process of writing and uncover the strategies that the participants use
in their assignments and writing tasks. Therefore, employing a think-aloud protocol was the
best choice because this method stems from the “belief that the process of writing requires conscious attention and that at least some of the thought process involved can be recovered” (Hyland, 2003, p.256).

Cohen (1998) classified think-aloud protocols into three types of verbal reports. According to Cohen, verbal reports can be:

1. Self-reports, in which subjects use general statements to describe their general behaviours.
2. Self-observation, in which subjects observe their specific behaviours, either introspectively (i.e., within 20 second of the mental event) or retrospectively (i.e., after they finish).
3. Self-revelation, in which subjects think aloud and consciously disclose their thought processes while attending to the information. Thoughts are allowed to flow verbally without controlling, directing, or observing them.

In the current study, the researcher used the self-revelation think-aloud technique as a research instrument to explore the ESL writing strategies for the following advantages. First, think-aloud protocols can reveal unobservable writing strategies. Second, these protocols can capture more direct and detailed information about what is going on in the writer’s mind during the writing process. Third, they are seen as “the richest data source based on which researchers can build cognitive models of the composing process.” (Abdel Latif, 2009, p.62).

However, think-aloud protocols as an instrument to explore writing strategies in particular have been criticized for the following disadvantages:

1. Cognitive processes and performance of tasks may be altered by concurrent verbalisation (Charters, 2003).
2. Continuous concurrent verbalisations, however, can be difficult to undertake at the same time as actions; a particular issue in situations when verbal communication is a significant part of the participant’s behaviour (Charters, 2003).
3. Mentors engage with a participant during a task period, develop a relationship, and reach a final decision based on multiple observations that affect the final decision made regarding an individual participant, as well as the accuracy of the decision maker’s memory, and perceptions of the event persists (Atkinson et al, 2011; Charters, 2003). Also, individual differences may play a role in producing different levels of verbalizations on the same task, which can negatively affect the reliability of the method (Green, 1998).
Chamot (2001) believes that researchers are recommended to identify some practical solutions to reduce reactivity and enhance validity and reliability of think-aloud protocols, e.g., participants should not explain or justify their thoughts while they are in the process of verbalization. Reactivity refers to “the fact that having to write and verbalize thoughts at the same time may disrupt the writer’s cognitive processes in comparison with what s/he would do when writing in a different condition” (Manchón et al., 2005, p. 194). In addition, participants need to verbalize their thoughts without the presence of the researcher, if possible, as this presence might negatively affect their accurate verbalizations. Participants should have clear instruction and sufficient training on how to verbalize their actual mental processes.

In this section, the researcher discussed the technique of think-aloud protocols generally, as well as the advantages and disadvantages of this technique as a research instrument in exploring writing strategies of EFL participants. This method was used with a set of students of English as a complementary method to the writing strategies questionnaire in the present research. Accordingly, the sessions of the think-aloud protocols were conducted in the presence of the researcher and took place in a classroom setting. The reason behind this was that the researcher needed to explain the requirements of the task clearly. The explanation included the nature of the task they were going to undertake, the nature of their contribution, and the aim of the current study (see Sections 4.6.1.2. & 4.6.3.1.1).

The researcher used another research instrument in the current study to obtain more details about the research population. The next subsection presents information regarding semistructured interviews.

4.4.3 Interviews

The oral interview has been widely used as a research tool in applied linguistics. The interview is a flexible data collection tool, enabling verbal, nonverbal, oral, auditory, and other multisensory channels (Cohen et al., 2007). Researchers consider interviews as a powerful tool because the order of the interview may be controlled and give space for spontaneity; additionally, the interviewer can press for complete answers, as well as responses regarding complex and deep issues (Cohen et al., 2007). Hyland (2003) argues in favour of this method, particularly in the field of L2 writing. The researcher states that the flexibility and responsiveness that comes with interviews are what make this tool popular. According to Hyland, interviews allow the informants to talk about and share their experience as writers, and to discuss their own perceptions and interpretations about these experiences. Through interviews, researchers have the advantage of seeing human experiences from a different
angle, “regarding knowledge as generated between people rather than as objectified and external to them” (Hyland, 2003, p. 254).

Nunan (1992) categorizes interviews in terms of formality, and interviews can be placed on a continuum ranging from structured and semistructured to unstructured interviews. The most formal type is the structured interview in which “the agenda is totally predetermined” (Nunan, 1992, p. 149). In the case of semistructured interviews, the researcher holds an idea regarding the direction and outcomes of the interview, and begins with a schedule of questions that expands, depending on the interviewees’ responses. The final type is the unstructured interview, which is more unpredictable in form, in the sense that it is largely guided by the responses of the interviewees rather than the researcher’s schedule.

Despite all the advantages of this method of research, some disadvantages exist that the researcher must be aware of when conducting interviews. For example, Hall and Rist (1999), (as cited in Mackay & Gass, 2005) state that interviews may involve selective recall, self-delusion, perceptual distortions, memory loss from the respondents, and subjectivity in the researcher’s recording and interpreting of the data. Another disadvantage associated with interviews is the “halo effect” discussed by Mackay and Gass (2005), in which interviewees pick up cues from the interviewer that lead them to provide the answers they believe the interviewer wants to hear, thus contaminating the data. In addition, interviews are time-consuming, could be subject to interviewer bias, and may be inconvenient for respondents as there may be no assurance of anonymity (Cohen et al., 2007).

In spite of all the highlighted disadvantages of interviews, semistructured interviews were used in the current study to address the first and the second research questions. Semistructured interviews are a set of guidelines, in no fixed order, that allow extensive follow up (Hyland, 2003). The semistructured interview format was preferred because of the flexibility that characterizes this type of interview, which can be seen in the freedom the interviewer has in changing the order of the questions and the ability to ask follow-up questions when interviewees begin elaborating on responses. This process proved effective because in a qualitative interview, data are rich and spontaneous. In addition, the use of interviews allows for triangulation of data, which is a measure taken in qualitative studies to ensure its reliability (Cohen et al., 2007).

Nunan (1992) states that it is important to pilot the interview questions with a small sample of subjects before using the questions. This process allows the researcher to determine if the questions yield the kind of data required and eliminate any questions that may be ambiguous or confusing to the interviewee.
Generally, interviews were an important method of data collection in the present study, because they helped in understanding the participants’ experience with writing problems and difficulties. Thus, person-to-person interviews were employed in this study, using the common interview format of the semistructured interviews to elicit accurate responses regarding the students’ experiences, attitudes, and strategies in EFL writing (see Appendix E). Because this kind of interview has to be guided by the basic research questions and matters to be investigated, specific interview questions related to the questions of the study were prepared (see Sections 4.6.1.3 & 4.6.3.1.1).

The next subsection details the textual analysis of students’ written products, which was used in the current study. The goal of this task was to examine Kuwaiti EFL learners’ attitudes towards cohesion-based EFL writing, as well as their understanding of the writing strategies employed in the writing process.

4.4.4 Textual Analysis of Students’ Written Products

Textual analysis of students’ written products was used in this study as another source of data to triangulate the research methods. The participants were required to compose a narrative writing task without supports from technology, i.e., creating handwritten texts without word processing, in which the writers employed certain unsophisticated processes, such as retrieving information and writing it down. The narrative writing task was considered to be the easier option, requiring no more than subjects reflecting on personal experiences. Compared to other writing task types, such as argumentative, it is believed to be more demanding and requires a complex management of writing processes (Bereiter & Scardamalia, 1987). Hence, in line with the aim of the current study to investigate the types of writing strategies used by the participants in terms of cohesion and quality, this kind of writing task was deemed.

Written products collected were an essential element in understanding certain aspects of the context of the study related to the difficulties faced in the writing process. According to Mckee (2003), textual analysis is a methodology used to gather information in academic research. It is a qualitative research method used widely to interpret meaning from the content of the text data (Hsieh & Shannon, 2005). In addition, researchers use textual analysis to describe and interpret the characteristics, content, structure, and functions of the written texts (Frey, Botan, & Kreps, 1999).

The written products of the participants were a significant element of the current study in that they provided more in-depth understanding of the students’ writing problems and the difficulties they encountered during their writing process, confirming and clarifying several
issues discussed by the students in the think-aloud protocols and the semistructured interviews. The participants also provided rich information regarding English learning in general and writing skills in particular.

The written products that were collected from the research context were of two types:
1. Writing tasks that were provided by the Department of English Language and Literature, College of Arts: These types of texts were used in classroom settings and exams.
2. Participants’ written products throughout the semester. The participants were asked to provide the researcher with their writing assignments. Those written products were samples of the students’ work that were analysed to extrapolate strategy use. The areas of focus on those texts were mainly on the writing strategies students used in their written products as well as the quality of their writing, particularly in terms of generating a cohesive text, which helped to generate more questions about the problems those students of English encountered in their writing practices.

4.5 Research Questions and Reflections on Research Instruments
As mentioned in Chapter 1, four main research questions were used to realise the research goals and objectives. The researcher attempted to answer the following research questions.

1. What kind of strategies do Kuwaiti college students utilize for writing? Is there a significant relationship between gender and writing strategy use?

To answer this question, the data were collected using a questionnaire, think-aloud protocols, semistructured interviews, and writing tasks. The use of these instruments influenced the writing strategies participants used in their writing process. Regarding the relationship between gender and strategy use, the researcher performed a Chi-square test of independence to examine the relationship between male and female participants who participated in the writing strategies questionnaire (Section 5.2.1.5).

2. What is the impact of utilizing L1 when composing in English as second language (L2)?

To answer this question, the researcher used questionnaires (see Appendix C, B.1. Items 6 & 7, B.2. Items 6 & 9), semistructured interviews with English professors (see Appendix H, Question 11) and semistructured interviews with the participants (see Appendix E, Question 3), as well as think-aloud protocols (see Appendix G). The researcher gained access to students’ experience as learners of English in general and English writing in
particular to see how their writing was shaped or influenced by L2, which was essential to investigate the composing process of students and the effect of using L1 when writing in English as a second language. Hence, the previously-mentioned tools were administered in an attempt to search for possible influences of L1 on their L2 writing, and to provide answers about certain attitudes and behaviours of students when composing in English as a second language (L2).

3. What are the characteristics of the texts produced by Kuwaiti college students in terms of cohesion and quality?

To answer this question, the researcher analysed texts from the three data sets—the think-aloud protocol, semistructured interview, and the questionnaire texts—to investigate the most frequent and the least used cohesive devices students employ in their writing process. The written texts of the students were scored based on the taxonomy of cohesive devices developed by Halliday and Hasan (1976). The researcher concentrated on dealing with the macrolevel of cohesive devices, in order to shed light on the difficulties and problems in the students’ writing process.

4. What is the relationship between strategy use and text characteristics in the writing of Kuwaiti college students?

To answer this question, the researcher performed a multivariate analysis to explore not only the relationship between strategy use and text characteristics, but also the internal relations between strategy uses. The results of the multivariate analysis of the questionnaire data presented with the text quality and cohesive device data are set out in Section 5.6 through presenting the factor analysis. In addition, the factor analysis will connect Research Questions 1, 2 and 4, together in an attempt to find a relevant link and relationship between the three research questions.

By employing these methods, the researcher attempted to answer the four research questions and obtain a clear picture of writing strategies in the Kuwaiti context. In subsequent sections, a full description of the procedures followed in administering the methods of the current study are discussed in detail.

The following sections present the methods and procedures used in both the pilot study and the main study of the current research.

4.6 Research Procedures

The current study followed a mixed methods design in an attempt to investigate the composing process and the writing strategies of Kuwaiti college students of English and to shed light on the challenges they face in this area. Using this type of method in the current
study provided an intensive description of the writing process and the strategies used by Kuwaiti college students of English, as well as the quality and cohesion of their writing. The findings of this study may result in subsequent improved student learning outcomes in the teaching and learning of L2 writing at a Kuwait university. This study involved four data-collection sources (see Section 4.4). The following flowchart in Figure 2 summarizes the data collection process in the main study. The study aligns the outcomes of data-collection regarding strategy use, with written texts of each participant across different participant groups in an attempt to explore their accounts of strategy use, and the quality of their writing in terms of cohesion.

**Figure 2 Research methods**

### 4.6.1 Data Collection Instruments

This section presents the data collection instruments used to investigate the writing strategies Kuwaiti college students used for their written products. These instruments are questionnaires, think-aloud protocols, semistructured interviews, and written products of students. The following subsections shed light on each of the data collection instruments.

#### 4.6.1.1 Writing Strategies Questionnaire

In this section, the researcher presents the writing-strategies questionnaire used in this study (see Appendix C). The procedures of piloting and administering the questionnaire were also provided.

Initially, the researcher used the Oxford SILL (1990) questionnaire in the current study as a preliminary survey. It was considered and carried out to provide a baseline of strategy use and it is widely used and has proved its reliability (Petric & Czárl, 2003). This instrument was administered to 40 male and female students of English at the Higher Institute.
of Telecommunication and Navigation at PAAET (see Appendix A), with no changes implemented on the questionnaire items.

The researcher then adopted Petric’s and Czárl’s writing strategy questionnaire (2003) (see Appendix C) on a larger number of participants (100 male and female Kuwaiti college students of the first and second year) at Kuwait University, College of Arts. This questionnaire was professionally validated using a mixed methods design of both a qualitative and a quantitative method with a large group of participants who write in English for academic purposes. The questionnaire enabled the researchers to compare findings in different contexts as they could provide important insights into general tendencies in a particular population, especially with large numbers of participants. However, the larger the number of participants, the more likely differences in context will occur. In addition, the instrument could also have pedagogical applications in two ways: (a) as a needs analysis or diagnostic tool for teachers and (b) as an awareness-raising tool for learners (Petric’s & Czárl, 2003).

4.6.1.1 Structure of the Questionnaire

In this study, writing strategies were defined as actions or behaviours consciously carried out by writers to make their writing more efficient (Cohen, 1998). The researcher used Petric and Czárl’s (2003) writing strategies questionnaire (see Appendix C) with some small additions. According to Petric and Czárl, the writing-strategy questionnaires were structured and organized as a list of written statements, each of which presents an opinion about the use of a writing strategy. The questionnaires state this format was taken from Oxford’s SILL questionnaire. Consequently, Petric and Czárl used a 5-point Likert scale with options ranging from (never) or (almost never true) to (always) or (almost always true). The Likert-scale is defined as an ordinal psychometric response scale primarily used in questionnaires to obtain participants’ preferences and measure their attitudes, beliefs, and opinions. Respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale, with one of five given choices such as (strongly disagree), (disagree), (neutral), (agree), and (strongly agree) (Likert, 1932, as cited in LaMarca, 2011). Currently, the Likert-type attitude scale is considered a reliable and valid instrument for attitude measurement and has been applied to various fields of study (Maurer & Andrews, 2000).

This kind of 5-point scale has many advantages. It is easy to construct, it does not require any personal judgements, and questions that require Likert-scale based answers are easy for respondents to complete (LaMarca, 2011). As a result, the response rate to these types of questions may be higher than open-ended questions. However, such a scale might
have the disadvantage of not allowing spontaneous responses by closing the choices for the respondents (Karavas-Doukas, 1996). The original Petric and Czárl questionnaire uses a Likert-scale, which the researcher replicated in this study to measure respondents’ attitudes toward negatively and positively-phrased statements. This type of response format was adopted because the choice of predetermined responses yields more accurate responses from the participants and were relatively easy to complete (LaMarca, 2011). In addition, the Likert-type response format allowed the respondents to indicate the level or strength of their opinions. The questions that required yes or no type answers were also included. To address the issue of limiting spontaneous responses, the questionnaire, although consisting mainly of closed questions with predetermined answers, included three open-ended questions that allowed the participants to express a broader response (i.e., other things I do before I start writing a paragraph in English).

The writing-strategies questionnaire is based on Flower and Hayes’ (1981) cognitive model, which emphasizes the idea of recursion in writing, and divides the writing process into planning, translating ideas into texts, and reviewing (Petric & Czárl, 2003). This is reflected in the division of the questionnaire into three main parts: prewriting, writing, and revising stages-to provide a clear frame of reference to the respondents.

More specifically, the writing-strategies questionnaire included 47 items. Specifically, 7 items related to demographic background questions, and 40 items related to strategy items. An additional three items were open-ended questions for each stage of the writing process. Initially, the questionnaire started with seven items related to questions requesting information about the respondents’ general background and demographic information, such as gender, native language, the number of years spent studying English, the writing courses attended, and types of texts written in English. The main part, dealing with strategies, was divided into three subsections: planning strategies (7 items), writing strategies (14 items), and revising strategies (19 items; see Appendix C).

As a result of the pilot, the researcher developed the questionnaire and added some items to serve the purpose of the current study as well as to ensure relevance to the nature of the writing problems EFL Kuwaiti college students encounter in their writing, particularly in terms of generating texts cohesively. The following question was added in section (A), ‘Why have you chosen this course?’

Some changes were implemented in Items 6 and 7 in section B.1. In addition, three more items on the topic of unity and coherence, as well as spell check, were added in Section B.3. (Questions 3, 13, & 14) because of their relevance to the purpose of the study.
Furthermore, three open-ended questions at the end of each stage of the writing process were added by the researcher to enable participants to respond in the way they thought appropriate to reflect their views and provide more details that might help in obtaining a broad picture of the research subject and the writing background. These questions were,

1. Other things I do before I start writing a paragraph in English.
2. Other things I do when writing a paragraph in English.
3. Other things I do when revising.

The additional items of the present writing strategy questionnaire are illustrated in the following Table 2.

<table>
<thead>
<tr>
<th>Table 2 Source of writing strategies questionnaire items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petric &amp; Czarl’s (2003)</td>
</tr>
<tr>
<td>Section A.</td>
</tr>
<tr>
<td>1, 2, 3, 4, 5, 6, 7</td>
</tr>
<tr>
<td>12, 15, 16, 17, 18, 19</td>
</tr>
</tbody>
</table>

4.6.1.1.2 Reliability Test of the Questionnaire Items

Eastrby-Smith et al. (2004) refer to reliability as the measure of the stability of the respondents’ responses, which measures whether the questionnaire items will yield the same results from the same respondent in different occasions. Reliability pertains to the extent to which a particular instrument provides the same result when it is applied to the same context repeatedly and indicates how free the measure is from random error (Pallant, 2005). According to De Vaus (1996), unreliability is caused by many sources, such as poor wording, asking difficult questions, insufficient information, as well as “rough-and-ready answers.” In addition, the accepted values of reliability coefficients in the order of 0.6 Cronbach’s alpha and higher was used to assess the reliability of the questionnaire items (see Eastrby-Smith et al., 2004). In the current study, a Cronbach’s alpha for the internal reliability of the writing-strategies questionnaire items revealed an overall alpha coefficient of 0.795, which is considered an adequate value for internal reliability; therefore, they are “acceptable” (Helms et al. 2007). As a result, the reliability is high using all the 40 items because alpha is 0.795, meaning participant responses were acceptable.

4.6.1.2 Think-Aloud Protocols

The researcher conducted think-aloud protocols with 8 male and female students at Kuwait University, College of Arts during a writing task (see Appendix G, Sections 4.6.1.2 &
The students participated voluntarily and were recommended by their teachers to reflect on what they were doing in their written texts.

The choice of the topics for the writing process for the think-aloud protocols writing task was based on the type of writing tasks that students in this setting were asked to compose in their writing courses (see Appendix G). This topic selection was important so that students would be familiar with the genre and writing topic and would motivate and enhance their performance during the composing process. As a result, students would enhance verbalizing their thoughts and ideas. According to Manchon, Murphy, and Roca (2005), familiar topics maximize the writers’ involvement in the process.

Furthermore, the reason behind choosing general topics is because it was required to introduce topics that suited the first and second year participants’ level of proficiency, as writing about a personal experience or about a city that one had visited would be much easier for them to uncover the processes involved when students composed on a topic that they had received information about. Students also had the freedom to use any language (Arabic, English) when verbalizing, but they preferred to use English.

The participants in the current study were asked to compose in English and were given three alternative general topics to choose from (see Appendix G). Other topics were offered because in the setting under study, students are usually introduced to three topics and asked to write about one of them. The lecturers were asked to suggest topics that the students in the first and second years of study were likely to encounter or write about. The topics of the writing task were familiar and close to the students’ experience and were chosen from a large number of alternatives similar to the topics studied in class or assigned in exams. The participants had 30 to 45 minutes to submit their writing task. They were also allowed to use dictionaries. No editing or modifications at any level were made to those texts. The think-aloud protocol topics were chosen according to the following,

**Directions:** Write a narrative paragraph about **ONE** of the following topics. Make sure your paragraph contains all of the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

1. Your first day at college
2. A vacation trip from your childhood
3. An account of a difficult decision that you had to make
To further enhance the validity and reliability of the writing-strategies questionnaire, the researcher decided to use another research instrument, semistructured interviews, for triangulation purposes.

4.6.1.3 Semistructured Interviews with Students

In this section, the researcher provides the procedures for conducting semistructured interviews with the students. Semistructured interviews following a writing task (see Appendices E & F) were used with a representative sample (20 males and females) of students at Kuwait University, College of Arts, who were chosen randomly to allow the participants to reflect on what they had done in their written texts.

The interviewed participants were asked to compose in English and to write on one general topic that was familiar and close to the students’ experience and similar to the topics studied in class or assigned during exams (see Appendix F). Consequently, the participants were given 30 to 45 minutes to submit their writing task. They were also allowed to use dictionaries. No editing or modifications at any level were made to those texts. The semistructured interview topics included the following:

Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all of the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

1. A memorable movie you have watched
2. A frightening experience
3. A trip that you would like to take

In addition, the writing task was followed by semistructured interviews with the participants to elicit their attitudes and strategy use in the writing process (see Appendix E). Each of these semistructured interviews lasted for 15 to 20 minutes and was audio taped. The researcher thematically analysed all interview data.

4.6.1.4 Semistructured Interviews with Teaching Staff

In this section, the researcher presents the procedures of conducting semistructured interviews with the teaching staff who teach at the Department of English at Kuwait University, College of Arts. Initially, semistructured interviews were planned and scheduled with members of the teaching staff who teach writing classes. The participants were three professors who were teaching English writing courses, asking them about the difficulties and problems encountered by EFL students in their writing (see Appendix H). Those professors
were involved in the study to help the researcher administer the questionnaires to the target population (100 students). Each of these semistructured interviews lasted 15 to 20 minutes and was audio taped. The researcher thematically analysed all interview data.

4.6.2 Pilot Study

This section outlines the procedures of piloting and administering the writing strategies questionnaire, think-aloud protocols, and semistructured interviews.

A pilot study took place in Fall Semester 2012 at Kuwait University, College of Arts to test the four data collection instruments: writing-strategies questionnaire, think-aloud protocols, semistructured interview schedule, and written products of the participants. The pilot study had two goals:

1. To conduct a preliminary investigation of the setting of the study and refine the research questions of the study, which entailed investigating the strategies Kuwaiti college students exploit in their EFL writing.
2. To pilot the data collection instruments in terms of their suitability and capability to collect a relevant collection of data and the appropriateness for the participant population.

The writing strategies questionnaire was first piloted with 10 male and female students of English at Kuwait University, College of Arts before implementing it with a larger group of participants to use it with the target population (100 male and female students). The participants were from the first and second year of college and all aged between 19 and 21. All students in both places share common features in terms of age, educational background, as well as cultural background and professional context, as both are considered third-level degree students.

In regard to piloting the questionnaire, it was completed in the presence of the researcher. The questionnaire was piloted and tested for response validity by using a think-aloud protocol whereby a group of volunteers talk through the process of completing the questionnaire. The main aim of using the think-aloud protocol was to check the wording and interpretation of the items of the questionnaire as well as their applicability to the participants’ situation. Another aim was to test the scale used in the questionnaire by checking whether the respondents’ explanations of their responses matched their choices of the steps on the scale. The questionnaire think-aloud protocol was conducted under supervised conditions with two groups of 10 participants (5 male and 5 female students). The volunteers had the task of completing the questionnaires and were encouraged to discuss the process of providing
responses, what they found difficult, and how the task could be rendered simpler and clearer. The pilot participants were recorded by the researcher as they carried out the task.

In regard to piloting the think-aloud protocols, conducting this method started with a practice session with a set of Kuwaiti college students (one male and one female participant) at Kuwait University, College of Arts. These pilot participants were from the first and second year and aged from 19 to 21 years old. The practice session was done in the presence of the researcher and these respondents were monitored for performance after given instructions. Pilot participants did not take part in the main study procedures.

Regarding the semistructured interview question schedule, this instrument was first piloted with a set of second year students (a male and a female) of English at Kuwait University, College of Arts, aged 19 years old (see Appendix B). These respondents were also barred from taking part in the final stages of data collection, as their status as pilot participants excluded them from being applicable as participants in the main study. The reason behind piloting the semistructured interviews was to test the instrument. Furthermore, the researcher piloted this to gather initial ideas regarding the composing habits and attitudes of Kuwaiti college students of English, together with the strategies they apply when they compose in English. As a result, the questions in the semistructured interview were developed to be capable of collecting a relevant body of the data required (Appendix E). The procedures of administering the methods of the main study are set out in the next section.

4.6.3 Main Study

The main study took place in the spring and fall semesters of 2013 and 2014 at Kuwait University, College of Arts. According to the Deputy Director of Kuwait University for Planning 2013–2014, this university contributes to the education of 31,633 Kuwaiti students (9046 males and 22,587 females) enrolled in different scientific and humanities degrees. All students are obliged to study English courses along with their major subjects. The main goal of teaching English at Kuwait University is to prepare students to acquire a standard level of English proficiency that meets the job demands in the public and private sectors or to continue their higher education in English.

4.6.3.1 Participants

The researcher felt a larger number of participants would provide more strength to the current study and yield more representative results. Thus, it was useful to extend the main study to include students from Kuwait University, because it is obligatory to acquire a standard level of English proficiency that meets the demands in the academic writing.
The main study involved two groups of participants: students and members of teaching staff at the Department of English Language and Literature at the College of Arts. The written texts of the student participants provided a unifying perspective regarding the use of writing strategies across the writing strategy data collection methods used with different student participant groups. The staff participants contributed an alternative perspective on student strategy use for the purposes of triangulation.

The researcher contacted the Dean of the College of Arts to obtain official consent to carry out the study and to start the process of data collection through administrating the research instruments. Another reason for this contact was to ask for the help from the head of the department in finding volunteers who would be interested in participating in this study.

Three separate groups of students who were learning English for Academic purposes participated in the study. The first group comprised of 100 students (50 male and 50 female Kuwaiti participants) who undertook the writing strategies questionnaire and the writing task, as it was intended to access an equal number of males and females. All the participants were taught by three professors of English, who were involved in the semistructured interviews later. The second group consisted of another 8 students (4 males and 4 females) who undertook the think-aloud protocols voluntarily and were recommended by their teachers. The third group comprised of 20 different students (10 males and 10 females) who undertook the semistructured interviews voluntarily. All the 128 participants were from different majors at the same student cohort of 3,458 (1,350 males and 2,108 females), studying English as a compulsory subject for academic purposes and enrolled in the same Department of English Language and Literature, College of Arts, Kuwait University. The researcher chose a small sample of participants students were unwilling to participate in this research in large numbers. As a result, the researcher collected data from different student groups within the same broad students’ population of EFL learners. Consequently, this study involved participants from the first and second year at Kuwait University who were near the beginning of their university career, because these students have more exposure to the writing courses in the first two years, rather than those in third and fourth year who were nearing graduation. According to the Deputy Director of Kuwait University for Planning (2013–2014), the total number of the first and second year students at Kuwait University, College of Arts was 2,374 students, with 1,399 (653 males and 746 females) students in the first year, and 975 (346 males and 629 females) students in the second year, and a percentage of population sampled being 18.546% of the overall student body.
In the main study, all the participants shared similar characteristics in terms of age (19 to 21), cultural background, and educational level. All the students who volunteered to participate in this research instrument had a level of competence in English that ranged from below average to average, based on their teachers’ evaluation of the written samples through the semester. The competence was assessed by the teachers using a range of non-standardised measures.

The other group of participants was three teachers who were members of staff at the Department of English Language and Literature, College of Art, and agreed to participate in this study and to be interviewed. These professors were included in the semistructured interviews to provide the researcher with their perspectives on the first research question (see Appendix H, Section 4.6.1.4). All the professors involved were highly qualified with doctorate degrees in literature or linguistics from different international universities. In addition, they had experience in teaching EFL in general, and teaching writing classes for Kuwaiti undergraduate students of English in particular. The following subsection describes the process and procedures of data collection.

4.6.3.1.1 Procedures

In this section, the researcher presents the writing strategies questionnaire used in this study (see Appendix C). After completion of piloting the writing strategies questionnaire, the researcher administered the questionnaires to a larger group of participants: 100 male and female third level Kuwaiti students of English at Kuwait University College of Art. The questionnaires were administered in a classroom setting without the presence of the researcher. According to Cohen et al. (2007), the absence of the researcher is helpful because it enables respondents to complete the questionnaire in private, to devote as much time as they wish to its completion, to be in familiar surroundings, and to avoid the potential threats or pressure to participate caused by the researcher’s presence. Additionally, students were briefed about the background of the research and the intention of the data collection. Each questionnaire was accompanied by a stamped addressed envelope and a consent form outlining the purpose of the study and the structure of the questionnaire.

Before administering the writing-strategies questionnaire, the participants were asked to perform a writing task, to provide the researcher with answers that would explore the difficulties and problems the participants encounter in the writing process, and the strategies they use to maximise writing skills. The tool allowed the researcher to explore participants’ attitudes toward the process of writing, and to identify and analyse the content of their texts in terms of macrolevel cohesion and quality. All participants were asked to compose in English
and were given three alternative topics to choose from. The topics of the writing task were similar to the students’ experience (see Appendix D). These topics were chosen from a large number of alternatives similar to the topics studied in class or assigned during exams. At the end of the writing process, each questionnaire was matched to the writing task for each student.

The think-aloud protocols were conducted with eight participants at Kuwait University, College of Arts (4 male and 4 female students) who voluntarily participated to complete the task. The sessions of the think-aloud protocols were conducted in the presence of the researcher and took place in a classroom setting. The researcher explained the requirements of the task. The explanation included the nature of the task they were going to undertake, the nature of their contribution, and the aim of the current study. The whole process of explanation took 15 minutes. Accordingly, all the think-aloud protocols were conducted in English and were audio-taped, transcribed, and coded for analysis (see Sections 4.7.2. & 4.7.2.1).

The think-aloud protocol task was carried out in the second week of February 2014. The researcher met twice with the participants. The first meeting was with the group as a whole to explain and introduce the technique of the task in general. After this introductory meeting, the researcher made appointments for think-aloud meetings. Each think-aloud session took place in a classroom setting. Two students conducted the task on the first day, followed by another two on the next day. The rest of the students completed the task gradually on the following 2 days.

When transcribing the audio-recorded think-aloud protocols, some of the students hardly said anything that might have been either because of shyness or because they did not understand the procedure. As a result, short pieces of writing were produced by some of the participants. Generally speaking, the number of participants who participated in this research instrument (the think-aloud protocols) was sufficient, to provide the researcher with the data needed for the current study.

The semistructured interview task was carried out in the second week of May 2014. The researcher met with each participant twice. The first meeting was used to give participants an idea about the nature and aim of the study and explain briefly what the semistructured interview task consisted of and the nature of the writing task followed by the interviews. After this initial meeting, the researcher made appointments for the semistructured interview sessions, which took place in an actual classroom setting. The interviewed participants were asked to compose in English and they were given 30 to 45 minutes to
submit their writing task as they were allowed to use dictionaries. The researcher conducted semistructured interviews following a writing task with each participant; interviews lasted from 15 to 20 minutes to reflect the writing strategies used in their writing process (see Appendices E & F).

The researcher used semistructured interview data to interpret and support questionnaire data, and to elicit an understanding of the patterns of students’ attitudes towards strategy used in their writing process. The researcher transcribed, and analysed data gathered from semistructured interviews qualitatively using thematic analysis (see Sections 4.7.2 & 4.7.2.1). The next section describes the process and procedures of data analysis.

4.7 Data Analysis

In this section, the researcher presents the procedures and methods of data analysis. The aims of the analysis were to investigate the choice of strategies in the written texts of Kuwaiti students of English at Kuwait University, to classify these strategies into categories, to identify their occurrences, and to investigate the effective strategies for developing and improving the writing skills of Kuwaiti college students in the area of text cohesion. Through the analysis, the researcher also attempted to show the differences in the use of strategies between skilled and less-skilled students.

This section outlines how the researcher analysed the qualitative and quantitative data obtained from the writing strategy questionnaire, transcribed and audio-recorded think-aloud protocols, semistructured interviews, and students’ writing samples. Similar to prior researchers (Alharthi, 2012; Alhaysony, 2008; Chaaban, 2010; El-Aswad, 2002; El-Mortaji, 2001), the researcher of the current study employed think-aloud protocols and semistructured interviews to investigate the current approach to EFL writing in Kuwaiti third-level education from the students’ perspective, the strategies they exploit in writing, and the challenges they face in this area. According to Green (1998), this method has been used as a research instrument in ESL/EFL writing strategies since the 1980s. This technique is an effective means of retrieving information regarding what students go through when composing, the way they think when they write, and the strategies they use during their writing process (Alharthi, 2012). Therefore, both think-aloud protocols and semistructured interviews were used in this study to address the second, third, and fourth research questions (see Section 4.5).

4.7.1 Analysis of Writing Strategies Questionnaire

The writing strategies questionnaire provided qualitative data (through open-ended questions) and quantitative data (through close-ended questions). The researcher analysed the questionnaire’s close-ended question responses using SPSS statistical software to derive
descriptive statistics. The following statistics were generated: mean, standard deviation, and frequencies. These statistics were used to summarize the frequency and mean (or average) of responses to the writing strategies used by the participants, and to understand the variability of their scores through the standard deviation.

The researcher performed a chi-square test of independence to examine the relation between male and female participants who participated in the writing strategies questionnaire (see Appendix C). Thus, this test is appropriate when two categorical variables from a single population are compared for associations. Researchers use this test to determine whether a significant difference exists between the expected frequencies and the observed frequencies in one or more categories to indicate whether the two variables are dependent on one another. In the current study, the chi-square test was used to determine whether a relationship exists between gender and writing strategy use (see Section 5.2.1.5).

In addition, the researcher performed a mean comparison between scores and gender through independent sample t test (see Section 5.5.2, Table 15). The t test was conducted to compare the participants’ mean scores in the 128 texts (think-aloud, interviews, and questionnaire texts) between the two genders’ written samples. The aim was to explore if any significant difference existed in relation to gender difference. The following subsection details the qualitative data obtained from think-aloud protocols and semistructured interviews.

4.7.2 Thematic Analysis of Qualitative Data

The data analysis process included transcription of all the audio-recorded protocols and interviews. The researcher conducted think-aloud protocols (see Appendix G) with a representative sample (eight males and females) of students chosen randomly with the help of their professors. The choice was based on the desire of the students to participate in the research and the teachers’ evaluation of their written performance.

In this study, think-aloud protocols as a method provided answers pertaining to certain attitudes and behaviours that might occur during the protocol sessions and helped to uncover the strategies students apply when they compose in English. Think-aloud protocols started with a practice session, which acted as a pilot test. This step was necessary because the students were not familiar with participating in this kind of activity.

More specifically, the requirements of the task were explained in English. The explanation included the aim of the current study and the nature of the task that the participants were going to undertake. Subsequently, the researcher encouraged the students to relax and perform the task as they would do in any written assignment in class. They were categorically informed that they should try to keep verbalizing in English what was going
through their minds. Each think-aloud session was between 20 to 30 minutes and was audio-recoded. The researcher transcribed and saved all data on the computer after completion of the think-aloud protocols to obtain a written record regarding the responses. Seidman (2006) stated an explicit transcript can provide researchers with in-depth insight into the verbal and nonverbal material that the original speech involved. The researcher then thematically analysed these transcriptions.

Thematic analysis is a qualitative research method that can be widely used across a range of epistemologies and research questions (Nowell, Norris, White & Moules, 2017). According to Boyatzis (1998) (cited in Nowell et al., 2017), thematic analysis is described as a translator for those speaking the languages of qualitative and quantitative analysis that enable researchers who use different research methods for communication. Braun and Clarke (2006) state that rigorous thematic analysis is pertained to identifying, analysing, organizing, describing and reporting themes found within a data set, in order to produce trustworthy and insightful findings. However, Nowell et al. (2017) argue that there is insufficient literature that outlines the pragmatic process for conducting thematic analysis.

Thematic analysis is a useful research method for summarizing key features of a large data set, enabling the researcher to take a well-structured approach to handling data, and produce a clear and organized final report (King, 2004). On the other hand, the disadvantages of thematic analysis become more apparent when considered in relation to other qualitative research methods, due to the lack of sufficient literature on thematic analysis. In addition, the flexibility of thematic analysis can lead to inconsistency and a lack of coherence when developing themes derived from the research data (Holloway & Todres, 2003).

Thematic analysis can be a data-driven approach, or theory-driven approach. As a data-driven approach, the researcher carefully reads and rereads the data, looking for keywords, trends, themes, or ideas in the data that will help outline the analysis before any analysis takes place. On the other hand, a theory-driven approach is guided by the specific ideas or hypotheses the researcher wants to assess, as she or he may still closely read the data prior to analysis. Theory-driven approaches tend to be more structured, and as a result, this may be considered more reliable. Conversely, data-driven approaches may be considered to have higher validity because they are more flexible and open to discovery of themes or ideas not previously considered (Guest & MacQueen, 2008).

Manchon et al. (2005) state, “the coding scheme is the filter through which one looks at one’s data to report, in a valid and reliable way, the story told in protocols” (p. 201). According to Braun and Clarke (2006), thematic analysis allows for flexibility in the
The researcher’s choice of theoretical framework. Through this flexibility, thematic analysis allows for rich, detailed, and complex descriptions of data (Vaismoradi, Turunen & Bondas, 2013). Thus, the researcher used thematic analysis in the current study to identify and qualitatively analyze the strategies and substrategies used by the participants in their writing, through looking for meaningful categories and patterns of information in all participants’ responses in the think-aloud protocols and semistructured interviews. Therefore, the thematic analysis of this data yielded both an account of strategy use across the 28 participants in the interviews, and the think-aloud protocols.

The first analysis phase involved identifying all expressions of writing strategy used in the data and grouping the coded segments by themes. The second phase then involved coding these extracts using a coding scheme derived from the literature regarding writing strategy use. Through the thematic analysis process, the researcher was engaged in making sense of students’ comments by selecting specific sentences and paragraphs, and by identifying themes using a coding scheme derived from the literature on writing strategies and substrategies. The researcher took notes and memos on the content of both semistructured interviews and think-aloud protocols as a reminder. The next section outlines the coding scheme of the think-aloud protocols and semistructured interviews.

4.7.2.1 Thematic Analysis Coding Scheme

This section details the coding scheme and the decisions regarding the coding scheme derived from the literature. The researcher identified and coded the think-aloud protocols and semistructured interviews (Section 5.2.2, Table 12) to identify the writing strategies and substrategies the participants used in their writing process.

Initially, thematic analysis started through taking notes or making ideas for coding. As coding continued, codes continued to be developed and defined throughout the entire analysis. The data were transcribed into written form in order to conduct a thematic analysis. According to Braun and Clarke (2006) and Nowell et al. (2017), there is no clear agreement about how researchers can rigorously apply thematic analysis, and there is no one set of guidance to adhere to when conducting the method, though these authors did provide a specific framework for thematic analysis, which was the analytic method chosen for this study. In the current study, coding was done manually by writing notes on the texts analyzed and using a highlighter to identify meaningful segments of data, which composed the initial codes, or smallest units of data within the transcripts.

After reading the transcripts, familiarizing with the data, and generating an initial list of ideas or segments about what is in the data, this researcher referred to these codes to
discern common meaning among them. Then, organizing these codes into meaningful groups, these codes became the basis for a series of themes, which are defined by the content of their substituent codes. Final themes, which started to be developed in the next phase, are where the interpretation analysis of the data occurs. Themes depended on the data, and the data were approached with specific questions in mind that were intended to guide the coding process. The initial step consisted of identifying the codes, followed by then matching them up with data extracts that demonstrate that code.

All data were initially coded, and sorted into segments or potential themes, and finally these coded data extracts were collated into the final themes. To do this, a table was used to visually analyze the codes and interconnections within the codes, and to consider how different codes may combine to form an overarching theme. All overarching themes were then organized into theme-piles. This phase concluded with a collation of candidate themes, and all extracts of data that have been coded in relation to themes, which were used to define the themes’ content.

After having a satisfactory thematic map of the data, the researcher further refined the themes that would be presented as results, and analyzed the data within them. The researcher defined and refined the data and identified the essence of what each theme was about, as well as the themes overall, and the way the themes related to one another. While defining themes, the researcher determined what aspect of data each theme captured. This process was done by going back to collated data extracts for each theme and organizing them into a coherent account.

After identifying the themes that emerged from all protocols and interviews, the researcher compared the categories with others found in the literature. This process resulted in borrowing some categories of strategies and substrategies proposed by researchers, such as Perl (1979, 1980), Arndt (1987), Wenden (1991), Raimes (1987), Cumming (1989), Victori (1995), Riazi (1997), and Sasaki (2000). These strategies are reading (reading topic sentence, reading generated texts), planning (thematic planning, local planning, mechanical planning, and outlining), editing (spelling, grammar), re-reading, evaluating (positive evaluation and negative evaluation), revising (deletion, addition, word choice) and finally, the use of L1. The previous definition of writing strategies (see Section 3.5.1) guided the researcher in constructing and selecting the categories and subcategories of the current coding scheme. A detailed literature-based discussion of the chosen writing strategies is included in the literature review (see Section 3.5.3).
From the review of the previous studies on EFL writing strategies, it is evident that different researchers have used different classification criteria to classify those strategies. For example, planning is an important strategy when going through the whole writing process (Victori, 1995). Some researchers, such as Victori (1995) and Sasaki (2000), subdivide planning into sub-strategies, such as planning overall content and idea or global planning, thematic planning, local planning, and mechanical planning, whereas Arndt (1987) puts planning and global planning (outlining) as individual strategies.

Furthermore, revising and editing were used interchangeably by researchers, such as Flower and Hayes (1981) who defined revising as “a thinking process that can occur at any time a writer chooses to evaluate or edit his text or plans” (p. 376). Riazi (1997) and Raimes (1987) use this classification. Some researchers tend to use the term revision to include all the changes that can occur during the writing process (Whalen, 1993). Other researchers, such as Arndt (1987) and Perl (1980), distinguish revising from editing. Revising is defined as the changes made to the written text on the content level to clarify meaning. These changes include addition, deletion, and word choice.

Editing is defined as the changes made to the written text on the surface level to correct the syntax or spelling without affecting the intended meaning. Wenden (1991) does not include revising strategies in her taxonomy. Raimes’ (1987) subclassification of these two strategies is adopted in the current research. According to Raimes, revising accounts for changes made to the produced texts to clarify meaning. These changes include either changes on content or structure level, such as addition, deletion, and word choice. On the other hand, editing accounts for changes made to the produced texts on the surface level to correct a specific piece of information or meaning.

As for re-reading of texts, Perl (1980) proposes reading and evaluation strategies, whereas Raimes (1987) and Sasaki (2000) propose evaluating strategies. Reading refers to instances of reading different parts of the text, such as reading words, sentences, paragraphs, as well as the whole text. Evaluating refers to the verbal judgment, positive or negative, targeting different parts of the written text. Both Perl and Raimes use the term assessment strategy instead of the term evaluating. In addition, Sasaki (2000) and Arndt (1987) propose re-reading strategies. Re-reading refers to instances of reading parts of the already written text more than two times. Finally, Cumming (1989), Wenden (1991), Victori (1995), Riazi (1997), and Sasaki (2000) propose the use of L1 strategy in their taxonomy of EFL writing strategies. The use of L1 refers to instances of using Arabic while composing in English to retrieve words and expressions, generating and planning ideas, and to verify whether they match the
required meaning. Hence, the analysis of the think-aloud protocols and semistructured interviews revealed the coding scheme of seven categories generated from theories related to EFL writing strategies that seem appropriate to the current study. These strategies and substrategies were,

1. **Planning**: refers to the activity of producing plans for content, organization, or language.
   a. *Thematic planning*: refers to the act of generating and planning content ideas that govern the whole essay orally.
   b. *Local planning*: refers to the act of planning what to write next in terms of content, to generate more details.
   c. *Mechanical planning*: refers to the act of planning the layout of the written text in relation to the number of paragraphs and lines it will contain.
   d. *Outlining*: refers to the only written form of planning.

2. **Reading**: refers to instances of reading different parts of the text, such as reading words, sentences, paragraphs as well as the whole text. This strategy includes substrategies:
   a. *Reading the topic sentence*: refers to instances of reading the topic question after the start of the composing process.
   b. *Reading the generated text*: refers to instances of reading parts or all of the produced text. This includes single words, sentences, paragraphs or the whole draft.
   c. *Reading outlines*: refers to instances of reading part(s) or all of the already produced outlines.

3. **Revising**: refers to the changes made to the written text on the content level to clarify meaning.
   a. *Addition*
   b. *Deletion*
   c. *Substitution*
   d. *Word choice*

4. **Evaluating**: refers to the verbal judgment targeting different parts of the written text.
   a. *Positive evaluation*: it refers to the positive judgment about different parts of the written text.
b. **Negative evaluation**: it refers to the negative judgment about different parts of the written text.

5. **Editing**: refers to the changes made to the written text on the surface level, in order to correct the syntax or spelling without affecting the intended meaning.
   a. **Spelling**
   b. **Grammar**

**Re-reading**: refers to instances of reading parts of the already written text more than two times.

6. **Use of L1**: refers to instances of using Arabic while composing in English to retrieve words and expressions, generate and plan ideas, and to verify whether they match the required meaning.

### 4.7.3 Analysis of Participants’ Written Texts

The following subsections present the analysis process of the texts obtained from the three data sets, the think-aloud protocol, semistructured interview, as well as the writing-strategies questionnaire.

#### 4.7.3.1 Scoring Texts’ Quality

The written texts produced by the participants who participated in the writing-strategies questionnaire, think-aloud protocols, and semistructured interviews were assessed for quality according to the criteria from Jacobs et al. (1981), which were considered as guidance for the process of scoring. The reason for adopting these criteria is the reliability, as used by other researchers conducting similar studies (Alhaysony, 2008; El-Mortaji, 2001; Chaaban, 2010).

#### 4.7.3.2 Purpose of Scoring

The main purpose of the scoring was to rank the performance of the students to investigate the difference in the use of writing strategies between those students. The rank was relative to the standard test of Jacobs et al. (1981), in which readers made five holistic assessments of the same essays. These assessments targeted different aspects of the composition: content (30 points), organization (20 points), vocabulary (20 points), language use (25 points), and mechanics (5 points), as shown in Table 3. In addition, the individual scale and the overall summed scale were broken down into numerical ranges that correspond to four mastery levels: excellent to very good (83–100 points), good to average (63–83 points), fair to poor (52–63 points), and very poor (34–52 points).
Table 3 ESL composition profile as described by Jacobs et al. (1981)

<table>
<thead>
<tr>
<th>Score</th>
<th>Level (points)</th>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Content</td>
<td>30</td>
<td>Knowledge of subject, substance, development of thesis, and relevance to topic.</td>
</tr>
<tr>
<td>Organization</td>
<td>20</td>
<td>Fluency, well-organization, logical sequencing, and cohesive.</td>
</tr>
<tr>
<td>Vocabulary</td>
<td>20</td>
<td>Effective word / idiom form.</td>
</tr>
<tr>
<td>Language Use</td>
<td>25</td>
<td>Sentence constructions, agreement, tense, word order, functions, articles, and prepositions.</td>
</tr>
<tr>
<td>Mechanics</td>
<td>5</td>
<td>Spelling, punctuation, capitalization, paragraphing and handwriting.</td>
</tr>
</tbody>
</table>

Each writing sample was marked by two assessors, the researcher and one of her colleagues at the English Language Unit who had a Ph.D. in Applied Linguistics. The assessors used the marking scheme. Interrater agreement was measured using Krippendorff’s Alpha (Krippendorff, n.d). The researcher used the free online calculator provided by Deen Freelon, assistant professor in the School of Communication at the American University, Washington, DC (http://dfreelon.org/recal/recal-oir.php). Consequently, interrater agreement was calculated for the think-aloud protocol and semistructured interview texts and was very high (Krippendorff’s Alpha = 0.974). The mean of the two rater values was used as the final language score (see Appendix L). Section 5.5.2 presents the results.

4.7.3.3 Analysis for Cohesion

The analytical framework of the textual analysis of students’ writing task was based on Halliday and Hasan’s (1976) theories set out in Sections 3.9.1 and 3.9.2. As mentioned before, to analyse the cohesion in students’ written texts, the participants were asked to write compositions. The total number of texts was 128. Initially, the researcher analysed all the texts in terms of macrolevel cohesion to provide answers to the second research question (see Section 4.2).

The presence and variation of cohesive devices were investigated to determine the most frequent and the least-used devices students employ in their writing process. The data for this study were collected from compositions written by students during one session and were scored based on the taxonomy of cohesive devices developed by Halliday and Hasan (1976; Section 3.9.2). Consequently, all five macrolevel taxonomy of cohesive devices (reference, substitution, ellipsis, conjunction and lexical cohesion) were scored and coded in the 128 students’ texts (see Appendix M). The researcher analysed each text in terms of cohesion, providing a frequency count for each cohesive device. The frequency counts were normalized for text length and reported as frequency of the device per 100 words of text to allow the researcher to compare cohesion counts in texts of different lengths (see Appendix
N). General comments and interpretation of results as well as tables of the summary of the results are provided in the next chapter.

### 4.7.4 Multivariate Analysis

Multivariate statistical analysis refers to multiple advanced techniques used to examine relationships among multiple variables at the same time. Factor analysis is a kind of multivariate analysis that can be used for data reduction or exploration (Field, 2005). This analysis is used to uncover patterns among variables and then group highly interrelated variables into factors. This analysis is based on a correlation matrix of all variables to be included in the analysis. In this study, factor analysis was used to identify what aspects of the process, the writing strategies and substrategies, affect aspects of the products, such as the quality score and the use of cohesive device. The researcher performed the analysis in SPSS statistical software as principal components analysis with varimax rotation. The goal of this factor analysis is to provide an account and interpretation of the variables with high factor loadings for the identified components within the data set. Appendix P includes the questionnaire factor analysis rotated component matrix. In this analysis, all variables higher than 0.4 are included, based on Stevens’ (2002) suggestion that the cut-off point is appropriate for interpretative purposes.

The researcher discusses the ethical guidelines in detail in the next section to ensure that the study was conducted as thoroughly as possible.

### 4.8 Ethics

Researchers should always reflect on ethical practice throughout the research process, from defining the problem, to advancing the research questions, to collecting and analysing data, and to writing the final report (Creswell, 2008). The pilot and main study follow the ethical guidelines of the School of Education, Trinity College Dublin. In addition, the researcher contacted the Dean of the College of Arts at Kuwait University to obtain the official approval to carry out the study and start the process of data collection through administering the research instruments (see Appendix I). Thus, the researcher followed a number of ethical procedures while conducting the current study.

The protection of anonymity and confidentiality of research participants is considered to be one of the most important ethical considerations (Creswell, 2008). Participants were guaranteed that all information obtained from the questionnaires, semistructured interviews, think-aloud protocols, as well as written products of students would be securely stored, appropriately coded, and used for the study aims only. The participants were informed that their names and information would be treated as strictly confidential and no name would be
mentioned in the study. Another key ethical principle was to ensure participants were well
informed regarding the study and provided with consent forms to participate (see Appendices 1–8). The researcher discussed the consent form in detail. In addition, the participants were clearly informed that participating in this study was optional, participation was voluntary and, they had the right to withdraw at any time.

The research methods of data collection used in the pilot study were administered in
the presence of the researcher. A further ethical question arose from this preliminary survey
when participants were students of the researcher. This could lead to the participants feeling
pressure to participate and also could taint the data collection. As a result, the research
methods of the main study were conducted at Kuwait University, Faculty of Arts. Students
who participated in the writing-strategies questionnaire also participated in writing task as
they were asked to write their names or sign their tests to facilitate matching and analysing
data obtained from the questionnaire. The researcher met the Dean of the Faculty of Art to
obtain permission for implementing the four research methods of data collection (see
Appendix I). After receiving permission, another professor from the faculty of arts selected
the participants, as the researcher was not allowed to have direct access to the student
database. Regarding the questionnaire, it was applied without the researcher being present,
which helped to reduce the potential threat or pressure on participants, and to enable them to
complete it privately with the assistance of their professors who guaranteed that the
participants would have a clear picture regarding their participation in the study.

4.9 Triangulation

Triangulation offers a means of validating data analysis by synthesizing data from
multiple sources to clarify meaning, and to verify the repeatability of an observation or
interpretation (Stake, 2000). This approach strengthens interpretations by examining the
information collected, and findings can be corroborated across data sets, reducing the
influence of potential biases. Triangulation is also defined as the use of two or more methods
of data collection in the study of some aspects of human behaviour by studying it from more
than one standpoint and by making use of both qualitative and quantitative data. Thus, the
more methods contrast with each other, the higher the researcher’s confidence about the
findings (Cohen et al., 2007). In addition, the use of triangulation techniques helps to
overcome the problem of method-boundedness, and to demonstrate the value of combining
qualitative and quantitative methods (Gorard & Tylor, 2004). According to Hammersley
(2002), triangulation is obtaining multiple viewpoints of the phenomenon being studied to
ensure the accuracy and truthfulness of the data and increase the researcher’s chances of arriving at a more correct understanding of the participants’ behaviour.

To achieve a high level of reliability in the present study, the researcher used four different methods of data collection to increase the validity of the study. The findings of the research methods were triangulated because of the possibility of analysing results within individuals as well as across individuals. For example, regarding the participants’ use of writing strategies and the difficulties encountered when composing in English, the researcher triangulated data gathered from the writing-strategies’ questionnaire, think-aloud protocol, as well as semistructured interview transcripts. The text evidence served to unify the three data sets with each data collection instrument being cross validated with the products’ analysis. Furthermore, the teachers’ semistructured interviews, in which they were asked about the composing practices of their students, provided further perspective pertaining to students’ writing strategies.

In conclusion, the use of methodological triangulation in this research resulted in a more complete picture of students’ attitudes and behaviours toward the writing process. It also allowed for more depth and coverage of the analysis.

4.10 Conclusion

This chapter presented the aims, objectives, and research questions of the study. The chapter began with the outline of the research questions and the researcher discussed the approach best suited to the study. The chapter detailed the research design, data collection processes, and instruments. In addition, the chapter provided a detailed account of the process of data collection, the nature of the data, the participants, the methods of data analysis, and the analytical framework of the study. Finally, the researcher discussed ethical considerations related to this study. The next chapter includes a detailed description of the data analysis.
Chapter 5: Data Analysis

5.1 Introduction

The previous chapter detailed the methods used to investigate the writing strategies that the Kuwaiti students of English employ in their writing in terms of cohesion and quality. The researcher employed a mixed methods design to explore the aims of the research using the following tools, a questionnaire with closed and open questions, think-aloud protocols, semistructured interviews, and textual analysis. In addition, the chapter provided a detailed account of the process of data collection, the nature of data, the participants, the methods of data analysis, and the analytical framework of the study.

This chapter presents the quantitative and qualitative analysis utilizing the four research instruments structured around the four research questions presenting and discussing the findings for each in turn. This chapter is divided into five sections followed by a general summary and conclusion. Sections 5.2 presents the analysis of the quantitative writing strategy questionnaire (see Appendix C), triangulated with the results of the qualitative think-aloud protocols and semistructured interviews with student participants, as well as the relationship between gender and strategy use. Section 5.3 sets out the analysis of the semistructured interviews with professors to investigate the writing strategies Kuwait University students of English exploit in their writing (see Appendix H). Derived from the analysis of the four data sets, Section 5.4 presents the findings related to RQ2 regarding the use of Arabic as L1 in composing in L2, and Section 5.5 presents findings related to RQ3 through reports on the results of the textual analysis of the students’ writing samples to investigate the cohesion and quality of their writing (see Appendix Q for representative writing samples). Section 5.6 presents the factor analysis of text characteristics and strategy use in questionnaire data related to RQ1, RQ2 and RQ4. Last, Section 5.7 presents the summary of the chapter.

5.2 Research Question 1: Strategy Use

Presented within this section is an analysis of the quantitative writing strategy questionnaire. The researcher triangulated these findings with the think-aloud protocols and semistructured interviews (Section 5.2.2). Sections 5.2.1.1, 5.2.1.2, and 5.2.1.3 present the overall analysis of the writing strategies questionnaire that shed light on the writing strategies students reported using before, during, and after writing, respectively. Section 5.2.1.4 presents an analysis of the open-ended questions of writing strategies questionnaire, and Section 5.2.1.5 presents a comparative analysis of the data according to the gender of the participants to examine the relationship between the males and females who participated. The analyses of
the qualitative and quantitative data establish the multivariate analysis of the questionnaire data, which contributes to answering this research question in Section 5.6. The quantitative results of the writing-strategies questionnaire are presented in the following subsection.

5.2.1 Findings of Writing Strategies Questionnaire

This section presents the analysis of the writing questionnaire administered to the target population, 100 Kuwaiti students (50 males and 50 females) of English at Kuwait University, College of Arts (see Appendix C). The main objective of using the writing-strategies questionnaire is to investigate the writing strategies employed consciously by the participants. Descriptive statistics (strategy, frequency, means and standard deviations) are derived from students’ responses using SPSS, consistent with the literature (e.g., Alharthi, 2012; Alnufaie, 2014).

The questionnaire was divided into three main parts—Before-Writing-in-English, When-Writing-in-English, and When-Revising—presented in tabular or graphic format. Counts, percentages, means, standard deviations, and chi-squares of the participants’ responses and scores proved indications regarding the trends of the Kuwaiti EFL students’ writing in terms of the frequently or less frequently used types of strategies.

5.2.1.1 Before-Writing-in-English Stage

Figure 3 illustrates the distribution of responses of the 100 participants to questions investigating the use of prewriting strategies in the Before-Writing-in-English stage. Although the distribution of responses to questions varied across each questionnaire item, the Always true response was the most frequent feedback in the prewriting strategies ($M = 4.27, SD = 1.08$), which suggests the students are aware of and active in some strategy use (see Table J1 in Appendix J).

The most frequently-used strategies by the participants were reading through reading the requirements of the task (77%, Column 2), reading the topic sentence, planning (55%, Column 4), and outlining and thematic planning.
Figure 3 suggests that reading through reviewing the requirements of the task (Column 2) and planning (Column 4)² are the two most frequently-used strategies reported by the participants. Of the participants 77% (61% Always true, 16% Usually true) reported that they always revise the requirements of the task before they start writing, whereas 8% almost never do (5% Usually not true, 3% Never true), and 15% provided a neutral response. This finding suggests most of the students are aware of the importance of reading the task requirements (i.e., reading the topic sentence substrategy) before they start writing and focus on the assigned task to begin writing. With regard to planning, 55% of the participants (18% Usually not true, 37% Never true) never start to write without having a written or mental plan (Column 4 inverted), whereas 22% usually do (7% Always true, 15% Usually true), and 23% provided a neutral response. This finding suggests the majority of students are aware of the importance of the outlining substrategy before they start writing. Furthermore, 54% of the participants (32% Always true, 22% Usually true) reported they think about what they want to write and have a plan in their minds, but not on paper (Column 5), whereas 18% almost never

² The planning question is phrased as a negative.
do (7% *Usually not true*, 11% *Never true*), and 28% provided a neutral response. This finding indicates students are aware of the thematic planning substrategy, as they are able to organize their writing, create a mental picture, and stimulate their imagination before they produce their writing on paper. It also indicates that most students are proactive, and they do some things or take some actions before they start writing in English. In addition, 52% of participants (20% *Always true*, 32% *Usually true*) stated that they always note down words and short notes related to the topic in both English and Arabic (Column 6), whereas 34% almost never do (14% *Usually not true*, 20% *Never true*), and 14% provided a neutral degree of response. Only 40% of the participants (17% *Always true*, 23% *Usually true*) write the outline of their paragraph in either English or Arabic prior to writing (Column 7), whereas 36% almost never do (16% *Usually not true*, 20% *Never true*), and 24% provided a neutral response. This indicates students might rely on L1 strategy when planning their paragraphs before they start the writing process. In addition, 30% of the participants (13% *Always true*, 17% *Usually true*) reported they look at a model (Column 3) written by a native speaker or a more proficient writer, whereas 55% almost never do (23% *Usually not true*, 22% *Never true*), and 25% provided a neutral response. Only 22% of the participants (9% *Always true*, 13% *Usually true*) reported they make a timetable for the writing process before they start writing (Column 1), whereas 49% (24% *Usually not true*, 25% *Never true*) almost never do, and 29% provided a neutral response.

In general, the quantitative analysis shows the positive behaviour of the participants using some planning (outlining, thematic planning) and reading strategies. This finding suggests they are careful and aware of the importance of checking the requirements of the task they are asked to do and active in generating a plan to tackle those requirements.

### 5.2.1.2 When-Writing-in-English Stage

The main aim of this category is to find the strategies that the students use most frequently while engaging in the writing process. Figure 4 displays the distribution of responses to questions pertaining to the When-Writing-in-English stage. Although the distribution of responses to questions varied across each questionnaire item, again the Always true response was the most frequent feedback in the in-writing strategies (*M* = 4.29, *SD* = 1.01; see Table J2 in Appendix J).

The most frequently-used strategies and substrategies by the participants were outlining (80%, Column 1), re-reading (73%, Column 4), revising (74%, Column 10), and editing (61%, Column 7).
Figure 4 Distribution of responses to questions about When-Writing-in-English.
The majority of students (80%) declared they start with an introduction when writing (58% Always true, 22% Usually true), whereas 7% almost never do (5% Usually not true, 2% Never true), and 13% provided a neutral response (Column 1). This indicates a majority of the students are aware of the importance of using the outlining substrategy during the writing stage. According to the data, 73% of the participants reported they reread (rereading strategy) what they have written to get ideas regarding how to continue (44% Always true, 29% Usually true), whereas 15 almost never do (11% Usually not true, 4% Never true), and 12% provided a neutral response (Column 4). Moreover, 54% of students (23% Always true, 31% Usually true) declared they usually stop after each sentence to read it again (Column 2), whereas 20% (13% Usually not true, 7% Never true) reported they almost never do, and 26% provided a neutral degree of response. This finding indicates an awareness of the role of reading through reading the outlines substrategy to develop writing. Similarly, 56% (20% Always true, 36% Usually true) of students reported they stop after a few sentences or a whole paragraph, covering one idea as an indication to their use of reading strategies through their use of reading the generate text’s substrategy (Column 3), whereas 11% (8% Usually not true, 3% Never true) almost never do, and 33% provided a neutral response.

With regard to editing strategies (editing grammar substrategy) and use of resources, 61% (35% Always true, 26% Usually true) of students indicated they always check grammar and vocabulary during the writing process (Column 7), whereas 12% (10% Usually not true, 2% Never true) almost never do, and 27% were neutral regarding their use of this strategy. Although 59% of students (38% Always true, 21% Usually true) reported they always use a bilingual dictionary to check for new vocabulary or correct spelling as an indication of the use of editing spelling substrategy (Column 12), 23% (12% Usually not true, 11% Never true) almost never do, and 18% provided a neutral response. In addition, 47% of students (27% Always true, 20% Usually true) reported if they do not know a word in English, they always stop writing and look up the word in the dictionary (Column 11), whereas 29% (19% Usually not true, 10% Never true) almost never do so, and 24% provided a neutral response. Furthermore, the data analysis revealed using a monolingual dictionary is less common (Column 13), as 42% (20% Usually not true, 22% Never true) of students stated they never use this resource, compared with the only 18% (10% Always true, 8% Usually true) of students who admitted they usually do, and 20% provided a neutral response. This finding may indicate students’ desire to know the exact Arabic equivalent to be able to develop their writing on the semantic level.
With regard to compensation strategies, 74% of students (36% *Always true*, 38% *Usually true*) stated if they do not know a word in English, they find a similar English word that they know (Column 10), whereas 7% (3% *Usually not true*, 4% *Never true*) almost never do, and 19% provided a neutral response. This finding indicates a large number of students use revising strategies, mainly substitution substrategy. Moreover, 59% of students (26% *Always true*, 33% *Usually true*) mentioned they simplify what they want to write if they do not know how to express their thoughts in English (Column 8), whereas 12% (8% *Usually not true*, 4% *Never true*) almost never do, and 29% provided a neutral response. This finding indicates students may use compensation strategies as a proactive behaviour during the writing process through simplifying and rephrasing the required amount of vocabulary or students may employ a lexical resource, such as a bilingual dictionary or a monolingual dictionary or peer support. Also, 43% of students (22% *Always true*, 21% *Usually true*) reported they always ask somebody to help out when they have problems with writing (Column 14), whereas 38% almost never do (18% *Usually not true*, 20% *Never true*), and 19% provided a neutral response. This finding indicates most of the students preferred not to use social strategies.

The results also revealed only 31% (7% *Always true*, 24% *Usually true*) of students reported they go back to their outline and make changes in it (Column 5), whereas 39% (23% *Usually not true*, 16% *Never true*) almost never do, and 30% provided a neutral response. This finding indicates students rarely modify their initial plan during the writing process, as a large number of them would not edit outlines. Regarding the participants use of L1 (Arabic) when composing in L2 (Columns 6 and 9), the findings are presented separately in Section 5.4.

### 5.2.1.3 When-Revising Stage

Figure 5 displays the distribution of responses to the question regarding investigating the use of strategies When-Revising. Although the distribution of responses to questions varied across each questionnaire item, again, the *Always true* response was the most frequent feedback in students’ attitude towards the revising process (*M* = 4.13, *SD* = 1.21) (see Table J3 in Appendix J). The most frequently used strategies and substrategies by the participants were reading (82%, Column 4) and revising (77%, Column 19).
When Revising

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>20</td>
<td>30</td>
</tr>
<tr>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>60</td>
<td>70</td>
</tr>
<tr>
<td>80</td>
<td>90</td>
</tr>
<tr>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question</th>
<th>Always true</th>
<th>Usually true</th>
<th>Somewhat true</th>
<th>Usually not true</th>
<th>Never true</th>
</tr>
</thead>
<tbody>
<tr>
<td>I check my mistake after I get the paper back from my teacher with feedback and try to learn from it</td>
<td>55</td>
<td>22</td>
<td>10</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>I give myself a reward for completing the assignment</td>
<td>16</td>
<td>15</td>
<td>23</td>
<td>17</td>
<td>29</td>
</tr>
<tr>
<td>I compare my paper with the paragraph written by my friends on the same topic</td>
<td>11</td>
<td>14</td>
<td>21</td>
<td>22</td>
<td>32</td>
</tr>
<tr>
<td>I show my text to somebody and ask for his/her opinion</td>
<td>18</td>
<td>15</td>
<td>28</td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td>I leave the text aside for a couple of days and then I can see it in a new perspective</td>
<td>7</td>
<td>15</td>
<td>18</td>
<td>22</td>
<td>38</td>
</tr>
<tr>
<td>I check if my paragraph has coherence</td>
<td>19</td>
<td>35</td>
<td>32</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>I check if my paragraph has unity</td>
<td>24</td>
<td>37</td>
<td>31</td>
<td>62</td>
<td>6</td>
</tr>
<tr>
<td>I check if my paragraph matches the requirements</td>
<td>31</td>
<td>35</td>
<td>20</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>I drop my first draft and start writing again</td>
<td>6</td>
<td>13</td>
<td>18</td>
<td>27</td>
<td>36</td>
</tr>
<tr>
<td>I focus on one thing at a time when revising</td>
<td>4</td>
<td>26</td>
<td>35</td>
<td>23</td>
<td>12</td>
</tr>
<tr>
<td>I make changes in the content or ideas</td>
<td>5</td>
<td>11</td>
<td>23</td>
<td>34</td>
<td>27</td>
</tr>
<tr>
<td>I make changes in the structure of the paragraph</td>
<td>3</td>
<td>13</td>
<td>40</td>
<td>21</td>
<td>23</td>
</tr>
<tr>
<td>I make changes in sentence structure</td>
<td>7</td>
<td>16</td>
<td>39</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td>I make changes in vocabulary</td>
<td>8</td>
<td>22</td>
<td>40</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>I use a dictionary when revising</td>
<td>12</td>
<td>16</td>
<td>24</td>
<td>28</td>
<td>20</td>
</tr>
<tr>
<td>When I have written my paper, I hand it in without reading it</td>
<td>23</td>
<td>13</td>
<td>26</td>
<td>56</td>
<td>6</td>
</tr>
<tr>
<td>I check the spelling in my writing</td>
<td>17</td>
<td>25</td>
<td>22</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>I only read what I have written when I have finished the whole paper</td>
<td>17</td>
<td>16</td>
<td>13</td>
<td>35</td>
<td>6</td>
</tr>
<tr>
<td>I read my text aloud</td>
<td>17</td>
<td>16</td>
<td>13</td>
<td>10</td>
<td>35</td>
</tr>
</tbody>
</table>

*Figure 5 Global statistics of the responses to questions about When-Revising*
A large number of students (82%) reported they never hand in their written papers without reading them (56% Never true, 26% Usually not true; Column 4), whereas 5% (2% Always true, 3% Usually true) usually do, and 26% maintained a neutral response. This finding indicates the students are aware of the importance of reading and revising strategies. A similar number of students (77%) stated they always check their mistakes with their teacher after they have received feedback and try to learn from the teacher’s comments (55% Always true, 22% Usually true; Column 19), whereas 13% (7% Usually not true, 6% Never true) almost never do, and 10% provided a neutral response. This indicates students are aware of the importance of the teachers’ support in developing their writing. It also indicates social strategies facilitate further improvement in the writing process when students are supported by their teachers’ assistance while checking their mistakes in the written feedback or through discussion of the mistakes in a face-to-face meeting with their teacher.

Of the participants, 61% indicated they always check if their paragraph has unity (24% Always true, 37% Usually true), whereas 8% almost never do (6% Usually not true, 2% Never true), and 31% of students provided a neutral response (Column 13). In addition, 54% of students mentioned they always check if their paragraph is coherent enough (19% Always true, 35% Usually true), whereas 14% almost never do (9% Usually not true, 5% Never true), and 32% of students provided a neutral response (Column 14). This finding indicates students might be aware of the importance of coherence and unity when revising their written products.

Represented within the data, 66% of students reported they always check if their paragraph matches the requirements (31% Always true, 35% Usually true), whereas 14% mentioned they do not do that (13% Usually not true, 1% Never true) and 20% of students provided a neutral response (Column 12). In addition, 42% of the participants (17% Always true, 25% Usually true) reported they only read what they have written when they have finished the whole paper, whereas 32% (17% Usually not true, 15% Never true) almost never do, and 26% provided a neutral response (Column 2). On the other hand, 54% of the participants almost never read their text aloud (19% Usually not true, 35% Never true), whereas 33% usually do (17% Always true, 16% Usually true), and 13% provided a neutral response. These responses may indicate some students are trying to focus on the writing process globally, how well-structured the whole writing is, and if it meets the requirements of the task through use of the reading strategies, but the majority may not be.

Some students (22%) reported they leave the text aside for a couple of days to approach from a new perspective as an indication of rereading strategy (7% Always true, 15%
Usually true), whereas 60% mentioned they do not (22% Usually not true, 38% Never true), and another 18% of students provided a neutral response (Column 15). In addition, some students (19%) reported they drop their first draft and start writing again as an indication of their use of outlining substrategies during the revising stage (6% Always true, 13% Usually true), whereas 63% of them informed they almost never do that (27% Usually not true, 36% Never true), and 18% of students provided a neutral response (Column 11).

Similarly, a small number of students (25%) stated they compare their papers with the paragraph written by their friends on the same topics (11% Always true, 14% Usually true), whereas a large number of students (54%) almost never do (22% Usually not true, 32% Never true), and 21% were neutral about showing their texts to somebody and asking for opinions (Column 17). In the same vein, 33% (18% Always true, 15% Usually true) of the participants reported they show their text to somebody and ask for an opinion (Column 16), whereas 39% (17% Usually not true, 22% Never true) almost never do, and 28% provided a neutral response. This finding indicates not all students use social strategies, or some of them prefer not to rely on classroom peer effect as a source of useful feedback and prefer to be supported by their teachers.

Of the participants, 31% stated they reward themselves for completing the assignment (16% Always true, 15% Usually true), whereas a larger number of students (46%) almost never do (17% Usually not true, 29% Never true), and 23% provided a neutral response about rewarding themselves for completing the assignments (Column 18). This finding indicates students might not be aware of the evaluating strategies when revising their written products.

The results also show only 16% of students make changes in the content or idea when revising their written products (5% Always true, 11% Usually true), although more than half of the students (61%) almost never do (34% Usually not true, 27% Never true), and 23% provided a neutral response about changing the content or idea of their writing (Column 9). On the other hand, some students (30%) declared they make changes to vocabulary (8% Always true, 22% Usually true), and a similar number of students mentioned they never do (18% Usually not true, 12% Never true), and 40% provided a neutral response about making changes in vocabulary. In addition, only 30% (8% Always true, 22% Usually true) of the participants reported they make changes in vocabulary. Some 30% (18% Usually not true, 12% Never true) almost never do, and another 40% provided a neutral response. This finding indicates students might not be aware of the importance of the revising strategies because they are not aware of the importance of using the word choice substrategy during the revising stage.
Within the data pertaining to sentence structure, a small number of students (23%) declared they change the structure of the sentence (7% *Always true*, 16% *Usually true*), whereas a larger number of students (38%) almost never do (24% *Usually not true*, 14% *Never true*), and 39% provided a neutral degree of response (Column 7). As for the structure of the paragraph, only 16% of students mentioned they always change the structure of the paragraph (3% *Always true*, 13% *Usually true*), whereas a larger number of students, specifically 44%, almost never do (21% *Usually not true*, 23% *Never true*), and 40% provided a neutral response about changing the structure of the paragraph in their writing (Column 8). This finding indicates students might not be aware of the importance of editing strategies as they do not use the grammar-editing substrategy when revising their written products.

Some students (30%) mentioned they focus on one thing at a time when revising (4% *Always true*, 26% *Usually true*), but 35% of students reported they never do (23% *Usually not true*, 12% *Never true*), and a similar number of students (35%) provided a neutral response (Column 10). This finding indicates some students do not put in the extra effort trying to revise or restructure their writing.

Furthermore, a small number of students (28%) reported they always use a dictionary when revising their written products (12% *Usually not true*, 16% *Never true*), but 48% of students maintained that they never do (28% *Usually not true*, 20% *Never true*), although 24% of students provided a neutral response (Column 5). This result might be because the students do not take the time to do so, or do not know how to use a dictionary. However, a larger number of students (49%) declared they always check the spellings in their writing (25% *Always true*, 24% *Usually true*), but 29% of students mentioned that they never do. Similarly, 22% provided a neutral response (Column 3). This finding indicates most of the students are aware of the importance of checking their spelling.

**5.2.1.4 Analysis of the Open-Ended Questions of Writing-Strategies Questionnaire**

The researcher qualitatively analysed the data obtained from the open-ended questions at the end of each stage in the writing-strategies questionnaire (see Section 4.6.1.1.1). The data were categorized and coded thematically to identify the writing strategies the participants used in their writing. The open-ended questions were added in the questionnaire to enable the participants to respond in the way they thought appropriate to reflect their views and provide more details.

The analysis revealed the open-ended questions were largely unused among the participants. In addition, some of the responses were not provided, and only 17% of the participants (seven males and 10 females) provided responses to the three open-ended
questions in the three stages of the writing-strategies questionnaire: Before-Writing-in-English, When-Writing-in-English, and When-Revising. Some of the participants answered only one or two questions among the three questions provided in the three stages. Regarding the first open-ended question, “Other things I do before I start writing a paragraph in English” in the Before-Writing-in-English stage, some of the points made by the female participants included that they plan, think of the new vocabulary they tend to use in their writing, write some notes, and check all the other topics before they start writing. Others mentioned that they write more than one draft and use a dictionary. Some of the points made by the male participants involved planning in their minds through brainstorming before they start writing, taking notes, reading the topic sentence, and thinking about some of their past experiences in English to help them with the writing process. The following extracts are instances of the participants’ responses.

(SF.25) I use the dictionary before I start writing.
(SF.31) I make a plan and just begin to write.
(SF.32) I review some of the vocabulary in my mind.
(SF.5) I check all the other topics before I write, to see which is the best one I can write about.
(SM.66) I usually do a brainstorming and draw a list of things I need to mention in my writing.

The number of participants who responded to the second open-ended question, “Other things I do when writing in English” at the second stage When-Writing-in-English was less. Some of the female participants mentioned they use the dictionary and try to have short sentences in their texts, whereas the male students stated they read their paragraphs to check the grammar and vocabulary, as demonstrated in the following extracts.

(SM.98) I have some ideas and some information to what I want to write.
(SF.27) Trying to find where I should finish the sentence, so I won’t have a very long sentence.
(SM.73) I read my paragraph and I check the grammar and the vocabulary.

In addition, the third open ended question, “Other things I do when revising” in the When-Revising stage, received the least number of responses from male participants, whose data reflected revision techniques, such as checking for spellings, use of vocabulary, and seeking help from their friends, as in the following extracts.

(SM.69) I always read and check my paragraphs.
(SM.77) I check the words that have false spelling and learn how to write them properly.
(SM.85) I know how to get help from my friends on Whatsapp.

The next subsection presents the quantitative findings obtained from the writing-strategies questionnaire to answer the second part of RQ1.
5.2.1.5 Comparative Analysis Writing-Strategies Questionnaire by Gender

The researcher performed a Chi-square test of independence to examine the relationship between the male and female participants who participated in the writing strategies questionnaire, and to answer the second part of the first research question, which relates to the significant relationship between gender and strategy use. The null hypothesis is articulated as follows,

**H0:** The differences between male and female responses are not statistically significant.

The results of the Chi-square test strongly suggest that in the case of eight questionnaire items through the three clusters, Before-Writing-in-English, When-Writing-in-English, and When-Revising, the null hypothesis can be rejected at $p < 0.05$.

Regarding strategy use, the data indicate males review the requirements and read the topic sentence before they start writing more frequently than females. The data indicate a significant difference statistically in the behaviour of males and females ($X^2 = 22.872$, $df = 9$, $N = 100$, $p < 0.00$). As illustrated in Table 4, 92% of the males stated they usually or always use this strategy compared to 62% of females. Conversely, 12% of the females never use this strategy compared with only 4% of the males. This finding indicates the male participants tend to review the requirements before they start writing more than the female participants.

### Table 4 First table of significance

<table>
<thead>
<tr>
<th></th>
<th>1 Male</th>
<th>2 Female</th>
<th>Total</th>
<th>$X^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>B.1.2</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Never true</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>3.0%</td>
</tr>
<tr>
<td>2 Usually not true</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>5.0%</td>
</tr>
<tr>
<td>3 Somewhat true</td>
<td>2</td>
<td>13</td>
<td>15</td>
<td>15.0%</td>
</tr>
<tr>
<td>4 Usually true</td>
<td>4</td>
<td>12</td>
<td>16</td>
<td>16.0%</td>
</tr>
<tr>
<td>5 Always true</td>
<td>42</td>
<td>19</td>
<td>61</td>
<td>61.0%</td>
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<tr>
<td><strong>Total</strong></td>
<td>50</td>
<td>50</td>
<td>100</td>
<td><strong>22.872</strong></td>
</tr>
</tbody>
</table>

*Note. B1.2. Before I start writing I revise the requirements.

* $p < .05$; ** $p < .001$.

In addition, regarding the behaviour of making notes, the data indicate that there is a significant difference statistically in the behaviour of males and females ($X^2 = 9.696$, $df = 9$, $N = 100$, $p < 0.46$). As illustrated in Table 5, 60% of the females stated they usually or always use this strategy compared to 44% of the males. Conversely, 44% of the males never use this strategy compared with only 24% of the females. This finding indicates the female participants tend to note down words and short notes related to the topic in English/Arabic more than the male participants before they start writing.
### Table 5 Second table of significance

<table>
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<tr>
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<th>Total</th>
<th>$X^2$</th>
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</thead>
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<tr>
<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>B.1.6 1 Never true</td>
<td>16</td>
<td>32%</td>
<td>4</td>
<td>8%</td>
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<tr>
<td>2 Usually not true</td>
<td>6</td>
<td>12%</td>
<td>8</td>
<td>16%</td>
</tr>
<tr>
<td>3 Somewhat true</td>
<td>6</td>
<td>12%</td>
<td>8</td>
<td>16%</td>
</tr>
<tr>
<td>4 Usually true</td>
<td>15</td>
<td>30%</td>
<td>17</td>
<td>34%</td>
</tr>
<tr>
<td>5 Always true</td>
<td>7</td>
<td>14%</td>
<td>13</td>
<td>26%</td>
</tr>
</tbody>
</table>

Total 50 100.0% 50 100.0% 100 100.0%

Note. B1.6. I note down words and short notes related to the topic in English / or in Arabic.

* $p < .05$; ** $p < .001$

Regarding the behaviour of students changing the outline, the data indicate a significant difference statistically between male and female behaviour ($X^2 = 11.498$, $df = 9$, $N = 100$, $p < 0.021$). As illustrated in Table 6, 42% of the females state they usually or always use this strategy compared to 20% of the males. Conversely, 48% of the males never use this strategy compared with only 30% of the females. This finding indicates the female participants tend to go back to their outline and make changes in it during their writing more than the male participants.

### Table 6 Third table of significance

<table>
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<tr>
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<th>2 Female</th>
<th>Total</th>
<th>$X^2$</th>
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<td></td>
<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
<td>B.2.5 1 Never true</td>
<td>13</td>
<td>26%</td>
<td>3</td>
<td>6%</td>
</tr>
<tr>
<td>2 Usually not true</td>
<td>11</td>
<td>22%</td>
<td>12</td>
<td>24%</td>
</tr>
<tr>
<td>3 Somewhat true</td>
<td>16</td>
<td>32%</td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td>4 Usually true</td>
<td>9</td>
<td>18%</td>
<td>15</td>
<td>30%</td>
</tr>
<tr>
<td>5 Always true</td>
<td>1</td>
<td>2%</td>
<td>6</td>
<td>12%</td>
</tr>
</tbody>
</table>

Total 50 100.0% 50 100.0% 100 100.0%

Note. B2.5. I go back to my outline and make changes in it.

* $p < .05$; ** $p < .001$

Furthermore, regarding the behaviour of reading what is written after finishing their papers, the data indicate a significant difference statistically in the behaviour of males and females ($X^2 = 10.289$, $df = 9$, $N = 100$, $p < 0.036$). As illustrated Table 7, 58% of the males stated they usually or always use this strategy compared to 32% of the females. Conversely, 46% of the females never use this strategy compared with only 18% of the males. This finding indicates the male participants tend to only read what they have written when they have finished the whole paper more than the female participants when revising their writing.
Table 7 Fourth table of significance

<table>
<thead>
<tr>
<th></th>
<th>1 Male</th>
<th>2 Female</th>
<th>Total</th>
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<td>%</td>
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<tr>
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<td></td>
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<tr>
<td>1 Never true</td>
<td>5</td>
<td>10%</td>
<td>10</td>
<td>20%</td>
</tr>
<tr>
<td>2 Usually not true</td>
<td>4</td>
<td>8%</td>
<td>13</td>
<td>26%</td>
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<tr>
<td>3 Somewhat true</td>
<td>15</td>
<td>30%</td>
<td>11</td>
<td>22%</td>
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<tr>
<td>4 Usually true</td>
<td>14</td>
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<td>11</td>
<td>22%</td>
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<td>5 Always true</td>
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<td>24%</td>
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<tr>
<td>Total</td>
<td>50</td>
<td>100.0%</td>
<td>50</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note. B.3.2. I only read what I have written when I have finished the whole paper.

* $p < .05$; ** $p < .001$. 

In addition, regarding the behaviour of making structural changes in the sentence, the data indicate a significant difference statistically in the behaviour of males and females ($X^2 = 14.112$, $df = 9$, $N = 100$, $p < 0.007$). As illustrated in Table 8, 36% of the females stated they usually or always use this strategy compared to only 10% of the males. Conversely, 84% of the males never use this strategy compared with only 28% of the females. This finding indicates the female participants tend to make changes in the sentence structure more than the male participants when revising their writing.

Table 8 Fifth table of significance

<table>
<thead>
<tr>
<th></th>
<th>1 Male</th>
<th>2 Female</th>
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<td>6%</td>
</tr>
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<td>13</td>
<td>26%</td>
<td>11</td>
<td>22%</td>
</tr>
<tr>
<td>3 Somewhat true</td>
<td>21</td>
<td>42%</td>
<td>18</td>
<td>36%</td>
</tr>
<tr>
<td>4 Usually true</td>
<td>2</td>
<td>4%</td>
<td>14</td>
<td>28%</td>
</tr>
<tr>
<td>5 Always true</td>
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<td>6%</td>
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<td>8%</td>
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<td>100.0%</td>
<td>50</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Note. B.3.7. I make changes in the sentence structure.

* $p < .05$; ** $p < .001$. 

Regarding the behaviour of making structural changes of the paragraph, the data indicate a significant difference statistically in the behaviour of males and females ($X^2 = 11.973$, $df = 9$, $N = 100$, $p < 0.018$). As illustrated in Table 9, 26% of the females stated they usually or always use this strategy compared to 6% of the males. Conversely, 56% of the males never use this strategy compared with 32% of the females. This finding indicates the female participants tend to make changes in the structure of the paragraph more than the male participants when revising their writing.
### Table 9 Sixth table of significance

<table>
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<th>2 Female</th>
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<td>21%</td>
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<td>4 Usually true</td>
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<td>4%</td>
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<td>13%</td>
<td>11.973*</td>
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<tr>
<td>5 Always true</td>
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<td>4%</td>
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</tr>
</tbody>
</table>

Note. B.3.8. I make changes in the structure of the paragraph. *$p < .05$; **$p < .001$.

Regarding the behaviour of making changes in the content or idea, the data indicate a significant difference statistically in the behaviour of males and females ($X^2 = 15.923$, $df = 9$, $N = 100$, $p < 0.003$). As illustrated in Table 10, 22% of the females stated they usually or always use this strategy compared to only 10% of the males. Conversely, 74% of the males never use this strategy compared with 58% of the females. This finding indicates the female participants tend to make changes in the content or idea more than the male participants when revising their writing.

### Table 10 Seventh table of significance

<table>
<thead>
<tr>
<th>Gender</th>
<th>1 Male</th>
<th></th>
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<th></th>
<th>$\chi^2$</th>
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<tbody>
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<td>Count</td>
<td>%</td>
<td>Count</td>
<td>%</td>
<td></td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>5</td>
<td>10%</td>
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</tr>
<tr>
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<td>15</td>
<td>30%</td>
<td>19</td>
<td>38%</td>
<td>34</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>3 Somewhat true</td>
<td>8</td>
<td>16%</td>
<td>15</td>
<td>30%</td>
<td>23</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>4 Usually true</td>
<td>4</td>
<td>8%</td>
<td>7</td>
<td>14%</td>
<td>11</td>
<td>11%</td>
<td>15.923*</td>
</tr>
<tr>
<td>5 Always true</td>
<td>1</td>
<td>2%</td>
<td>4</td>
<td>8%</td>
<td>5</td>
<td>5%</td>
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</tr>
</tbody>
</table>

Note. B.3.9. I make changes in the content or idea. *$p < .05$; **$p < .001$.

Regarding the behaviour of leaving the text aside for a couple of days to see it from a new perspective, the data indicate a significant difference statistically in the behaviour of males and females ($X^2 = 14.160$, $df = 9$, $N = 100$, $p < 0.007$). As illustrated in Table 11, 26% of the males stated they usually or always use this strategy compared to 18% of the females. Conversely, 74% of the females never use this strategy compared with only 46% of the males. This finding indicates the male participants tend to leave the text aside for a couple of days and then can see it in a new perspective more than the female participants when revising their writing.
The results of the Chi-square test of the eight questionnaire items present how the use of writing strategies differs across participants’ genders. The findings of the writing strategies questionnaire are cross-referenced with the findings of the think-aloud protocols and the semistructured interviews presented in detail in Section 5.2.2. The following section provides a more in-depth discussion. The next section presents the results of the think-aloud protocol thematic analysis administered to those participants who undertook it.

The qualitative findings concerning RQ1 are presented in the following subsection, to enrich the quantitative results of the writing-strategies questionnaire presented in section 5.2.1.

5.2.2 Findings of the Think-Aloud Protocols and Interviews

The aims of the think-aloud protocol and the semistructured interview analysis were,

1. To investigate the choice of strategies in the writing process of Kuwaiti college students of English at Kuwait University.
2. To classify these strategies into categories and identify their occurrences.
3. To show the differences in the use of those strategies between more or less proficient participants to shed light on the features those students use during the writing process.

This section details the results of a thematic analysis, presenting the frequencies and instances of identified and categorized writing strategies and substrategies used by the participants. The same themes or codes (Table 12) were used for analysing the think-aloud protocols and the interviews, with the exception of L1 use dealt with in RQ2, as well as the coherence theme, which is presented only in the interview data and dealt with under RQ3. The results of those themes are presented in Figures 5.5, 5.6, 5.7, 5.8, as well as Table 13, which outlined the counts of the writing strategies and substrategies in use. In this section, the researcher explores each strategy through the use of illustrative quotes from students. The

<table>
<thead>
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<th>B.3.15</th>
<th>1 Never true</th>
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<th>X²</th>
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<td>%</td>
<td>Count</td>
<td>%</td>
</tr>
<tr>
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<td>100.0%</td>
</tr>
</tbody>
</table>

Note. B.3.15. I leave the text aside for a couple of days and then can see it in a new perspective.

*p < .05; **p < .001.
codes used are (S) for student, followed by the gender (F) or (M) and a number, as well as a code for the data source: (TAP) for the think-aloud protocols and (SSI) for interviews. The relevant strategy or substrategy code is also indicated in brackets in bold after the quotes.

Table 12 Coding table of think-aloud protocols and semistructured interviews

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Code</th>
<th>Substrategy</th>
<th>Code</th>
</tr>
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<tbody>
<tr>
<td>Reading</td>
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<td>Reading Topic S.</td>
<td>Rtc</td>
</tr>
<tr>
<td></td>
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<td>Reading generated</td>
<td>Rgt</td>
</tr>
<tr>
<td></td>
<td></td>
<td>text</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Reading Outlines</td>
<td>Ro</td>
</tr>
<tr>
<td>Planning</td>
<td>Pl</td>
<td>Local Planning</td>
<td>Lp</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Thematic Planning</td>
<td>Tp</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mechanical Planning</td>
<td>Mp</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Outlining</td>
<td>O</td>
</tr>
<tr>
<td>Editing</td>
<td>Ed</td>
<td>Spelling</td>
<td>Sp</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Grammar</td>
<td>Gr</td>
</tr>
<tr>
<td>Evaluating</td>
<td>Ev</td>
<td>Positive Evaluation</td>
<td>Pe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Negative Evaluation</td>
<td>Ne</td>
</tr>
<tr>
<td>Revising</td>
<td>Rv</td>
<td>Addition</td>
<td>A</td>
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<td>Deletion</td>
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<td>-</td>
</tr>
<tr>
<td>Coherence</td>
<td>Ch</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Writing Strategies and Their Frequencies

X-axis = Strategy; Y-axis = Frequency of occurrence

Figure 6 Writing strategies of the eight think-aloud protocol students
Figure 7 Writing substrategies of the eight think-aloud protocol students

Figure 8 Writing strategies of the twenty semistructured interview students

Figure 9 Writing substrategies of the 20 semistructured interview students
Table 13 Writing strategies, substrategies and frequency use

<table>
<thead>
<tr>
<th>Writing Strategies</th>
<th>%</th>
<th>Writing Substrategies</th>
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<tbody>
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<tr>
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<td></td>
<td>O</td>
<td>11</td>
<td></td>
<td></td>
<td>O</td>
<td>12</td>
</tr>
<tr>
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<td>A</td>
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<td>Rv</td>
<td>3</td>
<td>A</td>
<td>_</td>
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<tr>
<td></td>
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<td></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
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<td>Ch</td>
<td>10</td>
<td></td>
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</tbody>
</table>

The following subsection presents the most frequently-used strategies and substrategies by the think-aloud protocol and semistructured interview participants. The planning strategy was the most frequently adopted strategy.

5.2.2.1 Planning Strategy and Relevant Substrategies

Planning (Pl) was the most frequently adopted strategy used by participants who undertook the think-aloud protocols and semistructured interviews. This strategy was used 47 times by all the eight think-aloud protocol students, and 37 times by 16 students in the interviews. The protocols and the interviews revealed some differences regarding the amount of planning strategies between participants. The researcher discusses these differences within each subcategory in the following sections.

Among these substrategies, thematic planning (Tp), which refers to the act of generating and planning content ideas that govern the whole essay orally, was the most frequently-adopted substrategy, as it was used 15 times by all of the participants of the protocols. The analysis revealed the participants focused on using thematic planning (Tp) to remind themselves of the ideas they intended to include in their written texts. This finding
indicates this substrategy played the role of introducing the themes before they were put down on paper. The interview data also supports this, as some people may write their plan down on a paper, but most of them have plans in their head. The following extracts are instances of thematic planning substrategy:

(TAP.SF1) Right now I’m planning what I’m going to say in my mind and I’m going to start writing after I pick the points. So, I’m going to plan before writing. (Tp)

From the interview data, the researcher discovered thematic planning (Tp) was only mentioned by five participants. The analysis revealed this substrategy was used to remind those participants of the ideas they intended to include in their written texts as shown in the following extract,

(SSI.SM7) No, I don’t plan. I take a moment to think, then I write. I just keep in my mind and organize then I know when to write each one. (Tp)

In the think-aloud protocol, few students made explicit mention of planning when engaged in the interviews, as demonstrated in the following extract,

(TAP.SM4) When I write, I usually don’t have a mental plan and I don’t have an outline, I just go on with my writing as I do whatever comes into my mind. (Tp)

The next substrategy is local planning (Lp), which most students did in the think-aloud protocols. Local planning (Lp) refers to the act of planning what to write next in terms of content, so as to generate more details for each theme produced during outlining or thematic planning. The analysis of the protocols shows most of the students (7) used this substrategy approximately 14 times (about twice each). A possible interpretation could be that generating ideas is an unconscious process or students start with a plan in mind, so they do not need to generate new ideas as they proceed. The texts in this study are short, similar to those the students are typically expected to write. This aspect of the requirements could dictate the degree of planning required and implemented. The following extract shows a local planning substrategy that a student produced in the text:

(TAP.SF1) Then I start to plan and think about how I can put it and go smoothly from the introduction into the main body, so it doesn’t seem like it’s two separate things. (Lp)

The analysis of the interviews also shows a small number of students (6) used this substrategy only once. This finding indicates they did not generate ideas regarding what to write next in the body of their written texts or provide details for developing their written
products. The following interview extracts show the local planning substrategy students produced:

(SSI.SM6) I prefer to plan in details, because when I put in details, I write more lines and sentences. (Lp)  
(SSI.SF8) Of course I plan. I plan on paper and sometimes in my mind. I plan as a whole (globally) then I go in details. (Lp)

Furthermore, outlining (O) was used 11 times by seven of the participants of the think-aloud protocols. This subcategory refers specifically to a written form of planning in which the participants put their ideas on paper. The analysis of the think-aloud protocols shows most of the students used outlining to guide them with writing their ideas of the whole texts through written words. Outlining might help students to move to another outline when they start writing the introduction related to their paragraphs. The following extracts apply the outlining substrategy:

(TAP.SM2) I’m thinking about, first, the days before the first day at college, and the preparation that I did, and then I’m going to talk about the event itself making it the body of my paragraph, and I will conclude with how I felt that day. (O)  
(SF1) Right now I’m planning what I’m going to say in my mind and I’m going to start writing after I pick the points. So, I’m going to plan before writing. (O)

Outlining was used 12 times by nine participants of the interviews. The interviews showed not all of the participants felt the need to outline their writing process to guide them through writing the introduction of their texts. The following extract applies the outlining substrategy:

(SSI.SF2) So, I slept for two hours since I was excited for my new life at Kuwait University. So, this is the introductory sentence. (O)

The next substrategy used by the protocol participants is mechanical planning (Mp). Mechanical planning refers to the act of planning the layout of the written product in relation to the number of paragraphs it will contain, as well as the number of lines for each paragraph. The use of this substrategy was minimal, used only seven times by five students who conducted the think-aloud protocols. The reason for this did not emerge from the data analysis, but it might be related to the length of the written pieces, as they were short and were not exhaustive of students’ attention.

(TAL.SF2) I always make three paragraphs, introduction, the body and conclusion. (Mp)  
(TAP.SM3) At the end, now I’m doing the conclusion. I started with introduction, talked in the body about what I was suffering from, giving more details and then the conclusion. (Mp)
This substrategy was used by most of the interview participants 14 times in total. The following extract is an instance of mechanical planning substrategy:

(SSI.SF1) *Then I start to plan and think about how I can put it and go smoothly from the introduction into the main body, so it doesn’t seem like it is two separate things.* (Mp)

The following subsection represents the second frequently-used strategy (reading) by the think-aloud protocol, as well as semistructured interview participants.

5.2.2.2 Reading Strategy and Relevant Substrategies

The next strategy frequently noted in the participants’ protocols and interviews is reading (Rd), which was used 15 times by all the protocol participants and was used 30 times by most of the 20 participants interviewed. By using the reading strategy, students read words, sentences, paragraphs, as well as the whole essay to be able to produce more texts when they have problems with continuing their writing task. In addition, reading usually leads to more corrections and revision when the students seem unsatisfied with their written products. Furthermore, some participants read a single word frequently, repeating it many times to regain control of their train of thought when they start to write. This strategy includes three substrategies: (a) reading topic sentence, (b) reading generated text, and (c) reading outlines.

Reading the topic sentence (Rtc) was the most frequently adopted substrategy used by all the think-aloud protocol participants and was used 12 times, although 16 interview participants used it 16 times. This substrategy refers to instances of reading the topic sentence, as it is considered the writing specification and the prompt where the participants continue from when starting the composing process, as can be seen in the following extracts,

(TAP.SF1) *I’m going to choose the first topic which is about ‘Your First Day at College’.* (Rtc)
(TAP.SF3) *I will choose the second topic which is about ‘A Vacation Trip from your Childhood’.* (Rtc)
(SSI.SM1) *Yes, my topic sentence gives the main idea of my paragraph.* (Rtc)

The next substrategy used by the participants was reading the generated text (Rgt). This substrategy was rarely used in the think-aloud protocol, as only two students with the same frequency (three times only) engaged in reading the generated text. This substrategy refers to instances of reading parts or the whole of the produced texts. This includes single words, sentences, paragraphs, or the whole draft. The low frequency of using this substrategy indicates students do not tend to look back on their writing as represented in the following extract,
This substrategy was used 14 times by the interview students, as in the following extract,

(SSL.SM9) Yes, I checked the content of my writing before handing it in. (Rgt)

The following subsection represents the third frequently used strategy (revising) by the think-aloud protocol and semistructured interview participants.

5.2.2.3 Revising Strategy and Relevant Substrategies

This section outlines the findings in relation to revising strategy (Rv) as it was used by both the protocol and interview participants. This strategy refers to the changes that the students make to their texts during the composing process to clarify meaning. These changes to the texts include either changes to content or structure (see Section 4.7.2.1).

Analysis of the think-aloud protocols reveals the revising strategy was used seven times by five participants, who revised their texts while they were still producing them, and after they finished the whole written task, whereas in the interviews, it was used 10 times among 10 students. The participants mentioned informally they had been directed in all writing classes to revise their written products before handing them to the teachers.

The revising (Rv) strategy includes four substrategies: addition (A), deletion (D), substitution (Sub), and word choice (Wc). Of the eight participants who undertook the think-aloud protocols, only five adapted their word choice (Wc). The analysis reveals this substrategy was used seven times by five think-aloud protocol participants, whereas it was used 10 times by 10 interview participants:

(SSL.SF8) What makes me upset in writing is that sometimes I lose words, I lose spelling but not all the time. (Wc)
(SSL.SM7) write, and if there are different words I can't write them, I mean vocabulary. (Wc)

The analysis also shows that addition (A) was used only once by the 8 participants. Moreover, another substrategy minimally used by the participants was deletion (D). This substrategy was used only twice, once each for two participants, whereas it was never used in the semistructured interviews. The following extracts are instances of the revising substrategies in the think-aloud protocols.

(TAP.SM1) My fears in Kuwait University were the (Now I’m searching for a right word to explain my fear of being accepted within my pears). (Wc)
If there was time, I would definitely revise the writing. If there wasn’t, I have to find just the major mistakes if there were any and trying to correct them. (D)

Then I revise it before I hand it in, and I look for the grammar mistakes or other things that I can omit or add. (A)

The following subsection represents the fourth frequently used strategy (evaluating) by the think-aloud protocol and semistructured interview participants.

5.2.2.4 Evaluating Strategy and Relevant Substrategies

Another strategy used by the participants was the evaluating strategy (Ev). The strategy, referring to the verbal judgment targeting different parts of the written text, was applied 13 times among all participants of the think-aloud protocols. The evaluation (Ev) strategy includes two subcategories, Positive evaluation (Pe) and Negative evaluation (Ne). Positive evaluation refers to the positive judgment about different parts of the written text. This usually occurs while the participants are still producing parts of their texts, and after producing a part of their texts and reading it. On the other hand, negative evaluation refers to the negative judgment about different parts of the written text, or what students write after reading what they produced.

The analysis of protocols and interviews revealed students tend to pass more negative than positive judgments about different parts of their writing. For example, five protocol students judged their written products negatively (seven times), with their negative comments leading to more reading and making changes to their writing. While carrying out the think-aloud protocols, the analysis showed only four high score protocol students could judge their written products positively (six times). This strategy was applied 16 times by only 11 interview participants. Although nine students could judge their written products 11 times negatively, only five high score students could judge their written products positively (five times) while carrying out the semistructured interviews. The following extract is an instance of the evaluating substrategies.

I'm not saying that my writing is perfect, but where I am now, I'm very confident of my work. (Pe)

Cross-referencing to the findings of the questionnaire, the analysis revealed behaviour of 30% of participants in the writing process echoes the findings obtained from the think-aloud protocols and semistructured interviews (see Section 5.2.1.3). The following extract echoes the questionnaire Item 10 (I focus on one thing at a time when revising) during the When revising stage:
What makes me upset in writing is grammar, because it is important in the writing. So far, I am ok with spelling. (Pe)

In addition, the analysis revealed some students are not driving their own learning and they tend not to take actions, as using the writing strategies are supposed to be a proactive behaviour. The following extract is an example.

(TAP.SF3) I always have wrong spelling and I don’t know how to fix it because I don’t know what to write. So, I leave it to the teacher. (Ne)

The following subsection presents the fifth frequently used strategy (editing) by the think-aloud protocol and semistructured interview participants.

### 5.2.2.5 Editing Strategy and Relevant Substrategies

The next strategy that occurred frequently after the previously-mentioned strategies is editing (Ed). Editing refers to the changes students make to their texts during the composing process on the surface level, as it includes two substrategies, such as grammar (Gr) and spelling (Sp), to correct a specific piece of information or meaning (see Section 4.7.2.1). The analysis of the protocols shows editing strategy was used nine times by only three of the participants. A number of students mentioned informally that they face problems with spelling and grammar from the early stages of schooling. Moreover, the analysis of the semistructured interviews showed this substrategy was used 20 times by 16 participants.

Regarding the substrategies, the analysis revealed grammar editing (Gr) was used less frequently than spelling editing (Sp) by the think-aloud protocol students. Grammar editing was used four times by three students, whereas spelling editing was used five times by three students. On the contrary, the analysis of the interviews revealed grammar editing (Gr) was used less frequently than spelling editing (Sp). Grammar editing was used four times by three students, whereas spelling editing was used 16 times by 13 students. Most of the participants stated informally that they try to edit their written texts, but they fail to spot all their mistakes and they might face difficulties while trying to correct all the grammatical and spelling mistakes of their produced texts. The following extracts refer to the editing substrategies, grammar and spelling, in both protocols and interviews.

(TAP.SM4) Then I revise it before I hand it in, and I look for the grammar mistakes or other things that I can omit or add. (Gr)

SSI.SM6 Yes, I checked the spelling. I just tried to remember using my mind. I spent 5-10 minutes. (Sp)

The following subsection represents the least frequently used strategy (re-reading) by the think-aloud protocol and semistructured interview participants.
5.2.2.6 Re-Reading Strategy

Re-reading (Rr) strategy was never used by the think-aloud protocol participants. The re-reading strategy (Rr) is different than reading (Rd), as it refers to instances of re-reading sentences that have been written or reading parts of the already-written text more than two times. By doing so, the students were actually fulfilling the requirement of the task, which was to continue verbalizing their thoughts. They might also be trying to convince themselves that they were still doing the task correctly.

The analysis of the interviews revealed this strategy was used 13 times among 13 participants during the semistructured interviews. The difference in strategy use between interviews and think-aloud protocols might suggest the think-aloud protocol format may not lead to re-reading strategy because of the reason that the process of this instrument ends directly after producing the written text. The following extract is an instance of the re-reading strategy:

(SS1.SF10) Yes, I revised and reread what I have written to be sure if everything is clear and alright and the vocabulary is clear. (Rr)

The following section represents the analysis of the semistructured interviews with English professors, to shed light on the difficulties and problems encountered by Kuwaiti EFL university students in their writing process.

5.3 Analysis of the Semistructured Interviews with English Professors

The researcher analysed the EFL professors’ semistructured interviews qualitatively by transcribing the audio-records as soon as the interviews were finished (see Appendix H). These transcriptions were then thematically analysed and categorized, through identifying the meaningful patterns of information provided, using SPSS. To provide an alternative perspective on students’ behaviour in their writing, the analysis of the professors’ interviews was triangulated with the results of the students’ protocols and semistructured interviews. Section 5.4 presents the data relevant to L1.

The teaching experience of the three professors interviewed varied between 3, 20, and 43 years of experience. Each of the three professors teach different compulsory writing courses, such as essay writing, report writing, research writing, paragraph writing, narrative writing, descriptive writing, as well as argumentative essay writing.

In regard to the professors’ interviews, they say that they instruct students regarding how to write in English, especially in terms of cohesion and coherence, punctuation, grammar, and to provide consistency throughout writing. Moreover, the professors all agreed on encouraging and instructing students to practice English writing and to use writing
strategies: mainly planning (local planning and outlining), reading (reading topic sentence), revising, coherence and cohesion. The following extract provides an example.

(P1) We teach them the stages of writing - prewriting, planning, writing and revising graphs and writing the final copy. For paragraph writing, we teach them the steps of writing, starting with choosing, and narrowing the topic, then brainstorming, outlining, writing the first rough draft, revising content, and organization by proofreading and then writing the final copy. Students are also exposed to authentic sample paragraphs to read and analyze their contents, with respect to major elements of the paragraph structure, like topic sentences, supporting sentences and concluding sentences. Also, we emphasize the need to have unity in the paragraph, as well as coherence and cohesion, that is the importance of using transitional signals when moving from one idea to another.

Represented within the analysis of these professors’ interviews was a mutual agreement of providing students feedback on their written work. Interviewed professors stated that they focus on planning (thematic planning), editing (spelling and grammar), revising (word choice), as well as cohesion and coherence. In addition, two of the professors agreed on encouraging students to use a monolingual dictionary to check the spelling of the words they are unsure of, although the third teacher mentioned encouraging students to use both monolingual and bilingual dictionaries to obtain an accurate word in the target language.

Furthermore, the professors mentioned students’ avoidance of engaging in social strategies, which surfaced as a potential problem in their teaching of writing. The students do not share and compare their written work with their peers, which may reflect negatively on their writing output. The following extract provides an example.

(P1) Due to the tight schedule, students don’t have time to practice the process of writing in class or sharing and comparing paragraphs with their peers which may reflect negatively on their writing output.

Another problem faced by the professors is the differentiation for multiple proficiency levels of students. Those professors found it difficult to differentiate their classes for the range of proficiency levels in the class, as in the following extract,

(P2) When you compare their writing, we definitely come across widely different accuracy and widely different degrees of fluency to the extent that you think that these two classes are two different levels.

In terms of generating a cohesive and coherent text, the professors mentioned students face difficulties while writing in English, through the way they organize their sentences and the way they achieve cohesion in their texts. One of the professors provided a solution to this problem through encouraging students to read aloud or read the generated text in the classroom. This process emphasizes the students’ use of the social strategies, as represented within the following extract,
(P3) I think one way of solving this is by letting them, especially at the early stage, read it out loud. I mean writing is easy for them, if we are brave enough to say this, but I think if we force them to read it out loud in front of students and they get not all the feedback from their classmates, but they also get a mental twig, and they notice what they wrote is actually not coherent with a couple of paragraphs above, in many ways I put them on a spot. So, that’s mainly for the early stages, and then they start remembering and trying to avoid this embarrassment.

Moreover, cross-reference to the findings of the questionnaire (see Section 5.2.1.3), reading aloud, or reading the generated text would also echo the findings from questionnaire Item 1 (I read my text aloud) during the “When revising stage”.

Regarding whether students like to write in English, the responses from professors varied, as one of them responded negatively that students do not like to write in English because they find it a hard task as they cannot express themselves in English. Offering an opposing view, another professor responded positively that students like to write in English only if they are allowed to choose their own topic-leading to more creativity in the writing process. Providing an additional perspective, another professor mentioned students would be more willing to use English only if they were confident of their English language skills. However, students would lose their confidence if they received negative feedback on their written products, as demonstrated in the following extract,

(P2) Usually, if a student is confident in his or her English, he or she will be more willing to use English, but if someone is not sure of his English, if someone got his written assignments marked with so many red on the page, he will be shy the next time to submit an assignment in English. This is how we all learn English as a foreign language, it started by making mistakes.

Finally, the three professors responded that students are not motivated to develop and improve their writing skills unless the lecturer provides them with enough feedback on their writing. The professors believed students only study English to pass the tests and then graduate with high scores for the sake of finding better jobs, but not for the sake of learning how to develop and improve their language skills. The following extracts exemplify this finding.

(P1) We correct their paragraphs and highlight the errors they make in class with respect to sentence structure, verb forms and agreements, word choice, basic elements of paragraph structure, punctuation, capitalization, run on sentences and fragments. We do that in the class when we return their assignments.

(P2) Usually I think when students submit any kind of work without getting it back corrected with all the mistakes indicated, and possibly if there is a common mistake in a particular piece of writing, this can be explained on the blackboard or the whiteboard. Sometimes, if it is an individual mistake, it can be written on the assignment paper itself.
The next section presents the findings concerning RQ2. The quantitative findings obtained from the writing-strategies questionnaire were cross-referenced with the qualitative findings obtained from the think-aloud protocols and semistructured interviews. This process allowed for a more in-depth discussion.

5.4 Findings of Research Question 2

This section presents the findings related to RQ2, reporting the participants’ account of utilizing L1 (Arabic), when composing in L2 (English). The researcher first presents the quantitative findings obtained from the writing strategy questionnaire, and then cross-referenced those with the qualitative findings obtained from the think-aloud protocols and semistructured interviews of both students and professors. The researcher presents the findings in relation to the literature in the next chapter (see Section 6.2). In addition, the analysis of the qualitative and quantitative data set up the multivariate analysis of the questionnaire data, which contributes to this research question (see Section 5.6).

The analysis of the writing-strategy questionnaires indicates participants do use their L1 in a variety of ways. In terms of the lexicon, a number of students (59%) stated they always use a bilingual dictionary to check for new vocabulary or correct spelling (38% Always true, 21% Usually true), whereas 23% almost never do (12% Usually not true, 11% Never true), and 18% of students provided a neutral response (Column 12). However, 47% of students reported if they do not know a word in English, they always stop writing and look up the word in the dictionary (27% Always true, 20% Usually true), whereas 29% almost never do (19% Usually not true, 10% Never true), and 24% of students provided a neutral response (Column 11). The majority of students (62%) reported they almost never use an English language monolingual dictionary (20% Usually not true, 42% Never true), whereas 18% always or usually do (10% Always true, 8% Usually true), with 20% of students providing a neutral response (Column 13). Therefore, in terms of accessing lexical resources, students rely on their L1 as a starting point. This might indicate students focus heavily on vocabulary and try to access the required vocabulary through use of a bilingual dictionary which shows that they continue to use their L1 to develop their vocabulary. Although many students almost never use a monolingual dictionary, 18% of students stated that they do use this resource during the writing process, as illustrated in Figure 4. This suggests a majority of the students rely on their L2 resources to expand their L2 vocabulary, at least part of the time.
The analysis of the questionnaires also showed 56% of the participants reported they almost never write bits of the text in their native language and then translate them into English (21% Usually never true, 35% Never true), whereas 30% usually do (10% Always true, 20% Usually true), and 14% provided a neutral response (Column 6). Similarly, 42% (14% Usually not true, 28% Never true) of the participants reported if they do not know a word in English, they never write it in their native language in an attempt to try to find an appropriate word later in English, whereas 37% (20% Always true, 17% Usually true) usually do so, and 21% provided a neutral response (Column 9). This may indicate some students do not use their L1 as a placeholder during the writing process, as they rarely write in Arabic until they can work it out and find the word in English.

Other students use compensation strategies to adapt their L1 choices and structures to their L2 resources. In the questionnaire data, the majority of students (74%) stated if they do not know a word in English, they find a similar English word that they know (36% Always true, 38% Usually true), whereas 7% almost never do (3% Usually not true, 4% Never true), and 19% of students provided a neutral response (Column 10). In addition, 59% of students mentioned they always simplify what they want to write if they do not know how to express their thoughts in English (26% Always true, 33% Usually true), whereas 12% almost never do (8% Usually not true, 4% Never true), and 29% of students provided a neutral response (Column 8). Cross-referencing to the analysis of the semistructured interviews, it showed some students might use their L1 in their writing through the whole process as a compensation strategy.

Thus, with regard to usage of L1 (Arabic) in writing with L2 (English), the L1, when used by students, was mostly used at formative stages. This was evident in data that showed the L1 was used when students were having difficulties with what specific words to use to express themselves, and new vocabulary and spellings, in which case they turned to tools like the bilingual dictionary. Of the participants, 30% admitted they resorted to direct translations of texts from the native language and 37% claimed when they were stuck during writing exercises, they substituted with Arabic words that would guide them in finding the right English words later. In addition, the majority maintained they preferred to rely on L2 through compensation strategies by finding simpler words or words similar in meaning. Thus, although students tried to utilize L2 more in their writing, the L1 played a key foundational role in text and sentence construction.

Regarding the qualitative data obtained from the think-aloud protocols and semistructured interviews, the results varied, as the analysis of the think-aloud protocols
revealed L1 strategy was the least used and it was used by only one participant. This might suggest the think-aloud protocol participants almost never used their first language (Arabic) to aid their writing in the target language (English). This could be because most of the students who participated in the think-aloud protocols were self-selecting and they were more proficient than those who participated in the interviews, based on their teachers’ evaluation of their written products through the semester. Consequently, the think-aloud protocol participants completed the task in English and did not appear to have difficulties in writing in English and potentially rarely faced problems that interrupt the flow of their ideas in the writing process.

On the other hand, the analysis of the interviews showed the L1 strategy was used seven times by six students during the semistructured interviews. All of the six students mentioned they usually transfer from Arabic to English in order to note down words and make short notes because they believe this might help when facing lexical difficulties. Six out of 20 participants noted using their L1 as a strategy as in the following quote,

(SM7) Yes, I note down words and short notes in Arabic. I usually do that because sometimes it helps when I find difficulties when I want to find a vocabulary I can't remember. I go back to Arabic and try to transfer. (L1)
(SF6) Yes, some words I don't know how to use, so I wrote in Arabic first. I always transfer from Arabic to English. (L1)

In reference to the professors’ interviews, two reported the L1 strategy use by students is considered a problem, rather than a potential strategic tool that might assess them in the writing process. The professors mentioned students use of L1 influence their writing habits, which might result in inaccuracy in their written products, as presented in the following extracts,

(P1) Due to the lack of ideas and the weakness in language skills, students find difficulty in expressing themselves in writing in English. They often try to literally translate their views in Arabic into English, which may result to an awkward sentence structure and expressions in English.
(P3) Unfortunately, it’s the language interference. Basically, L1 affects L2, and sometimes, even in my translation classes, I’ve noticed students are aware of the words, are aware of what they mean, but they copy the structure of English. So, sometimes they copy the punctuation, not just the style. They copy the structure of English into Arabic.

In terms of lexical choices, two of the professors agreed students should be encouraged to use a monolingual dictionary to check the spelling of the words they are not sure about, but the third teacher mentioned encouraging students to use both monolingual and bilingual dictionaries to achieve the accurate word they need in the target language. The
emphasis from the professors was on L1 as a negative influence, which should be avoided unless through a structured dictionary use.

(P1) Yes, we always ask them to refer to a monolingual dictionary.
(P2) Both actually, because if I’m teaching a course in the Department of English for undergraduate level, I give them the option either to use a monolingual dictionary or a bilingual dictionary critically. Sometimes, they have to check a word or an expression in both in order to get exactly the accurate thing that it needs in target language.
(P3) I would recommend they first rely on a bilingual dictionary to try to get the translation equivalent. Then if there is any misleading information from the entry of the dictionary, I would recommend they try the monolingual dictionary, since the monolingual dictionary doesn’t provide an equivalent but rather provides more descriptive information which provides more definitions and contextual examples, which leads to a better understanding of the word.

The current section presented the findings related to RQ2 through reporting the quantitative and qualitative findings obtained from the writing-strategies questionnaire, as well as the think-aloud protocols and semistructured interviews of both students and their professors. In addition, the following section presents the findings related to RQ3 through the textual analysis of students’ written products in terms of cohesion and quality.

### 5.5 Findings of Research Question 3

This section presents the findings related to RQ3, through reporting the characteristics of the texts produced by the students in terms of cohesion and quality. This section outlines the quality measures as well as the cohesion measures of students’ written products obtained from the think-aloud, interviews, and the questionnaire texts. The sampling for the three groups was different, as noted in the methodology. The goal of this task was to identify and analyse the content of students’ texts in terms of typical quality measures and cohesion.

#### 5.5.1 Coherence Strategy

Halliday and Hasan (1976) emphasize the linguistic description of coherence. The researchers define coherence as a semantic unit, and cohesion as the set of internal semantic relations that build it. Coherence is also defined as “the organization of discourse with all elements present and fitting together logically” (Hinkel, 2004). This definition emphasizes that a coherent essay consists of an introduction, a thesis statement, rhetorical support, and a conclusion.

The coherence strategy (Ch) links to the theme for RQ3 and was created and added to the analysis of the semistructured interviews. The analysis showed this strategy was used 10 times by only half of the students (10). The following extract is an instance of the coherence strategy.
The analysis of the semistructured interviews echoes the analysis of the questionnaire, as item 14 (I check if my paragraph has coherence) showed 54% of students reported as always checking the coherence of their writing (19% Always true, 35% Usually true), 14% rarely doing so (5% Usually not true, 9% Never true), and 32% of students being neutral in their responses. This finding indicates the majority of the participants write their paragraphs coherently and do proper arrangement of ideas during their writing process.

Some participants responded quite negatively to the coherence strategy, and only one student expressed negative evaluation of herself, as represented in the following extract,

(SSI.SM9) What makes me upset in writing is that I have a problem with spelling, grammar and the way I write, it's most complicated. I can't even put the words in the right place, connecting sentences and planning.

The following subsection presents the quality measures as well as the characteristics of students’ written products obtained from the writing-strategies questionnaire, think-aloud protocols, and semistructured interview texts.

5.5.2 Text Quality Metrics of Students’ Written Texts

The 128 written products of the three different groups of participants (writing-strategies questionnaire, think-aloud protocols, and semistructured interviews) were similar to the topics studied in the classroom setting or assigned in exams, and were generated without word processing (see Section 4.4.4). The textual analysis was assessed according to the criteria from Jacobs et al. (1981), which was considered as guidance for the scoring process (see Section 4.7.3.2). However, the written product analysis allowed for comparison of aspects of text quality to the strategies participants used in the think-aloud protocols, interviews, and writing-strategies questionnaire. This section outlines the analysis of the evaluation measure. Section 5.5.3 outlines the cohesion analysis of the students’ writing samples, and Section 5.5.4 outlines the correlation of cohesive devices’ measures and text evaluation scores.

Appendices K and L present the text quality metrics of the participants’ written texts. The texts were assessed for quality according to the standard test of Jacobs et al. (1981), that readers make five holistic assessments that target different aspects of the composition, such as content, organization, vocabulary, language use, and mechanics (see Section 4.7.3.2). Figure
10 presents the mean of the 128 text scores was 55.89% with a standard deviation of 23.334, and a normal distribution.

![Histogram](image)

**Figure 10 Histogram of the 128 students’ texts scores**

A distinction exists between the performance of students in the think-aloud, semistructured interviews, and questionnaire texts. Table 14 outlines the text quality metric descriptive statistics per data set.

<table>
<thead>
<tr>
<th>Data set</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>All students</td>
<td>Score</td>
<td>128</td>
<td>0.00</td>
<td>100.00</td>
<td>55.894</td>
</tr>
<tr>
<td></td>
<td>Valid N</td>
<td>128</td>
<td></td>
<td></td>
<td>23.3357</td>
</tr>
<tr>
<td></td>
<td>(listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Think-aloud</td>
<td>Score</td>
<td>8</td>
<td>35.00</td>
<td>91.00</td>
<td>68.188</td>
</tr>
<tr>
<td></td>
<td>Valid N</td>
<td>8</td>
<td></td>
<td></td>
<td>19.6720</td>
</tr>
<tr>
<td></td>
<td>(listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interviews</td>
<td>Score</td>
<td>20</td>
<td>53.00</td>
<td>97.50</td>
<td>77.950</td>
</tr>
<tr>
<td></td>
<td>Valid N</td>
<td>20</td>
<td></td>
<td></td>
<td>12.8024</td>
</tr>
<tr>
<td></td>
<td>(listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire</td>
<td>Score</td>
<td>100</td>
<td>.00</td>
<td>100.00</td>
<td>50.500</td>
</tr>
<tr>
<td></td>
<td>Valid N</td>
<td>100</td>
<td></td>
<td></td>
<td>22.35503</td>
</tr>
<tr>
<td></td>
<td>(listwise)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 15 outlines the mean score (M), standard deviation (SD) and t value of the scales in males and females. Regarding the texts within the 100 questionnaires, the males had a broader range of scores than the females in general, although the females’ highest score was 100 (Female max = 100, min = 30; Male max = 80; min = 0 & 10). Regarding the eight think-aloud protocol texts, the females had a broader range of scores than the males (Female max = 91, min = 35; Male max = 82.5; min = 42.5). However, within the interview data, the males
tended to get higher scores than the females (Male max = 97.5, min = 63.5; Female max = 95.5; min = 53.5).

Also, when looking at the full data set of questionnaire texts, the males have a broader range of results (1–100) with a lower mean than the female students (see Table 15). The analysis of the evaluation measure of the participants’ texts revealed a statistically significant difference in the means between the three groups of data sets and score, which demonstrates the questionnaire data of 100 students is the highest mean by the three groups of data sets. Additionally, the analysis revealed a statistically significant difference in the means between males and females. Female participants perform better ($M = 64.9$) than the male participants ($M = 46.9$), as shown in the $t$ test statistical analysis below ($t = -4.520$, $p < .0001$). Consequently, a statistically significant difference existed in the means between males and females in the questionnaire data, as females perform better ($M = 62.4$) than the males ($M = 38.6$), as shown in the $t$ test statistical analysis ($t = -6.270$, $p < .0001$). With regard to the think-aloud protocols and interview data of 28 participants (8 think-aloud and 20 interview participants, with equal count for the males and the females in both groups), analysis revealed no significant difference between the genders.

<table>
<thead>
<tr>
<th>Scales</th>
<th>Males</th>
<th>Females</th>
<th>$T$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min</td>
<td>Max</td>
<td>$SD$</td>
<td>Min</td>
</tr>
<tr>
<td>Think-Aloud Students</td>
<td>42.5</td>
<td>82.5</td>
<td>17.4</td>
<td>35.0</td>
</tr>
<tr>
<td></td>
<td>(n =4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interview Students</td>
<td>63.5</td>
<td>97.5</td>
<td>11.2</td>
<td>53.5</td>
</tr>
<tr>
<td></td>
<td>(n =8)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire Students</td>
<td>00.0</td>
<td>80.0</td>
<td>20.9</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>(n=50)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Students</td>
<td>00.0</td>
<td>97.50</td>
<td>25.1</td>
<td>30.0</td>
</tr>
<tr>
<td></td>
<td>(n=64)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note. *$p < .05$ (two-tailed). **$p < .001$ (two-tailed).*

The next section presents the cohesion analysis and the frequency count of the cohesive devices used in the participants’ written samples.

5.5.3 Cohesion Analysis of the Students’ Written Texts

This section reports the results of the textual analysis of the students’ written texts to investigate the students’ use of cohesive devices (see Table 16). In the current study, the
researcher intended to provide an investigation of macrolevel cohesive devices used in each text. This analysis was based on the idea that Kuwaiti college students face difficulties in using proper cohesive devices in their writing process. The cohesive devices were identified through the participants’ written texts and were counted using frequency distribution tables in Excel software by two assessors, the researcher and a colleague at the English Language Unit who has a Ph.D. in applied linguistics. Subsequently, mean and standard deviation of the cohesive devices were verified using SPSS statistical software. In addition, the researcher used correlation analysis to determine the relationship between the frequency of the use of cohesive devices and the quality of the writing (score). More details related to the data of the frequency count of the cohesive devices used by the three groups of 128 students are provided (see Appendix M). The textual analysis of the participants’ writing task was based on the analytical framework of Halliday and Hasan (1976; see Section 3.9).

Table 16 Data of the normalized count of the cohesive devices used by the 128 students

<table>
<thead>
<tr>
<th>Type of Cohesive Device</th>
<th>%</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference</td>
<td>2897</td>
<td>21.3307</td>
<td>5.77440</td>
</tr>
<tr>
<td>Conjunction</td>
<td>755</td>
<td>5.6357</td>
<td>2.61611</td>
</tr>
<tr>
<td>Lexical</td>
<td>977</td>
<td>7.4274</td>
<td>3.31224</td>
</tr>
<tr>
<td>Substitution</td>
<td>61</td>
<td>.4026</td>
<td>.73380</td>
</tr>
<tr>
<td>Ellipsis</td>
<td>40</td>
<td>.3029</td>
<td>.67524</td>
</tr>
</tbody>
</table>

The researcher presented descriptive statistics derived from the data to investigate the most frequent cohesive devices used by students. The five macrolevel cohesive devices—reference, substitution, ellipsis, conjunction, and lexical—were scored and coded in the 128 student texts (see Appendix M).

The researcher analysed each text in terms of cohesion, providing a frequency count for each cohesive device. The frequency counts were normalized for text length and reported as frequency of the device per 100 words of text to allow the researcher to compare cohesion counts in texts of different lengths (The normalized count of the cohesive devices used by the 128 students is provided in Appendix N). With regard to the frequency count of the cohesive devices used by the 128 students of the three data sets shown in Table 16, the students in the present study employed a variety of cohesive devices with some types of devices used more frequently than others.

As illustrated in Table 16, the analysis revealed a notable difference in the students’ use of cohesive devices in terms of frequency. Students overused certain types of cohesive
devices, while neglecting to use the others. Reference cohesive device, which is a type of grammatical cohesion, was the most extensively-used category of cohesion in the writing of all the 128 participants ($M = 21.3307, SD = 5.7744$). Reference as a cohesive device includes use of personal or relative pronouns, possessive demonstratives, and demonstrative words. The frequency in use of reference cohesive device was followed by the frequency of lexical cohesion, which was used among 126 students ($M = 7.4274, SD = 3.3122$), and then conjunction cohesion was used among 124 students ($M = 5.6357, SD = 2.6161$). Substitution and ellipsis were used rarely, although substitution was used by only 39 students ($M = 0.3029, SD = 0.6752$) and ellipsis was only used among 29 students ($M = 0.3029, SD = .6752$). The standard deviation across the most frequently-used cohesive devices is high, indicating the devices are used to different extents by different writers (see Table 16). The next section details the correlations between different cohesive devices and the measure of text quality.

5.5.4 Correlation of Cohesive Devices’ Measures and Text Evaluation Scores

Correlation analysis is used to illustrate the strength and direction of the linear relationship among cohesive device measures and text evaluation scores. Table 17 outlines the Pearson correlation coefficients of the various five dimensions of cohesive devices representing the moderate positive significance relationship with text evaluation scores. A $p$ value less than 0.05 devices was required for significance. Table 17 presents the correlation analysis among the writing scores and the different cohesive variables.

As indicated in Table 17, the analysis revealed the correlation coefficient between writing scores and reference cohesive device is positive and statistically significant, because only the reference was highly correlated with score ($r = .271, p < 0.05$). This indicates that reference cohesion is well-used by students in generating high scoring texts. In addition, the results show the correlation coefficient between score and word count (text length) is positive and statistically significant ($r = .631, p < 0.05$). This result may be related in the fact that high score texts tended to be longer, even though text length is not one of the evaluation criteria for the text quality measure. Moreover, the analysis reveals that the correlation coefficient between ellipsis and reference cohesion is positive and significantly correlated ($r =.220, p <0.05$), even with the ellipsis cohesion being represented within this data as rarely used. Meanwhile, only conjunctions and reference cohesive devices were found to be negatively correlated ($r = -.225, p < 0.05$). Cross-reference to the analysis of the three professors’ interviews, the findings revealed professors instruct students on how to write in English, especially in terms of cohesion (see Section 5.3).
### Table 17 Correlation of cohesive devices’ measures and text evaluation scores

<table>
<thead>
<tr>
<th></th>
<th>Normalised reference per 100 words</th>
<th>Normalised conjunction per 100 words</th>
<th>Normalised lexical per 100 words</th>
<th>Normalised substitution per 100 words</th>
<th>Normalised ellipsis per 100 words</th>
<th>Word Count (Text Length)</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normalised reference per 100 words</td>
<td>Pearson Correlation</td>
<td>1</td>
<td>-0.225*</td>
<td>-0.073</td>
<td>-0.087</td>
<td>0.220*</td>
<td>0.661</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.11</td>
<td>0.412</td>
<td>0.331</td>
<td>0.012</td>
<td>-0.096</td>
<td>-0.025</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Normalised conjunction per 100 words</td>
<td>Pearson Correlation</td>
<td>-0.225*</td>
<td>1</td>
<td>0.117</td>
<td>0.004</td>
<td>-0.096</td>
<td>-0.025</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.011</td>
<td>0.190</td>
<td>0.967</td>
<td>0.282</td>
<td>0.783</td>
<td>0.516</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Normalised lexical per 100 words</td>
<td>Pearson Correlation</td>
<td>-0.073</td>
<td>0.117</td>
<td>1</td>
<td>0.065</td>
<td>-0.139</td>
<td>-0.094</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.412</td>
<td>0.190</td>
<td>0.466</td>
<td>0.118</td>
<td>0.224</td>
<td>0.290</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Normalised substitution per 100 words</td>
<td>Pearson Correlation</td>
<td>-0.087</td>
<td>0.004</td>
<td>0.065</td>
<td>0.1</td>
<td>0.087</td>
<td>0.140</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.331</td>
<td>0.967</td>
<td>0.466</td>
<td>0.328</td>
<td>0.115</td>
<td>0.710</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Normalised ellipsis per 100 words</td>
<td>Pearson Correlation</td>
<td>0.220*</td>
<td>-0.096</td>
<td>-0.139</td>
<td>0.087</td>
<td>1</td>
<td>-0.018</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.012</td>
<td>0.282</td>
<td>0.118</td>
<td>0.328</td>
<td>0.840</td>
<td>0.061</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Word Count (Text Length)</td>
<td>Pearson Correlation</td>
<td>0.061</td>
<td>-0.025</td>
<td>-0.108</td>
<td>0.140</td>
<td>0.018</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.492</td>
<td>0.783</td>
<td>0.224</td>
<td>0.115</td>
<td>0.840</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
<tr>
<td>Score</td>
<td>Pearson Correlation</td>
<td>0.271**</td>
<td>-0.058</td>
<td>-0.094</td>
<td>0.033</td>
<td>0.166</td>
<td>0.631**</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>0.002</td>
<td>0.516</td>
<td>0.290</td>
<td>0.710</td>
<td>0.061</td>
<td>0.000</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
<td>128</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (2-tailed).

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

The following section presents the findings concerning RQ4 in detail using multivariate statistical analysis to provide more in-depth investigation of the relationship between strategy use and text characteristics in students’ writing.

### 5.6 Multivariate Analysis and Findings of RQ4

The analysis of the qualitative and quantitative data set up the multivariate analysis of the questionnaire through the reporting of the relationship between strategy use and text characteristics in the writing of Kuwaiti college students, as well as the internal relations between strategy uses. The goal of this factor analysis is to provide an account and
interpretation of the variables with high factor loadings for the identified components within the data set, and then group highly interrelated variables into factors. This analysis was based on a correlation matrix of all variables included in the analysis. In this study, factor analysis provided a contribution to the exploration of RQ4, as well as the findings related to RQ1 and RQ2 to identify what aspects of the process, the writing strategies and substrategies, affect aspects of the products, such as the quality score and the use of cohesive device. The following section outlines the results of the multivariate analysis of both the questionnaire and the text quality and cohesive devices’ data through a presentation of the factor analysis with an eigenvalue of more than 1.1 (see Section 4.7.4, Appendix O). Appendix P includes the questionnaire factor analysis rotated component matrix. The qualitative data identified in the interview and think-aloud protocols were not included in the multivariate analysis but aligned with it subsequently on strategy use with written texts of each participant across different participant groups, in an attempt to explore their accounts of strategy use and the quality of their writing in terms of cohesion.

5.6.1 Results of the Factor Analysis of Text Characteristics and Strategy Use in Questionnaire Data

This section provides an account and interpretation of the variables with high factor loadings for the components identified within the data set. The goal of this factor analysis was to look for the relationships between strategy use and text quality, and the use of cohesive devices. Factor analysis identifies correlated groupings of strategies from across the range of strategy categories and text characteristics as discrete factors.

The researcher identified 15 components within the data set and eigenvalues were required to be more than 1.1. Consequently, the analysis yielded a 13-factor solution because of the low factor loading of the remaining variables (14 and 15) with an eigenvalue < 1.1. In this study, all component variables with a factor loading of more than 0.4 were included, based on Stevens’ (2002) suggestion that the cut-off point was appropriate for interpretative purposes. Appendix P presents a table of the questionnaire factor analysis rotated component matrix. Table 18 presents the identified factors and percentages of variance. Together, these factors explained 65.926% of the variance in the 47 variables (40 questionnaire items, 5 cohesive devices, score, and gender).
<table>
<thead>
<tr>
<th>Factor</th>
<th>Description</th>
<th>% of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Proactive and strategic behaviour regarding mental planning before writing</td>
<td>12.367</td>
</tr>
<tr>
<td>2</td>
<td>Proactive behaviour regarding text structure before, during and after writing</td>
<td>8.378</td>
</tr>
<tr>
<td>3</td>
<td>Proactive behaviour regarding editing vocabulary and error checking during and after writing</td>
<td>7.944</td>
</tr>
<tr>
<td>4</td>
<td>Social strategies</td>
<td>6.612</td>
</tr>
<tr>
<td>5</td>
<td>Proactive behaviour regarding coherence strategies during writing with the use of reference cohesive device</td>
<td>4.649</td>
</tr>
<tr>
<td>6</td>
<td>Gender and score linked also to the use of substitution cohesion devices</td>
<td>4.298</td>
</tr>
<tr>
<td>7</td>
<td>Proactive behaviour regarding a systematic approach during and after writing</td>
<td>3.792</td>
</tr>
<tr>
<td>8</td>
<td>Reliance on L1 and an unstructured approach to writing</td>
<td>3.495</td>
</tr>
<tr>
<td>9</td>
<td>Proactive behaviour regarding reading and revising strategies after writing</td>
<td>3.251</td>
</tr>
<tr>
<td>10</td>
<td>Affective strategies</td>
<td>3.902</td>
</tr>
<tr>
<td>11</td>
<td>Active use of dictionary resources to avoid compensation strategies</td>
<td>2.861</td>
</tr>
<tr>
<td>12</td>
<td>Proactive behaviour regarding revising and social strategies after writing</td>
<td>2.760</td>
</tr>
<tr>
<td>13</td>
<td>Lexical cohesive device</td>
<td>2.615</td>
</tr>
</tbody>
</table>

| Total  | 65.926                      |

The first component (eigenvalue = 5.813; % of variance = 12.367%) is comprised of high factor loadings for the following variables, using a model, making a timetable, noting down words and short notes related to the topic, starting writing with no plans, reviewing the requirements, making notes and outlines, and planning in mind. This component could be interpreted as a proactive and strategic behaviour before writing, as students tend to look at a model written by a native speaker or more proficient writer to write notes or an outline to support their focus on vocabulary, accuracy, and the flow of their written work, to meet the requirements of a specific writing task through initial preparation and final review. In addition, students tend to perform a mental plan before writing. These behaviours relate to the following themes derived from the interviews and think-aloud protocols: reading through the topic sentence, planning strategies through local planning, thematic planning, and outlining (see Table 19).
Table 19 Components of factor 1 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1: Proactive and strategic behaviour regarding mental planning before writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>b3</td>
<td>I look at a model written by a native speaker or more proficient writer</td>
<td>.844</td>
</tr>
<tr>
<td>b1</td>
<td>I make a timetable for the writing process</td>
<td>.806</td>
</tr>
<tr>
<td>b6</td>
<td>I note down words and short notes related to the topic in English/Arabic</td>
<td>.771</td>
</tr>
<tr>
<td>b4</td>
<td>I start writing without having a written or mental plan</td>
<td>.707</td>
</tr>
<tr>
<td>b2</td>
<td>Before I start writing I revise the requirements</td>
<td>.596</td>
</tr>
<tr>
<td>b7</td>
<td>I write notes or an outline of my paragraph in English/Arabic</td>
<td>.561</td>
</tr>
<tr>
<td>b5</td>
<td>I think about what I want to write and have a plan in my mind, but not on paper</td>
<td>.492</td>
</tr>
</tbody>
</table>

The second component (eigenvalue = 3.938; % of variance = 8.378%) is comprised of high factor loadings for the following variables, changing paragraph structure, changing sentence structure, changing content or idea and changing outlines. This component could be interpreted as a proactive behaviour before, during and, in particular, after writing with a focus on text structure. These behaviours relate to the themes derived from the interviews and think-aloud protocols: local planning during the writing stage and revising strategies after writing (see Table 20).

Table 20 Components of factor 2 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 2: Proactive behaviour regarding text structure before, during and after writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>d8</td>
<td>I make changes in the structure of the paragraph</td>
<td>.825</td>
</tr>
<tr>
<td>d7</td>
<td>I make changes in the sentence structure</td>
<td>.750</td>
</tr>
<tr>
<td>d9</td>
<td>I make changes in the content or idea</td>
<td>.707</td>
</tr>
<tr>
<td>c5</td>
<td>I go back to my outlines and make changes in it</td>
<td>.641</td>
</tr>
<tr>
<td>d6</td>
<td>I make changes in vocabulary</td>
<td>.525</td>
</tr>
</tbody>
</table>

The third component (eigenvalue = 3.734; % of variance = 7.944%) is comprised of high factor loadings for the following variables, using bilingual dictionary, using a dictionary and checking spellings. This component could be interpreted as a proactive behaviour during and after writing, as students tend to use resources, especially a bilingual dictionary, to help them find and edit vocabulary and check the errors they make in their writing when they read their texts. These behaviours relate to the themes derived from the interviews and think-aloud protocols: editing strategies through spelling and grammar (see Table 21).
Table 21 Components of factor 3 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 3: Proactive behaviour regarding editing vocabulary and error checking during and after writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>c12</td>
<td>I use a bilingual dictionary</td>
<td>.818</td>
</tr>
<tr>
<td>c11</td>
<td>If I don’t know a word in English, I stop writing and look up the word in the dictionary</td>
<td>.757</td>
</tr>
<tr>
<td>d3</td>
<td>I check the spelling in my writing (with a spell checker or dictionary)</td>
<td>.551</td>
</tr>
</tbody>
</table>

The fourth component (eigenvalue = 3.108; % of variance = 6.612%) is comprised of high factor loadings for the following variables, asking for help when having problems while writing, asking for opinions, and comparing with friend’s writing. This component could be interpreted as social strategies. Social strategies did not emerge as a theme in the think-aloud protocols and interview data (see Table 22).

Table 22 Components of factor 4 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 4: Social strategies</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>c14</td>
<td>I ask somebody to help out when I have problems while writing</td>
<td>.817</td>
</tr>
<tr>
<td>d16</td>
<td>I show my text to somebody and ask for his/her opinion</td>
<td>.725</td>
</tr>
<tr>
<td>d17</td>
<td>I compare my paper with the paragraphs written by my friends on the same topic</td>
<td>.602</td>
</tr>
</tbody>
</table>

The fifth component (eigenvalue = 2.185; % of variance = 4.649%) is comprised of high factor loadings for the following variables, checking paragraph unity, reading what’s written when finishing the whole paper (negative), reference cohesive device, leaving the written paper for a few days for a new perspective (negative), and checking paragraph coherence. This component could be interpreted as a proactive behaviour during writing, with a focus on text coherence and unity, as well as using reference cohesive devices, because students tend to check the coherence of their texts during the writing process. This during-writing behaviour is not followed by further reviewing, rereading the draft or taking time to consider rereading the draft after some time. These behaviours relate to the following themes derived from the interviews and think-aloud protocol reading strategies (see Table 23).
Table 23 Components of factor 5 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 5: Proactive behaviour related to coherence strategies during writing with the use of reference cohesive device</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>d13</td>
<td>I check if my paragraph has unity (all sentences are about the topic)</td>
<td>.711</td>
</tr>
<tr>
<td>d2</td>
<td>I only read what I have written when I have finished the whole paper</td>
<td>-.599</td>
</tr>
<tr>
<td></td>
<td>Reference cohesive device</td>
<td>.546</td>
</tr>
<tr>
<td>d15</td>
<td>I leave the text aside for a couple of days and then can see it in a new perspective</td>
<td>-.540</td>
</tr>
<tr>
<td></td>
<td>I check if my paragraph has coherence (i.e. my paragraph flows smoothly from the beginning to end)</td>
<td>.512</td>
</tr>
</tbody>
</table>

The sixth component (eigenvalue = 2.020; % of variance = 4.298%) is comprised of high factor loadings for the following variables, score, gender, evidence of substitution cohesive devices in writing. This is the only factor or component associated with the score variable. This component reflects the high correlation of the gender and score variables whereby the females tend to do better than the males, although the males had a broader range of scores than the females in the questionnaire texts (Section 5.5.2). In addition, the gendered high scores are associated with the use of substitution as a cohesive device, which may suggest a more advanced approach to creating cohesive texts. However, substitution was rarely used and therefore this may relate only to the specific behaviour of certain high performing individuals.

Table 24 Components of factor 6 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 6: Proactive behaviour related to score, gender and substitution cohesion before and during writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>.780</td>
</tr>
<tr>
<td></td>
<td>Score</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gender</td>
<td>.740</td>
</tr>
<tr>
<td></td>
<td>Substitution cohesive device</td>
<td>.507</td>
</tr>
</tbody>
</table>

The seventh component (eigenvalue = 1.782; % of variance = 3.792%) is comprised of high factor loadings for the following variables, stopping after each sentence to read it again and rereading what has been written to get ideas. This component could be interpreted as a proactive behaviour during and after writing, with a focus on reading strategies, especially reading the generated text, because students tend to read their generated texts. This component reflects a systematic approach to writing with a focus on reading. These behaviours relate to the themes derived from the interviews and think-aloud protocols: reading through the generated text, and rereading strategies (see Table 25).
Table 25 Components of factor 7 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 7: Proactive behaviour related to a systematic approach during and after writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>c2</td>
<td>I stop after each sentence to read it again</td>
<td>.669</td>
</tr>
<tr>
<td>c4</td>
<td>I reread what I have written to get ideas how to continue</td>
<td>.633</td>
</tr>
</tbody>
</table>

The eighth component (eigenvalue = 1.643; % of variance = 3.495%) is comprised of high factor loadings for the following variables, handing in the written paper without reading, starting with an introduction, and writing words in L1. This component does not suggest proactive or strategic behaviour. It shows some reliance on L1 and a somewhat unstructured approach to writing, which is not started at a coherent point. These behaviours relate to the themes derived from the interviews and think-aloud protocols: planning through local planning and use of L1 (see Table 26).

Table 26 Components of factor 8 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 8: Reliance on L1 and an unstructured approach to writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>d4</td>
<td>When I have written my paper, I hand it in without reading it</td>
<td>.770</td>
</tr>
<tr>
<td>c1</td>
<td>I start with the introduction</td>
<td>-.551</td>
</tr>
<tr>
<td>c6</td>
<td>I write bits of the text in my native language and then translate them into English</td>
<td>.489</td>
</tr>
</tbody>
</table>

The ninth component (eigenvalue = 1.528; % of variance = 3.251%) is comprised of high factor loadings for the following variables, dropping the first draft and starting writing again, and reading the text aloud. This component could be interpreted as proactive behaviour after writing with a focus on reading and revising strategies. These behaviours relate to the themes derived from the interviews and think-aloud protocols: reading through reading the generated text and revising strategies. However, regarding dropping the first draft and start writing again, this theme did not emerge in the think-aloud protocols and interviews (see Table 27).

Table 27 Components of factor 9 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 9: Proactive behaviour related to reading and revising strategies after writing</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>d11</td>
<td>I drop my first draft and start writing again</td>
<td>.635</td>
</tr>
<tr>
<td>d1</td>
<td>I read my text aloud</td>
<td>.594</td>
</tr>
</tbody>
</table>

180
The 10th component (eigenvalue = 1.364; % of variance = 2.902%) is comprised of high factor loadings for the following variables, giving myself a reward for completing the assignment. This component is interpreted as affective strategies and referenced in the semistructured interviews. The participants did not mention using affective strategies, but they did mention evaluating their own work, which is a part of self-reward. The questionnaire analysis revealed 31% of students give themselves a reward for completing the assignment, which indicates this strategy is relatively infrequently used by the participants. Affective strategies did not emerge as a theme in the think-aloud protocols and interview data (see Table 28).

**Table 28 Components of factor 10 and the loadings**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 10: Affective strategies</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>d18</td>
<td>I give myself a reward for completing the assignment</td>
<td>.797</td>
</tr>
</tbody>
</table>

The 11th component (eigenvalue = 1.345; % of variance = 2.861%) is comprised of high factor loadings for the variables simplify what to write when not knowing how to express thoughts in English (negative), using a monolingual dictionary, finding synonyms when having difficulties in finding words in English (negative), and using a dictionary to revise. This factor has negative loadings for simplifying and looking for alternative vocabulary, but positive loading for using the dictionary. This component could be interpreted as active use of dictionary resources to avoid compensation strategies or to avoid altering the intended message. This finding suggests students use the dictionary to find the correct resources for what they want to say, rather than to simplify or change the intended meaning. The students do not use compensation strategies to change what they want to say to fit what they are able to write. This behaviour relates to the themes derived from the interviews and think-aloud protocols: revising through word choice, particularly the selection of words, for their written work (see Table 29).

**Table 29 Components of factor 11 and the loadings**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 11: Active use of dictionary resources to avoid compensation strategies</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>c8</td>
<td>I simplify what I want to write if I don't know how to express my thoughts in English</td>
<td>-.832</td>
</tr>
<tr>
<td>c13</td>
<td>I use a monolingual dictionary</td>
<td>.550</td>
</tr>
<tr>
<td>c10</td>
<td>If I don't know a word in English, I find a similar English word that I know</td>
<td>-.421</td>
</tr>
<tr>
<td>d5</td>
<td>I use a dictionary when revising</td>
<td>.402</td>
</tr>
</tbody>
</table>
The 12th component (eigenvalue = 1.297; % of variance = 2.760%) is comprised of high factor loadings for the following variables, focusing on one thing at a time, and checking mistakes after getting the paper back from the teacher with feedback and trying to learn from it. This component could be interpreted as a proactive behaviour related to social and revising strategies after writing. The combination of careful revision and consultation with the teacher for feedback suggests a focused effort to improve writing. In the interviews, the participants do not talk about social strategies, but they do indicate they tend to rely on the teacher’s help when they get the feedback about their writing. Social strategies did not emerge as a theme in the think-aloud protocols and interview data (see Table 30).

Table 30 Components of factor 12 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 12: Social strategies</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>d10</td>
<td>I focus on one thing at a time when revising (e.g., content, structure)</td>
<td>.617</td>
</tr>
<tr>
<td>d19</td>
<td>I check my mistakes after I get the paper back from my teacher with feedback</td>
<td>.528</td>
</tr>
<tr>
<td></td>
<td>and try to learn from it</td>
<td></td>
</tr>
</tbody>
</table>

The 13th component (eigenvalue = 1.229; % of variance = 2.615%) is comprised of high factor loadings for the lexical cohesive devices variable. This component could be interpreted as proactive behaviour during writing with a focus on using lexical cohesive devices (see Table 31). The use of this device is not statistically significantly correlated with any specific strategic behaviour noted in the questionnaires. This could indicate lexical cohesion is a less conscious process than coreference within texts.

Table 31 Components of factor 13 and the loadings

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 13: Lexical cohesive device</th>
<th>Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Lexical cohesive device</td>
<td>.737</td>
</tr>
</tbody>
</table>

The next subsection includes a summary of the interpretation of the variables with high factor loadings for the components identified within the data set, to provide more in-depth investigation of the relationship between strategy use and text characteristics in students’ writing.

5.6.1.1 Summary

The key issues emerging from the factor analysis are that some of the behaviour patterns are linked together. These behaviours may occur before, during, or even after writing, and can be proactive and strategic (Component 1) for the writers who are strategic with
respect to the text demands, and work on the requirements of the task through initial preparation and final review, with a focus on vocabulary and accuracy through using reading and planning strategies. Other behaviours are proactive (Components 2, 3, 5, 9 and 12), focusing on text structures through use of some planning strategies, such as local planning, thematic planning and outlining, and editing strategies, including editing vocabulary and error checking. In addition, proactive behaviours may focus on coherence, revising strategies, reading strategies through reading the topic sentence, and reading the generated text, re-reading strategies, editing strategies through using the dictionary to check spelling and grammar, and reference cohesive device. Moreover, some behaviour patterns included using cohesive devices, such as substitution (Component 6). This is the only factor or component associated with score variable. This component reflects the high correlation of the gender and score variables whereby the females tend to do better than the males, although the males had a broader range of scores than the females in the questionnaire texts (Section 5.5.2). As shown in the t test (Table 15), that score is significantly correlated with gender. Furthermore, the gendered high scores are associated with the use of substitution as a cohesion device, which suggests a more advanced approach to creating cohesive texts.

Other behaviours are proactive regarding a systematic approach that involves highly-focused attempts to revise prior to submission (Components 7 and 9). Some proactive behaviours emerged only in the questionnaires, such as dropping the first draft and write again, as this led the writers to consider focusing on reading and revising strategies. In contrast to the other behaviours, some behaviours focus much on reliance on L1 and unstructured approach to writing (Component 8), as this suggests a more fluid, less strategic approach to writing and it is the only one that includes an explicit use of the L1. Other behaviours could be interpreted as affective strategies (Component 10), including the self-reward for completing the assignment, as this behaviour emerged only in the questionnaires.

In addition, some students use social strategies (Components 4 and 12) through asking others about their opinions and comparing their work with them, as well as relying on the teacher’s help when getting feedback about their writing. Social strategies did not emerge as a theme in the think-aloud protocols and interview data. Finally, some behaviours are proactive during writing, such as focusing on the use of lexical cohesive device.

5.7 Conclusion

The researcher used a mixed methods design in the current study to yield detailed information and overcome assumed drawbacks. The textual analysis of students’ writing samples helped to provide a more complete picture of the participants’ attitudes toward the
writing process, and the strategies used in their writing in terms of cohesion and quality. This might result in subsequent improved student learning outcomes in teaching and learning of L2 writing, specifically in Kuwait, and might help writing curricula designers and teachers at Kuwait University, and hopefully those of the other Kuwaiti (and maybe other Arab) universities better their performance, and change their approaches to L2 writing with all its details and features to help students write better cohesive and coherent texts, and improve the quality of their writing. The researcher collected the data using four research methods: questionnaires, think-aloud protocols, semistructured interviews, and text analysis. A methodological triangulation was used by combining both qualitative and quantitative data to establish validity and reliability. The researcher analysed texts from the three data sets to investigate the most-frequent and the least-used cohesive devices students employ in their writing process. The written texts of the students were scored based on the taxonomy of cohesive devices developed by Halliday and Hasan (1976; Section 3.7). Moreover, the researcher used Perl’s (1981) coding scheme to analyse the think-aloud protocols and semistructured interviews. The researcher aimed to gain access to students’ experience as learners of English in general, and English writing in particular, to see how their writing is shaped or influenced by L2, which was essential to investigating the composing process of students and the effect of using L1 when writing in English as a second language. Hence, the previously-mentioned tools were administered in an attempt to search for possible influence of L1 on their L2 writing, and to provide answers about certain attitudes and behaviours of students when composing in English as a second language (L2). In addition, the researcher performed a multivariate analysis to explore not only the relationship between strategy use and text characteristics, but also the internal relations between strategy uses. The factor analysis connected Research Questions 1, 2 and 4 together in an attempt to find a relevant link and relationship between the three research questions.

The main study findings relate to the effect of L1 on L2 writing, cohesion, gender, and the relationship between strategy use and text characteristics. Most students are proactive, taking some actions before they start writing in English (e.g., planning strategies). Students’ learning strategies need to be encouraged and supported. The analysis indicates participants do use their L1 in a variety of ways, making it a problem in writing, rather than a potential strategic tool. Regarding cohesion, the findings revealed a notable difference existed in the students’ use of cohesive devices in terms of frequency. Students overused certain types of cohesive devices (e.g., reference, conjunction, and lexical) while neglecting to use the others (e.g., substitution and ellipsis). The analysis also revealed the correlation coefficient between
writing scores and reference cohesive device is positive and statistically significant, because only the reference cohesive device correlated highly with the score. In addition, strategy use and approaches to writing vary depending on the gender of the participant. The females tended to score higher on their texts than the males, because the females tended to be more strategic and organized. Certain behaviours may also occur before, during, or even after writing; some can be proactive and strategic, although others rely heavily on L1 and use an unstructured approach to writing. The findings of the study suggest the participants of this study, who generally come from the same educational and cultural backgrounds, show similar experiences with respect to writing in English. Consistent with the sociocognitive approach, these experiences may play a considerable role in the difficulties and problems they encounter in the writing process and the strategies they utilize. The findings also suggest the participants need to be exposed to different writing skills and genres, along with effective writing strategies, to improve their writing. The next chapter presents the discussion in the light of the findings of the current study.
Chapter 6: Discussion

6.1. Introduction

The previous chapter included the results of the data analysis in light of the four research questions. The researcher discussed writing as a sociocognitive process through investigating the strategies and substrategies, as well as the most frequently used cohesive devices, used in Kuwaiti students’ writing process. This chapter provides an in-depth discussion of the results, organized around the four research questions and discusses the main findings of the study in addition to linking them with the relevant literature. In addition, the chapter pertains to the sociocognitive elements of the writing process discovered in the results, in an attempt to obtain a greater understanding of the sociocognitive factors that influence Kuwaiti students’ writing behaviours.

The remainder of this chapter is divided into five sections; the first four subsections discussing each research question in turn (Sections 6.2.1, 6.2.4). Furthermore, Section 6.3 presents the summary of the discussion of the four research questions. Section 6.4 discusses the reconceptualization of writing strategies within a sociocognitive approach, through reporting the influence of the sociocultural context in which writing takes place and the way cognitive strategies are employed. Finally, the researcher presents an overall conclusion at the end of the chapter in Section 6.5.

6.2 A Sociocognitive Approach for Writing Strategies

6.2.1 Discussion of Research Question 1

This section presents the quantitative findings related to RQ1, obtained from the writing-strategies questionnaire. Subsequently, the researcher triangulated those quantitative findings with the qualitative findings of the think-aloud protocols and the semistructured interviews, respectively. This process allowed for a more in-depth discussion. The analysis of the findings indicate Kuwaiti college students employ a range of writing strategies before, during, and after their writing. The analysis of the protocols and interviews compared with the questionnaire data suggested the majority of Kuwaiti college students at Kuwait University are aware of the role of metacognitive strategies in writing to engage mental planning, reading, monitoring, and reviewing. The students also appear to be conscious that they are supposed to plan, read, revise, and edit. However, students’ actions do not always reflect what they think they should do in their writing.

The next subsections (6.2.1.1, 6.2.1.2, 6.2.1.3) pertain to the most frequently used writing strategies and substrategies uncovered in the current study, comparing them with the findings of the previous studies presented in Chapter 3, the literature review.
6.2.1.1 Planning Strategies

Planning strategies and related substrategies were the most frequently-adopted by most of the Kuwaiti participants who undertook the think-aloud protocols, semistructured interviews, and questionnaire at Kuwait University. Planning is one of the most important components of the composing process (Flower & Hayes, 1980, 1981). In the current study, the data analysis revealed the majority of the participants used planning strategies in the three data sets (questionnaires, think-aloud protocols, and interviews) with a high frequency indicating most of the students are aware of the role of the prewriting stage in writing text. Moreover, students’ planning for their writing indicates they are activating the relevant cognitive processes, e.g., mental representation and problem detection, to recall information related to the task of writing as much as possible. Finally, the results showed the participants understood the importance of the writing process; most of the participants appeared to be aware of the role of planning as an important strategy in guiding them to organize their ideas. Students understood planning was essential and transferable in various writing situations, and they used planning strategically, according to the results of the multivariate analysis (see Section 5.6.1). Proactive and strategic behaviours regarding mental planning before writing were the number one factor explaining the most variability in the writing-strategies questionnaire.

The act of planning of writing varies in form and in focus, and this is evident in the different subcategories of planning discussed in the literature. Although Raimes (1987), for instance, identifies only one category for planning, namely planning structure, researchers investigating strategies have posited more diverse planning substrategies, such as Sasaki’s (2000) five substrategies, namely thematic planning, local planning, mechanical planning, global planning, and conclusion planning. In the present study, four categories of planning were uncovered (see Section 4.7.2.1). The researcher of the present study adopted Sasaki’s first three substrategies (thematic planning, local planning, mechanical planning), whereas the researcher adopted the fourth planning substrategy, outlining, from Arndt (1987).

This seems to agree with findings from Alam (1993), who states that students planned their writing first. In addition, the findings of the current study and those of Sasaki (2000) indicate using planning demonstrates students are adopting professional writing habits. This also supports the findings of the current study related to the strategy use in both qualitative and quantitative data, as planning and reading were the most-frequently adopted strategies by most of the participants in the prewriting stage (Sasaki, 2000; Victori, 1995). The findings also indicate the importance of stressing planning in writing classes in Kuwait in addition to
including it in any writing curriculum, which, as discussed below, seems to be a current practice in Kuwaiti EFL writing instruction.

The present study partially confirms findings of previous studies regarding the use of planning strategies among Arabic EFL students. Namely, El-Mortaji (2001) found the Moroccan students did a significant deal of planning, as they used a set of strategies to plan, organize, set goals, and evaluate, but the frequency of occurrence of these strategies between Arabic and English was subject to individual differences. The findings of Chaaban’s (2010) study also showed proficient writers in Syrian universities were found to do more planning than less proficient ones. On the other hand, Aljamhoor (1996) determined Arabic ESL students did not use planning techniques; therefore, the present study contradicted this finding.

The explanation for the use of the cognitive planning strategy seemed to stem from instruction. Chaaban (2010) states that planning and reading strategies seem to be the two most outstanding strategies that all teachers stress during the writing process. Aljamhoor (1996) investigated the role of instruction and how it affects the writing strategies and processes, revealing the participants did not implement any planning strategies in L1 or L2 before the ESL instruction. However, after the instruction, the participants started writing straightforwardly through the use of plans (Aljamhoor, 1996). In the current study, the analysis of the semistructured interviews with the three English professors revealed they all encouraged and instructed students to plan carefully (local planning, outlining, and thematic planning; see section 5.3). This finding contradicts the study of Yuksel (2014), who claimed that the participants occasionally used planning strategies, whereas the while-writing strategies were used more frequently among the participants. The findings further confirm El-Mortaji’s (2001), in that students’ emphases on planning were a result of prior teaching methods that stressed the need for outlining. However, the findings also indicate that some teachers instruct students to use certain strategies as rules that should be followed, focusing on planning in their classes, contrary to the focus in general writing instruction on writing as a recursive, nonlinear process (Emig, 1971; Perl, 1979). Nevertheless, the majority of students in this study suggested because of direct instruction, they did not hesitate to use planning strategies, whether consciously or unconsciously. This finding suggests that focused, direct instruction on the writing process may be fruitful within Kuwaiti contexts, which may be a difference from writing theory and other SLA best practices.

Thematic planning, local planning, and outlining (see Section 5.2.2.1) were the most frequently-adopted substrategies used by the participants in the questionnaire. The analysis of the writing-strategies questionnaire revealed 55% of the participants outline their texts before
they start writing, 73% plan locally to get ideas of how to continue their written products, whereas 54% plan thematically, as they think about what they want to write and have a plan in their minds. Thematic planning occurred when students orally produced plans of their whole essays featuring the themes they chose to write about in their essays; in other words, they used thematic planning to remind themselves of the ideas they intended to include in their written texts. This type of planning does not cover the whole writing task in detail, but rather orally states the main themes that will dominate the essay, as opposed to outlining. In many instances, thematic planning was similar to outlining, in the sense that it could take the form of a single word, phrases, or complete sentences. In addition, local planning refers to the act of planning what to write next in terms of content to generate more details. Furthermore, outlining refers to the only written form of planning, which might help the participants to move to another outline when they start writing the introduction related to their paragraphs (Arndt, 1987). The behaviours espoused by the participants echoed those that Sasaki (2000) illustrated and characterized.

In contrast, the analysis of the think-aloud protocols and interviews confirms to a large extent that students planned their writing, but some inconsistencies existed regarding the most frequently-used substrategies. The thematic planning substrategy was used by all of the eight think-aloud protocol participants, which indicates thematic planning played the role of introducing the themes before they were put down on paper. A number of instances existed in which the participants planned the content of the whole text in the form of the oral verbalization, subsequently expanded and developed into text that formed the final written product. However, the analysis of the interviews showed of the 20 participants, only five used thematic planning. The analysis of the think-aloud protocols showed of the eight participants, seven used local planning, whereas six out of 20 interview participants used this substrategy. Furthermore, outlining was used in seven out of eight think-aloud protocols, and was used by all of the 20 interview participants.

Use of writing substrategies had various relationships with the previously-published literature regarding cognitive writing practices among Arabic students. For example, the findings of the current study parallel the study of Alhaysony (2008), who reported most participants globally planned for their writing through outlining by dividing “their passage into three parts: introduction, body and conclusion…Then they created local plan for the content as they planned the content in each specific part…again mentally” (p. 303). These findings contradict the findings of El-Aswad (2002), who found 12 students rarely made global plans for their topics and adopted a mental plan but not a written plan on paper. El-
Aswad stated that, given a topic, Arab students would immediately create a mental plan to generate ideas of what to write, but they would not use formal planning strategies to generate text. In contrast, the quantitative analysis in the current study shows the positive behaviour of some of the participants using some written planning strategies.

In addition, the task type influenced the planning behaviour of the participants. This finding can be attributed to students’ knowledge of topics of the required writing tasks, because of being familiar and close to the students’ experience and similar to the topics studied in classroom or assigned in exams. The findings show the type of task seemed to influence the amount of planning the participants employed in their writing. This finding is in line with Cummings’s (1989) argument that problem-solving strategies differ with the type of writing task that participants are involved in. This behaviour was also observed by El-Mortaji (2001) and Victori (1999) and supports the sociocognitive theory of writing espoused by Atkinson (2002) in showing that context influences cognitive processes.

Thus, the findings related to RQ1 suggested Kuwaiti EFL writers, through writing instruction, developed a strategic relationship with various planning substrategies. Writers in this sample followed the text demand using reading strategies and planning, in terms of looking through the requirements of the task, is linked to reading strategies. The next subsection addresses these reading strategies, the second most frequently adopted strategy, and the related substrategies by the Kuwaiti college students at Kuwait University.

### 6.2.1.2 Reading Strategies

Reading refers to instances of reading different parts of the written text, such as reading words, sentences, paragraphs, or the whole text. Many researchers have reported the employment of this strategy by their participants, such as Perl (1979), Zamel (1983), and Raimes (1985, 1987), Victori (1999), and Sasaki (2000). Moreover, some researchers have identified a number of sub-strategies related to reading (see Section 4.7.2.1). In the current study, the analysis revealed most students were aware of the role of reading, as students read words, sentences, or the whole paragraph to produce more text when facing a problem in continuing their written task. Moreover, the analysis of the three data sets revealed reading strategies were the second most frequently used by writers.

The use of reading strategies by students in this sample indicates a positive cognitive behaviour of Kuwaiti EFL students. Chaaban’s (2010) protocol data revealed reading as an important part of the composing process of the proficient participants, as the researcher stated reading was among the strategies employed frequently by both more proficient and less proficient participants. Chaaban noted reading was used whenever the participants felt what
they were producing diverged in focus from what was required to address the topic. This finding was similar to the findings related to the current study, as all the participants employed reading strategies in order to produce more cohesive and coherent written texts.

Some researchers have identified a number of subcategories of the reading strategies. Strategies and substrategies have been proposed by researchers, such as Perl (1979, 1980), Arndt (1987), Wenden (1991), Raimes (1987), Cumming (1989), Victorri (1995), Riazi (1997), and Sasaki (2000). For example, Perl (1979) distinguished between two main categories: reading the assignment and reading the writer’s text. Raimes (1987) divided reading one’s text into reading locally, for sentence-level issues, and reading globally, for overall cohesion and ideas. The analysis of the data in the present study uncovered three subcategories of reading: reading the assignment, reading the generated text, and reading outlines (see Section 4.7.2.1).

Reading the assignment was the most frequent substrategy of reading, used by 78% of the questionnaire participants. The findings of the think-aloud protocols and interviews confirm this finding, as all of the eight protocol participants and 16 of the interview participants used this substrategy. This finding indicates the students were aware of the role of the writing assignment in guiding their writing. Students read the assigned topic whenever they felt that what they were producing split in focus from what was required to address the topic. The same behaviour was reported by Raimes (1987), who found her participants read the assignment to “orient themselves once more” (p. 455). This strategy was used for monitoring the writing process as a whole.

In addition, reading the generated text was the next substrategy frequently adapted by 73% of the questionnaire participants. The analysis revealed this substrategy was minimally used by two among the eight protocol students but was used among 14 of the 20 interview students. Reading the generated text refers to instances of reading parts or reading the whole produced texts, and includes single words, sentences, paragraphs, or the whole draft. Those participants who used the strategy tended to read what they had already written whenever they faced a difficulty in generating further text. Zamel (1983) and Raimes (1987) reported similar results. Alhaysony (2008) also found female Saudi university students’ most frequently-used strategy during L2 writing was to read what was previously written. The low frequency of using this substrategy in the think-aloud protocol group indicates students may have trouble articulating this behaviour; it could be that the guidance and structure of the questionnaire and the interview reminded students of this best practice.
Finally, the participants read parts of their texts as well as the whole draft to see if what they had produced matched their intentions in terms of content as well as form. This behaviour of reading, as explained by Hayes (1996), is that “when we read to revise, we treat the text quite differently. We are still concerned with the message. But now we are also concerned with bad diction, wordiness and poor organization” (pp. 14–15). In the think-aloud protocol and interview texts, reading for the purpose of surface level revision or editing did not occur until the complete text was produced, a habit participants have acquired through their past learning experience.

As with planning strategies (see Section 6.2.1.1), different substrategies resulted from instruction. The analysis of the semistructured interviews with the three English professors revealed that all students are encouraged to use reading strategies, such as reading the topic sentence (see Section 5.3). Therefore, instruction seems to have a positive influence on the views and behaviours of the students in this study, constituting an important contextual factor for consideration in a sociocognitive view of Kuwaiti students’ writing behaviours. The next subsection further addresses the revising and editing strategies, as well as the related substrategies uncovered by the Kuwaiti college students at Kuwait University.

6.2.1.3 Revising and Editing Strategies

In the present study, revising strategies are used to assess the changes students make to their texts during the composing process to clarify meaning, rather than editing through error correction. These strategies have been defined by many researchers, depending on a variety of interpretations. Some researchers tend to use the term revision to include all the changes that can occur during the writing process (Hayes, 1996; Whalen, 1993). Other researchers tend to draw a distinction between revising and editing (Raimes, 1985, 1987; Riazi, 1997; Sasaki, 2000), as in the present study. The term revision is used to signal a main category of strategies, including four subcategories, which refers to the changes made to the written text on the content level to clarify meaning, including addition, deletion, substitution, and word choice. In contrast, editing refers to the changes made to the written text on the surface level to correct the syntax or spelling without affecting the intended meaning, which includes two subcategories related to editing spelling and grammar (see Section 4.7.2.1).

According to Hayes (1996), Raimes (1987), and Zamel (1983), revising appears to be related to skill and linked to the level of writing proficiency, as the skilled participants read parts of their texts as well as the complete draft to see whether their produced texts matched their intentions in terms of content and form. The researchers stated skilled writers tend to be more conscious of variables, such as topic of organization, and are therefore more likely to
make revision at a global level, whereas less-skilled writers tend to have a narrower outlook in the sense that the revisions they make usually target surface level issues, such as words and sentence structure. Moreover, Raimes (1994) observed skilled ESL students tended to revise and edit more frequently than less skilled writers.

However, the findings of the present study appear to contradict the arguments concerning the difference between proficiency levels and types of revisions. The analysis of writing scores revealed the participants revised in similar ways, in that all participants seemed to address the word and sentence levels in their revising process, regardless of their proficiency level. Regarding revision, the analysis of the questionnaire revealed 30% of the participants used the word choice substrategy. In the analysis of the think-aloud protocols, among the eight participants, this substrategy was used by five; whereas among the 20 interview participants, it was used by 10. Furthermore, in the questionnaire data of the current study, 61% of the participants reported they edit the grammar and vocabulary of their texts. In contrast, the analysis of the think-aloud protocols revealed spelling editing was used 9 times by only 3 participants (out of 8), whereas this substrategy was used 20 times by 16 students in the interviews. Some of the participants informally mentioned they encounter difficulties with spelling and grammar editing from the early stages of schooling.

The lack of global revisions among Arabic to English writers was a common theme in the literature (Al-Amer, 2000; Al-Semari, 1993; El-Aswad, 2002; Fageeh, 2003), but the research seemed to suggest that more proficient writers would be more likely to employ more global revision processes (El-Mortaji, 2001; Mahfoudi, 2001). On the other hand, Yuksel (2014) investigated academic writing strategy use in L1 and L2 among 253 students through applying Patric and Cz’arl’s (2003) writing strategy questionnaire and claimed students with lower proficiency tended to use a wider variety of writing strategies, which was similarly inconsistent with the present study. The findings of the present study were partially consistent with Alhaysony’s (2008) results, which demonstrated Saudi writers of all proficiencies used the same strategies, although proficient writers employed the strategies more frequently in Alhaysony’s study. The lack of difference in L2 writing among proficient writers seems to contradict Uzawa (1996) and also partially Alhaysony, who both found that L1 and L2 writing processes are similar. One novel consideration was that interview data further revealed time plays an important role in the use of revising strategy (see Section 5.2.2.3); participants might not engage in revising or editing if they perceive there is not enough time to do so. This finding suggested the writers in the interviews did not view revision and editing as an essential part of the writing process.
A few potential explanations for the lack of global revisions were observed in the present study. First, L2 proficiency might be the reason for the narrow scope of revisions by the participants of this study; students may focus on sentence-level errors because they do not feel confident in this aspect of their writing. El-Aswad’s (2002) investigation of the writing processes and strategies showed participants who had limited linguistic knowledge and writing proficiency reviewed only grammar and vocabulary and applied strategies inaccurately in their drafts and final written compositions, and they did not make any final revision. Moreover, they may lack sufficient knowledge of the L2 to understand their meaning issues and the ability to identify text problems because they have not comprehended all the rules of the language, as found by Stevenson et al. (2006). Another possible reason might be their actual understanding of what revision involves. The participants in the current study consider revising as more error correction because of their past learning experiences in L1 and L2, as well as the type of feedback they receive on their written products, as grammar and vocabulary revising are much more emphasized in classrooms. This lacking instruction regarding the writing process, specifically revision, among Arabic EFL writers was noted by Fageeh (2003). Hayes (1996) stated the lack of awareness of the global dimension of revision can be attributed to inadequacy of the writers’ basic revising process, as well as to the fact that the writer’s task schema may not include the goal to attend to global problems.

Regarding the location of revisions, data revealed the participants revised their texts while they were still producing them, and after they finished the whole written task (see Section 5.2.2.3). Of the eight participants in the think-aloud protocol, five stated that they revised their texts while they were still producing them and after they finished the whole written task, whereas of the 20 interview participants, this strategy was used by only 10 students, representing a slight inconsistency in the data. This finding aligns with Chaaban (2010), who found her participants made changes immediately after putting words on paper, as well as the changes made to the already produced text. This finding conversely contradicts Raimes (1987), who found revising and editing occurred mostly during the writing of sentences and not as a separate stage in a linear process.

This finding may suggest the student participants viewed writing as a recursive process, rather than with a linear view of the writing process. Many studies emphasized writing is a nonlinear process (Abdullah, 2009; Emig, 1971; Perl, 1979; Ransdell, Leavelle, & Levey, 2002; Zamel, 1983), noting when students revise, they recognize a need to rework their written thoughts, as they return to the already-produced written products, in an attempt to check the correspondence between the intended meaning and the text they have just produced
This could lead to a higher writing quality than a linear process, through text generation and revision (Ransdell et al., 2002). These researchers emphasized the process of composing from the cognitive point of view is perceived as a problem-solving task in which the complex, recursive, and individual nature of the composing process, and where the cultural aspects are not accounted for; the process of revising as observed in the present study may therefore lead to higher quality texts.

The results of the study indicated, as in Alharthi’s (2012) study, that students espouse knowledge and use of the writing process that they do not necessarily apply in their writing. Although the questionnaire data of the current study suggests most of the students (82%) revise their writing before they hand it to their teacher, according to the analysis of the think-aloud protocols and semistructured interview data, the majority of the students reported they almost never revised their writing. In addition, some proactive behaviours reflected a high correlation between other strategies, such as revision and reading strategies (Component 9), as students tended to drop their first draft in order to start reading it again as well as read their texts aloud. In regard to the writing strategy questionnaire, the analysis revealed they rarely completed these activities.

These inconsistencies suggested regarding revisions, students may overestimate their attentiveness to appropriate revision, especially in the questionnaire data. This contradictory response might be related to confirmation bias, in that the researcher may exert a sense of compulsion among the participants, as they may feel uncomfortable about completing the questionnaire or interview and may not want to complete it or even start it (Cohen et al., 2007; see Section 4.4.1). The lack of revision may also suggest students are not proactive or engaged when revising their texts. Most of the participants reported they check their writing before handing it in, although the analysis did not reveal what they really check, because a small number of participants responded on specific checks performed on their writing (e.g., spelling, grammar, using the dictionary when revising).

An additional issue with questionnaires is illustrated in the current study by the high response rate for revising in the questionnaire versus the low rate for both the think-aloud and semistructured interview (see Section 5.2.2, Table 13). The questionnaires provide data regarding what students report they do or perhaps would like to do, but not as an observed behaviour. Therefore, questionnaire data can sometimes be misleading and nonrepresentative of actual writing processes. The same holds true for Alharthi (2012), whose findings of the writing strategy questionnaire revealed students did not report what they actually did, which is one of the drawbacks researchers should consider when analysing the data gathered from
questionnaires. Questionnaires should be piloted before implementation to identify the drawbacks and limit those drawbacks as much as possible. In this context, the small differences between the questionnaire and the think-aloud and interview findings might be related to the small sample size in the think-aloud protocol and interview and to the procedural nature of strategies.

The use of revision and editing was consistent with instructional emphases. Revising and editing are two strategies all teachers stress in writing classes (Chaaban, 2010), as revision is considered “an essential part of writing and, hence, an important skill for writers to develop” (Stevenson et al., 2006, p. 201). In the current study, the analysis of the semistructured interviews with three English professors revealed they all agree on encouraging and instructing students to use the revising (word choice; Section 5.2.2.3), editing (spelling and grammar), and writing strategies (Section 5.2.2.5). The next subsection pertains to the second part of RQ1, which is related to the gender and strategy use.

6.2.1.4 Gender and Writing Strategy Use

The final component of RQ1 involved examining gender differences in writing strategy use. El-Mortaji (2001) found the gender of the participants affected their choice of writing strategy. This finding revealed females and males approached the writing tasks in different ways and thus used different writing strategies matching the approach they adopted. Similarly, El-Dib’s (2004) study showed females used the cognitive-compensatory strategies and revision strategies significantly more than males, and Green and Oxford (1995) state that female use more general language learning strategies overall. Hence, gender has an effect on the choice of writing strategy as proved by El-Mortaji’s and El-Dib’s studies. However, it is not necessarily clear whether the gender differences were a result of the different education they had received in segregated education, some other sociocognitive aspect, like noted in Kobayashi’s (2002) study that revealed more positive attitudes in Japanese female participants overall or was due in fact to biological difference (e.g., Van Der Slik et al., 2015).

In the current study, quantitative analysis revealed a significant difference between males and females in response to the reading strategies through reading the assigned topic. The analysis showed the male students tended to read the topic before they start writing more than the female students. In addition, the analysis revealed the males usually read and revise what they have written after only after finishing their written tasks more frequently than the females; the analysis revealed the males (58%) tended to read only what is written when finishing the whole text more than the females (32%) when revising their writing. Conversely, 46% of the females never use this strategy compared with only 18% of the males (see Section
This finding corresponds to the data revealed in El-Mortaji (2001) that females and males approached the writing tasks in different ways and in the choices of strategies to be used, but it contradicted Alhaysony’s (2008) findings that Saudi women used the reading-for-revision strategy most commonly in their writing, and Fageeh’s (2003) findings among male Saudi students, which suggested male Arabic EFL writers utilized little to no writing process in their generation of texts. In contrast, men in the present study used more reading strategy processes than women regarding the topic.

The findings suggest women were more likely to make global revisions than were the men. The females (22%) were more likely to make changes in the content or ideas compared to only 10% of the males. Conversely, 74% of the males never use this strategy compared with 58% of the females. In addition, the females (36%) tended to make changes in the sentence structure more likely than males (10%). Conversely, 84% of the males never use this strategy compared with 28% of the females. Furthermore, females (26%) tended to make changes in the structure of the paragraph more than the males (6%) when revising. Conversely, 56% of the males never use this strategy compared with 32% of the females (Section 5.2.1.5, Tables 5.5, 5.6, and 5.7). These findings correspond to what Catalan (2003) states, that females generally rely more on auditory techniques.

The prevalence of reading for final revision, and the gender difference regarding this topic, shows a difference between findings in the literature and the present study. Consistent with Al-Amer’s (2000) and Al-Semari’s (1993) findings regarding Arabic ESL students, El-Aswad’s (2002) Arabic EFL participants did not make any final revision, as most of them were influenced by the product approach. The present study supported this finding for men, in that they only read the text once at the end to revise, but women may view revision and editing as a more recursive and global process. Given that schools in Kuwait are gender-segregated (see Section 2.4), it may be that men’s schools are emphasizing reading strategies as a linear process, whereas women’s schools remain focused on the recursive approach espoused by Emig (1971). The gender differences in this regard suggest further research should be conducted regarding the teaching of the writing process in male and female schools in Kuwait. As suggested by Sheikhzadeh (2016), further investigation of the social cognition of gender and language should be provided and might indicate socialized aspects of gender definition and teaching that influence whether and how Kuwaiti students experience and progress in EFL.

Contrary to this interpretation, another finding involved positive revision practices for men related to time and delay. The male students (26%) tended to leave the text aside for a
couple of days so that they could see it in a new perspective more than females (18%) when revising their writing. Conversely, 74% of the females never use this strategy compared with 46% of the males (Section 5.2.1.5, Table 11). This finding suggests male students reread and revise their written products more in the final stages than the females. This may be because of an emphasis in education on the writing process as a single, linear process which ends in heavy revision (Fageeh, 2003). Similarly, Pahom et al.'s (2015) study showed that males did significantly better on the overall recall of vocabulary learning than females, which would similarly focus on language acquisition as a linear or memorization process. The gender differences here suggest sociocognitive factors, such as an emphasis within the gender-segregated schools or potentially gender expectations, may result in different writing practices in the revision stage.

Another difference between men and women in the present study was the use of planning strategies. Women in the present study were more likely (60%) to take down notes regarding the topic in English and Arabic prior to beginning than were the men (44%). Females planned locally and outlined their texts more likely than males, pay more attention to writing notes and make more structural changes, and look for more input from others when editing and revising their writing. Furthermore, women were more likely to revisit and adjust their outline when compared to men; 42% of the females stated they usually or always use this strategy compared to 20% of the males, although 48% of the males never use this strategy compared with only 30% of the females. Conversely, the analysis showed the male students (92%) tended to read the requirements of the task more than the female ones (62%) before starting the writing process. Conversely, 12% of the females never use this strategy compared with only 4% of the males (see Section 5.2.1.5, Table 4).

The gender differences in writing process strategies may result in the differences in scoring. Concerning the multivariate analysis, some behaviours reflected a high correlation between gender and score (see Section 5.6.1, Appendix P). In this study, the results of the t test analysis showed a significant correlation between score and gender variables (Component 6), as the females tended to be more strategic and do better than the males significantly in the questionnaire texts (see Section 5.5.2). For example, females tended to create more cohesive texts, which may be linked to their more extensive global revision processes. The findings of Van Der Slik et al. (2015) regarding the impact of gender on their proficiency scores in L2 are consistent with the findings of the current study, as female learners consistently outperformed male learners in writing proficiency in Dutch as a second language. On the other hand, the males had a broader range of scores than the females in the questionnaire texts.
Section 6.2.4 presents the distinction between the performance of the male and the female students in the think-aloud, interviews, and the questionnaire texts.

6.2.2 Discussion of Research Question 2

The second research question involved the use of L1 in EFL writing. Chaaban (2010) describes writing in L1 as a demanding task that requires several linguistic and metacognitive abilities to be in constant interplay. In the current study, the quantitative results obtained from the questionnaire showed that the majority of the participants tended not to use L1, their Arabic native language, while composing in English. The analysis of the questionnaire revealed 37% of the participants reported if they do not know a word in English, they write it in their native language. Moreover, 31% of the participants reported they write bits of the text in their native language and then translate them into English. Accordingly, the analysis of the qualitative findings from the think-aloud protocols showed the majority of students tended not to translate from L1 to L2; of the eight participants, L1 strategy was used minimally and only once, whereas among the twenty interview participants, seven used their L1 when writing in L2 as a compensation strategy. Again, in this context, the small differences between the questionnaire, think-aloud protocol and interview findings might be related to the small sample size in the think-aloud protocols and interviews and the procedural nature of strategies. Furthermore, students may use L1 without thinking of it, resulting in a low reporting rate for the use of L1.

One potential explanation for the low rates of L1 use in the present study was the task. Task type has been found to influence L1 use; for example, Friedlander (1990) found the participants were keen on generating ideas in L1 when the writing task is related to the culture of L1. Similar findings were reported by Wang and Wen (2002) and Wang (2003), who found significant differences between uses of L1 by high proficiency participants across different writing tasks. Given the focus on task types, the present study included a writing task related to the general narrative writing tasks that students are asked to compose in classroom setting. The knowledge the participants required for the task was already present in their memories. This knowledge helped the students to be familiar with the genre and writing topic to motivate and enhance their performance during the composing process. As a result, the task type was accessible to the participants in this study, and they may not have needed to heavily rely on their L1 (Arabic). The findings of El-Mortaji (2001) regarding the task type are consistent with findings of the current study, as most participants felt more comfortable writing narratives; they felt they had sufficient access to knowledge in this case, as well as to literary theory, as studied in prior classes when it came to the expository essay.
Social pressure may also limit the students’ use of L1; this finding might therefore indicate students develop their own sense of proper strategies to use or not to use, despite the assumed influence of instruction in classrooms, and that they conclude L1 use is taboo in EFL classrooms. The use of L1 in L2 learning is controversial, with some researchers suggesting it is a detrimental strategy (Cumming, 1989; Jones & Tetroe, 1987; Sasaki & Hirose, 1996), and others indicating it can be a positive writing strategy (Manchon et al., 2007; Uzawa, 1996). Others have linked L1 use as an intermittent strategy linked to L2 proficiency (Alam, 1993; Chaaban, 2010; Alhaysony, 2008; Fageeh, 2003; El-Aswad, 2002; Al-jamhoor, 1996; Abdulla, 2009). Specifically, students use L1 in their writing process when they face problems of shortage of knowledge in the L2 as they tend to switch to L1 to compensate for this lack of knowledge (Cumming, 1990). Most of the students who took part in the think-aloud protocols were self-selecting and were more proficient than those who participated in the interviews; therefore, the results may support the link between proficiency and eliminating L1 use. However, results also indicated that students did not use L1 to avoid being stigmatized or accused of "thinking in Arabic" which usually results in inelegant or awkward English. Therefore, there may be a sociocultural pressure to avoid L1 use, to avoid potential downfalls of interlanguage transference. However, this complete avoidance and pressure might limit some positive benefits of using L1 among less proficient EFL students.

Partially, students’ perceptions of L1 being negative in EFL writing may come from professors’ perceptions. The results indicate professors consider the use of L1 as a problem. In the current study, the analysis of the semistructured interview with the three English professors showed two of them stated students use their L1 as a problem-solving, rather than a potentially strategic tool. The professors stated the use of L1 influences the writing habits of students, including reflecting hesitation in writing when a writer is not quite sure of his or her accuracy, and results in mistakes that writers should not have made. This perception was consistent with literature that suggested less-skilled students used L1 as a crutch in the writing process (Wang & Wen, 2002; Wolfersberger, 2003; Woodall, 2002). According to Hayes (1996), less proficient writers tended to rely on the use of L1 as a problem-solving skill to facilitate the writing process when they were faced with a task that they perceived as difficult and do not have a fully adequate task schemata. A potential negative outcome of rote banning of L1 is that students may lose the benefits of using their native language as a strategy of learning to write, as supported by a number of studies (Alam, 1993; El-Aswad, 2002; Fageeh, 2003).
Although students reported using their L1 for problem solving to facilitate the writing process, the data did not suggest negative transfer as a result (see Section 5.4). Furthermore, the positive use of L1 in English writing has been demonstrated in some second language acquisition research (Friedlander, 1990; Manchon et al., 2007; Uzawa, 1996). The L1 strategy was used by participants with different high and low scores, which indicates some students have used their L1 strategies to aid their writing in the target language (English) to bridge gaps during their writing process.

It does not seem, as suggested by some researchers (El-Aswad, 2001; Wang & Wen, 2002; Woltersberger, 2003; Woodall, 2002), that L1 is only a detrimental strategy used by low-skilled writers. For example, Woltersberger (2003) found the participants frequently used their L1 during prewriting and made use of translating from L1 to their L2 to compensate for their limited ability to write in their L2, concluding lower-proficiency writers struggle in utilizing all strategies that could help their writing in L2. Cumming (1989) and Wang and Wen (2002) similarly determined more proficient writers tended to depend less on their L1 particularly in idea generation than less proficient writers. Wang (2003) supported those findings by reporting high-proficient writers switched to their L1 more frequently than low-proficient writers in their ESL writing. El-Aswad (2001) stated L1 writing knowledge and strategies were transferred into L2 EFL writing, and that less-skilled students tended to use L1 discourse and strategies more frequently when writing in L2. The findings obtained through students’ text scores in the current study were that both groups of low proficient and high proficient writers used L1 strategy, suggesting L1 use in and of itself is not a bad writing strategy for all writers. However, the results also demonstrated L1 use was associated with not rereading the text, suggesting L1 users may have a less developed writing process for generating appropriate text.

L1 strategies, when used, served specific functions supported by the literature. The findings of Chaaban’s (2010) study revealed that regardless of task types and writing proficiency levels, the students used Arabic in English writing as a tool to help them find ideas and review the suitability of vocabulary. Chaaban’s study confirmed the findings of Wang and Wen (2002), who found students tended to use L1 equally for vocabulary retrieval and assessment of strategic behaviours based on context, task types and writing proficiency levels. Both studies included proficient and nonproficient writers. Also, Alhaysony (2008) found participants used Arabic for retrieving vocabulary and for assessing their choices when facing difficulties in producing a word or an expression that matches the meaning they intended to express in L2, as participants used more writing strategies when composing for
the L2 writing task. The students stated if they do not know a word in English, they follow different strategies: first, use a bilingual dictionary; second, use a monolingual one (in fewer cases); and finally, ask for peer support. This shows that the students continue to use their L1 to develop their vocabulary and better the quality of their writing. The findings of Alhaysony, Chaaban, and Wang and Wens support the results of the current study, which showed both high and low scored participants used L1 while writing L2 as a tool to help them find ideas and review the suitability of vocabulary, regardless of their proficiency level.

The results showed all levels of writers utilized L1 for vocabulary development, which was inconsistent with much of the literature on L1 use for vocabulary. Alharthi’s (2012) protocol analysis revealed that his participants translated literally from L1 to L2, as less-skilled writers used L1 while writing in L2, because of the lack of vocabulary or grammatical structures, and their inability to think and write directly in English. The findings of Alharthi are consistent with Abdullah (2009), who found less-skilled participants used L1 in their L2 writing to complement their lack of competence in their L2, as they used this strategy for checking accuracy of written expressions, generating ideas, or in their attempt to retrieve suitable words and phrases. These studies correspond to Fageeh’s (2003) findings, which showed the participants reported limited chances for writing both in L1 and L2, and they encountered difficulties in writing mechanisms, grammar, and vocabulary. Fageeh’s assertion partially supports the findings revealed from the interviews, as students mainly use L1 to help them find suitable vocabulary.

Participants used L1 to note words and make short notes when reading assignments because students believe this might help when facing lexical difficulties. This was especially common among the female participants. This finding contradicted Raimes (1985), that EFL writers are not “as concerned with accuracy as we thought they were” (p. 246). In other words, L1 makes writers feel lexically safe; whenever they encountered a lexis-related problem or difficulty, they resorted to their L1 to provide them with the word or phrase needed, and then translated it. In fact, “the idea of abandoning the native tongue is too stressful to many learners, who need a sense of security in the experience of learning a foreign language” (Galina, 2009, as cited in Alnufaie, 2014, p. 1). This, however, may not be a successful strategy, as resorting to Arabic may lead students to end up with writing texts that sound odd and do not conform to the English rules or structures of meaning.

For planning and revising strategies, the participants in the present study reported they only occasionally used L1, whereas the while-writing L1 strategies were used more frequently. However, Alam’s (1993) findings suggested students use their L1 during prewriting, writing,
and revising. Similarly, the results of Yuksel (2014) revealed the use of L1 is proficiency-dependent, as the students with lower proficiency tend to use writing strategies more and planning strategies were used most frequently in both languages, L1 and L2. Thus, the present findings seemed to contradict these findings. The results were in line with the findings of Alhaysony (2008), who stated good and poor writers use the same set of writing strategies to facilitate their L2 writing but contradicted the present study in the overall findings which showed that L1 was used extensively in L2 writing. The relative lack of L1 use in planning stages may be positive for students, as Chaaban (2010) found students produce better texts when they plan in the language that matches the topic they are writing about.

However, because of the small number of participants in the think-aloud protocols and interviews, the findings do not conclusively prove the participants’ level of proficiency is not a determining factor in the use of L1. But, the findings do suggest other factors apart from proficiency affect the use of L1, consistent with Chaaban (2010). One potential factor revealed in the present study related to the results of the multivariate analysis (see Section 5.6.1), which revealed L1 use was associated with not rereading the text (Component 8) and the use of other resources to avoid L1 use. Further relationships among cohesive devices, writing scores, and their relationships are addressed later in this chapter. In the next section, the researcher discusses in detail the results obtained from the questionnaires, as well as the textual analysis of the students’ writing samples relating to RQ3, through reporting the results of the textual analysis of the 128 students’ written texts as an attempt to investigate the cohesion and quality of their writing.

6.2.3 Discussion of Research Question 3

6.2.3.1 Textual Analysis and Scoring

Students who participated in the current study were required to perform a narrative writing task, to get a more precise judgement about the writing strategies employed in their writing, as well as the types of cohesive devices used. In addition, the writing quality of each of the participants’ texts was scored by two assessors—the researcher and one of her colleagues at the English Language Unit who has a Ph.D. in applied linguistics. The scoring of texts occurred through administering the ESL composition profile outlined by Jacobs et al. (1981) as indicators of their writing proficiency, which was considered as guidance for the process of scoring (see Section 4.7.3.1). The reason for adopting the criteria from Jacobs et al. is its reliability, which had led to be used by other researchers conducting similar studies (Alnufaie, 2014; Chaaban, 2010). The main purpose of the scoring was to rank the performance of the students. The rank was relative to the Jacobs et al. (1981) standard test
(see Section 4.7.3.2), in which readers make five holistic assessments of the same essays. These assessments target different aspects of the composition: content (30 points); organization (20 points); vocabulary (20 points); language use (25 points); and mechanics (5 points; see Section 4.7.3.2, Table 3). Further, the individual scale and the overall summed scale are broken down into numerical ranges, which correspond to four mastery levels: excellent to very good (83–100 points); good to average (63–83 points); fair to poor (52–63 points); and very poor (34–52 points).

All participants were asked to compose in English and were given three alternative topics to choose from. The topics of the writing task were familiar narratives drawn from the students’ experience. These topics were chosen from a large number of alternatives supposed to be similar to the topics studied in class or assigned in exams (Appendices 4, 6, & 7). Section 4.7.3 as well as Appendices 11 and 12 present more details on scoring and analysing the writing task of the three data sets.

The findings concerning text quality for all the 128 participants generally suggest a statistically significant difference between genders in terms of writing quality and the use of strategies. In general, the females tended to do better on average than the males, although the males had a broader range of scores than the females in the questionnaire texts, whereas the females had a broader range of scores than the males in the think-aloud protocol texts. However, within the interview data, the males tended to get higher scores than the females, as illustrated in Table 15 (Section 5.5.2). Combined, female participants performed better in the interview means, but in the combined think-aloud protocol and interview, there was no significant difference between the genders.

As previously mentioned, several sociocognitive factors may influence the improved scores for female participants. The tendency to make global revisions and to view writing as a recursive process, as observed among the female participants in the think-aloud protocol, questionnaire, and interviews, may result in better scores. Global revisions are a problem for Arabic writers (Al-Amer, 2000; Al-Semari,1993; El-Aswad, 2002; Fageeh, 2003), and writing practices, such as failing to return to an outline or waiting until the writing is finished to begin re-reading, may lessen male participants’ ability to create cohesive, quality texts. The differences may stem from the fact that primary EFL instruction exists in gender-segregated schools, which may emphasize different writing procedures, although these data are not currently available. This difference is worth further investigation by researchers.

Specifically, the more proficient writers spent more time composing than less proficient writers did. This finding is consistent with that of previous research, as skilled
participants worked more on their essays (Sasaki, 2000; Zamel, 1983). This finding also relates to participants’ interviews that they failed to revise because of a lack of time. It may be that an effective response to writing is the perception of a lack of time, which may be felt more by less-proficient writers. In the next section, the researcher discusses the questionnaire, think-aloud protocol, as well as interview texts of the overall 128 participants to investigate the cohesion and quality of participants’ writing.

6.2.3.2 Cohesive Devices’ Measures and their Correlation with Text Scores

The researcher investigated the variation of the cohesive devices to discover the most frequent and the least-used devices the participants employed in the writing process. The main objective was to concentrate on the macrolevel cohesive devices in students’ descriptive English writing. Consequently, the taxonomy of cohesive devices, consisting of reference, substitution, ellipsis, conjunction and lexical cohesion, were scored and coded in the 128 participants’ written texts (see Appendix M). The researcher analysed each text in terms of cohesion, providing a frequency count for each cohesive device (see Section 4.7.3.3). The analysis was based on the normalized counts of the cohesive devices per 100 words to provide a clear picture of the length of the text and its relation to the number of cohesive devices employed by the students (normalised count of the cohesive devices used by the 128 participants is provided in Appendix N). In addition, the researcher used Halliday and Hasan’s (1976) theory of cohesion to analyse the written products of the participants.

In the current study, the researcher’s intention was to provide the analysis of the macrolevel taxonomy cohesive devices (reference, substitution, ellipsis, conjunction and lexical cohesion) used in each text. This was based on the idea that Kuwaiti college students face difficulties in using proper cohesive devices in their writing, and this study was an investigation of this problem. Qaddumi (1995) revealed the misuse of certain cohesive devices was a major source of incoherence and textual deviation in students’ writing. Qaddumi’s research is similar to the current study regarding the effect of L1 on L2 writing, but the studies differ in the approach to cohesive devices, as Qaddumi focused on how they are used, although the current study focused on the frequency of their use.

With regard to the frequency count of the cohesive devices used by the 128 students of the three data sets (see Section 5.5.3, Table 16), students in the present study employed a variety of cohesive devices. The findings revealed a notable difference in the students’ use of cohesive devices in terms of frequency. Students extensively used certain types of cohesive devices (reference, conjunction, and lexical) while neglecting to use the others (substitution and ellipsis). Reference was most commonly used, followed by lexical cohesion and then
conjunction. Substitution and ellipsis were used rarely; substitution was used by only 39 students, although ellipsis was only used among 29 students. The standard deviation across the most frequently-used cohesive devices was high, indicating that writers use the devices to different extents.

The findings of the current study are partially consistent with the findings of other studies (Abdulrahman, 2013; Al Sharoufi, 2014; Hinkel, 2001; Hung & Thu, 2014; Liu & Braine, 2005; Khalil, 1989; Qaddumi, 1995), as the results of these studies indicate EFL students writing expository texts encountered difficulties in using some cohesive devices. For example, Liu and Braine (2005) investigated the cohesive devices used in Chinese EFL students’ writing and found that the EFL students had issues with employing cohesive writing. Liu and Braine noted students are aware of the various cohesive devices, but they encounter difficulties in applying them appropriately in their writing. The present study indicated Kuwaiti students were able to use some cohesive devices frequently, such as reference, whereas other devices, such as ellipses and substitution, were used much less frequently. The students in this sample employed reading the text during writing as a method of reading for cohesion; however, the results suggested they did not follow up this behaviour with a final rereading of the text for cohesiveness.

The commonality of reference regarding lexical cohesion was inconsistent with Khalil (1989), who determined lexical cohesion was the predominant linking device used in the expository essay writing of Arab EFL college students. Similarly, the findings of Hinkel’s (2001) study revealed nonnative speakers excessively relied on conjunctions, which suggests that at advanced levels of English, learners still lack the skill to use the connecting links that affect the text quality, but the students in the present study used conjunctions as the third most frequent strategy, fairly commonly. However, as the present study assessed frequency rather than effectiveness, it may be that conjunction was ineffectively used. The results indicate Arab EFL students writing expository texts encountered difficulties in using some cohesive devices, i.e., substitution and ellipsis. This matches Khalil’s (1989) study, as the students selected faced an apparent problem on how and where to use some cohesive devices. This finding is also related to the finding made by Hinkel (2001) who investigated the use of cohesive devices by EFL students of different nationalities, including Arabic students, and concluded that students overuse and misuse demonstrative pronouns and conjunctions.

The analysis also revealed only the reference cohesive device was highly correlated with score, with a positive and statistically significant relationship existing between the two variables. Consequently, the researcher used correlation analysis to illustrate the strength and
direction of the linear relationship among cohesive devices’ measures and text evaluation scores. The Pearson correlation coefficients of the five combined dimensions of cohesive devices represented a moderate positive significance relationship with text evaluation scores (see Section 5.5.4, Table 17), but further analysis revealed only the correlation coefficient between writing scores and reference cohesive device is positive and statistically significant. This finding indicates reference is well-used by students in generating high scoring texts, which is positive considering it was the most commonly used cohesive device in the present study. Hinkel’s (2001) findings and the current one show that misuse of reference in some cases makes the produced text confusing cohesively and coherently, highlighting the importance of reference to text cohesion; without cohesion, sentences would be unrelated and would result in a chaotic text.

The findings of the current study related to cohesive devices contradict the findings of Neunner’s (1987) study, who found that the frequency of cohesive device ties did not distinguish a good essay from a poor one, and the essays did not differ significantly in cohesive distance. The findings were partially consistent with Liu and Braine (2005), who state an important relation exists between the number of cohesive devices used and the quality of the writing created by EFL learners, as more cohesive devices of any kind mean higher quality writing. Liu and Braine noted the Chinese EFL students in their study had a problem with the use of reference and lexical cohesion, but the students in the present study employed reference and lexical cohesion most frequently and seemed to do so successfully in terms of reference. The differences between Liu and Braine’s and Neunner’s findings and the present study may stem from the different linguistic backgrounds of the students.

Ghasemi (2013) emphasized that cohesion has a positive effect on the quality of writing, as using the cohesive devices correctly leads to a higher scores coherent text, but Ghasemi’s analysis was based on a review of the literature, rather than empirical evidence. Khalil (1989) found a weak correlation between the number of cohesive ties and the coherence score of the texts when investigating the relationship between cohesion and coherence. In the current study, only frequency of reference was correlated with text quality, indicating reference is well-used by students in generating high-scoring texts, whereas the other cohesive devices did not relate to text quality.

The findings of Sadighi and Heydar (2012) also support the findings of the current study. Sadighi and Heydar found that low-level learners’ most frequent errors were in the use of reference, followed by errors in lexical cohesive devices and conjunction. The findings showed that errors in references were the most common, followed by errors in lexical and
conjunction cohesive devices in the mid-learners’ writing, whereas the high-level learners’ most frequent errors were in the use of lexical cohesion, references, conjunction cohesion, and substitution. Sadighi and Heydar’s study was different from the current study, as the two researchers focused on the number of errors and the current study pertained to the frequency of cohesive devices. However, the findings of the present study similarly indicated reference was a significant cohesive device that influenced the quality of the text.

One explanation of the results of the present study regarding the lack of relationships between cohesive devices and text scores may be that although students use cohesive devices frequently, they may not use them effectively. In their study, Hung and Thu (2014) pointed out that although their students were aware of and got sufficient knowledge of cohesion, they paid average attention to the use of cohesive devices, which is almost the case in the current study. Liu and Braine (2005) similarly concluded that students had apparent knowledge of cohesive devices as shown by the variety of cohesive features they extensively used; however, Liu and Braine noted it was essential to differentiate between two important elements: (b) students’ knowledge and awareness of cohesive devices and (b) their ability to use them correctly and accurately. The current findings may support these assessments, as students use a variety of cohesive devices frequently (e.g., reference, conjunction, and lexical cohesion), and questionnaire responses revealed an awareness of the importance of cohesiveness (54%) and unity (61%), but such awareness and use are not enough to use them correctly. In other words, awareness is important, but it is more important to find the professional solution to the problem of cohesion through instruction and writing curricula. It may be that lexical cohesion and conjunction, although used, are not used appropriately.

The analysis revealed some relationships between variables. For example, the correlation coefficient between ellipsis and reference was positive and significantly correlated \( r = .220, p < 0.05 \), even with the ellipsis cohesive device being rarely used. Additionally, the researcher found conjunctions and references to be negatively correlated \( r = -.225, p < 0.05 \). In the current study, the multivariate analysis revealed the gendered high scores are associated with the use of substitution as a cohesive device, which may suggest a more advanced approach to creating cohesive texts (Section 5.6.1) and may stem from the female participants’ increased attentiveness to global revisions in during-writing behaviours. This relationship between substitution and score was not the result of a relationship between substitution and score in the general sample, potentially because substitution was rarely used among the participants. This finding might be related only to the specific behaviour of certain high performing individuals. The results further show the correlation coefficient between
score and word count (text length) is positive and statistically significant ($r = .631, p < 0.05$). High score texts tended to be longer, even though text length is not one of the evaluation criteria for the text quality measure. This may also be related to the finding that higher scoring individuals spent more time working on their document.

The next subsection outlines the findings of the fourth research question regarding the multivariate statistical analysis of the questionnaire data, through reporting the relationship between strategy use and text characteristics in the writings of the participants, as well as the internal relations between strategy use.

### 6.2.4 Discussion of Research Question 4

The fourth research question pertained to the relationship between strategy use and text characteristics. The key findings that emerged from the factor analysis involved the linkage of some of the behaviour patterns. These behaviours may occur before, during, or even after writing. Strategic behaviours (Component 1) included conscientious decisions made with a specific outcome in mind. Other behaviours are proactive (Components 2, 3, 5, 9 and 12) focusing on text structures through using some planning strategies, such as local planning, thematic planning and outlining, and editing strategies, such as editing vocabulary and error checking. Affective strategies (Component 10) included giving oneself a reward for completing the assignment.

Proactive behaviours include coherence, revising strategies, reading through the prompt and reading the generated text, rereading strategies, editing strategies through using the dictionary to check spelling and grammar, and reference cohesive device. The results of the multivariate analysis (see Section 5.6.1) indicate some proactive behaviours reflected a high correlation between reading and rereading strategies, as students tended to focus on reading through reading the generated text, as well as rereading what has been written to get ideas of what to write next (Component 7), which reflects a systematic, strategic approach to writing with a focus on reading. The analysis of the questionnaire confirmed this finding. Other behaviours are proactive regarding a systematic approach that involves highly focused attempts to revise prior to submission (Components 7 and 9). Some proactive behaviours emerged only in the questionnaires, such as dropping the first draft and writing again, as this led the writers to consider focusing on reading and revising strategies.

The results of the multivariate analysis (see Section 5.6.1) revealed the revision strategies (Component 2) are grouped together, as global and local revision strategies are correlated. The participants tend to make changes at all levels of their texts through changing the structure of their paragraphs, sentence structure, changes in the content or idea, changes in
outlines, as well as changes in vocabulary. This finding indicates the aspects of text structure are linked to strategy use, which aligns with Mahfoudhi (2003), who investigated the writing processes and products of Tunisian EFL university students and concluded that at the local level, students’ writings showed inaccurate use of mechanism and grammar, whereas on the global level, they were devoid of a clear thesis statement, substantial support of ideas, adequate transitions, and hedged statements. These problems were because of many factors, including revising issues.

One of the findings was that the positive role of corrective feedback proves to be an effective element in improving the quality of the students’ writing. Some students use social strategies (Components 4 and 12) through asking others about their opinions and comparing their work with them, as well as relying on the teacher’s help when getting writing feedback. Social strategies did not emerge as a theme in the think-aloud protocols and interview data. The results of Fageeh (2003) also indicated students need to be exposed to different writing genres, skills and strategies, and effective feedback to improve their writing abilities. Feedback represents a kind of warning or alarm to students that they are drifting away from academic writing. The multivariate analysis (see Section 5.6.1) also reflected a high correlation between revising strategy use and social strategies (Components 4 and 12). The results suggest social strategies may play a role in the use of some strategies among the participants rather than others, as students tended to ask for help when having problems while writing, and they used peer work to compare their written works. With regard to the responses of the participants in the questionnaire, the data analysis revealed most prefer not to use social strategies and not to consult their colleagues if they face any difficulties in their writing. This preference to avoid the social aspect of writing may limit their progress in receiving and accepting peer feedback.

In contrast, the majority of the participants indicated they would ask for the help of their teacher. The analysis of the questionnaire revealed 77% of the participants check their mistakes with their teacher after they have received feedback and tried to learn from the teacher’s comments. This finding suggests students do not see peers as being knowledgeable or powerful enough or a source of useful feedback, and they often like to work independently without comparing their work with the writing of other colleagues. Students prefer to receive the teacher’s help in developing their writing and facilitating further improvement in the writing process. Similarly, this finding accords with what Alharthi (2012) found. The researcher’s data analysis revealed some of the participants preferred to solve their writing problems alone and not to discuss their writing in front of their friends, and they preferred to
ask for the help of the teacher when facing difficulty in their writing (Alharthi, 2012). This finding indicates those students understand that feedback can help them overcome their writing difficulties.

Moreover, some behaviour patterns included using cohesive devices, such as substitution (Component 6). This is the only factor or component associated with score variable. This component reflects the high correlation of the gender and score variables, whereby the females tended to do better than the males, although the males had a broader range of scores than the females in the questionnaire texts (see Section 5.5.2), as was shown in the t test (Table 15) that score is significantly correlated with gender. Furthermore, the gendered high scores are associated with the use of substitution as a cohesion device, which may suggest a more advanced approach to creating cohesive texts.

In contrast to the mentioned behaviours, some behaviours pertain to reliance on L1 and an unstructured approach to writing (Component 8). Students who used L1 attempted to avoid it, and they also failed to read generated text as a method of revision. This finding may suggest L1 use reflects a less strategic or proactive approach by the participants towards the writing process. Such unstructured writing behaviours seemed to be the only behaviour that includes an explicit use of the L1; therefore, although no relationship existed between L1 use and writing proficiency, as discussed with respect to RQ1, it may be that increased L1 use is related to an unstructured view of the writing process. This finding may suggest a relationship that supports that the use of L1 is primarily employed by less-skilled writers (El-Aswad, 2001; Wang & Wen, 2002; Wolfersberger, 2003; Woodall, 2002), as evidenced through unstructured writing behaviours. Conversely, this finding may suggest the influence of the Kuwaiti writing strategy, wherein students primarily learn to free-write as opposed to planning first, results in additional use of L1. Therefore, learning to think and plan in L2 would help students realize the alternative structure and form of EFL writing (Abdul Rahman, 2013).

Concerning affective strategies, the results indicated some students may use affective strategies through evaluating their work to help deal with difficulties related to L2 writing. For example, participants reward themselves for completing the assignment. In contrast, the analysis of the writing-strategies questionnaire revealed that only a small number of participants showed positive attitudes toward using affective strategies (see Section 5.6.1 and Appendix O). This finding is consistent with the findings of El-Dib (2004), who used a multivariate analysis in an attempt to establish a link between culture, gender, language level, and learner’s choice of learning strategies. El-Dib revealed a relationship between language
level and affective strategies used among the participants, through including some attempts for relaxation, such as giving self a reward or treat when the students do well in English writing, as well as noticing when students are nervous. This finding suggests the participants use affective strategies to control their emotions, regulate their writing, evaluate what they had written, and make the writing task manageable. On the other hand, this finding does not accord the findings by the study of Alharthi (2012), who stated the participants did not take a break to alleviate the writing tension when they were not able to complete their writing process or check in with their affective response to writing.

The multivariate analysis reflected a high correlation between some cohesive devices and text coherence. For example, reference cohesion was strongly correlated to coherence strategies. This finding indicates the practice of using reference to produce cohesive writing is associated with strategies related to coherence, whereas lexical cohesion and substitution were not related to strategies to promote coherence. Using pronouns to generate cohesion is a conscious process on the part of the students during the writing process. The link between strategic use regarding reference cohesion may help to explain why reference frequency was linked to higher scores, in that reference is a conscious cognitive process of the writers in this sample. Reference cohesion is linked to reading and rereading strategies within the writing process.

6.3 Summary of the Discussion of the Four Research Questions

In this chapter, the researcher discussed the four research questions based on the qualitative and quantitative analysis of the data obtained from the questionnaire, think-aloud protocols, semistructured interviews, as well as text analysis. This chapter also presented a discussion of the main findings of the study in addition to linking these findings to the related literature, underscoring the gap in the literature filled by the current study. This link helped the researcher establish recommendations and suggestions related to instruction and curriculum design, included in the next final chapter that concludes this research. These recommendations are an attempt to inform pedagogical practice and learning strategies, and to help develop and improve the writing practices of Kuwaiti college students, especially with respect to the quality of their writing skills. The next section emphasizes sociocognitive influences on these writing characteristics and strategies. The next section discusses the reconceptualization of writing strategies within a sociocognitive approach, through reporting the influence of the context in which writing takes place and how it influences the way strategies are employed.
6.4 Influence of Sociocognitive Factors on the Development of Writing

The previous analysis in the chapter pertained to the findings in relation to the research questions. In this section, the researcher focuses on the primary sociocognitive behaviours noted in the literature (see Section 3.8) to interpret the results. Flower (1989) stated the individual writer’s thinking is determined, directed, and prompted by the context in which writing takes place and that “in its least visible role, context affects us in the form of past experience that supplies a wealth of prior knowledge, assumptions and expectations” (p. 288). According to Flower, context guides cognition in many ways, and as far as the writing process is concerned, Flower suggests the context can interact with the writer’s mind by influencing three cognitive areas in writing, such as goals, criteria and strategies, which accordingly suggest the need for a model of writing that places cognition in its context. This section pertains to writing in its contextual dimension in an attempt to obtain increased understanding of the sociocognitive factors that influence students’ writing behaviours.

6.4.1 Past Learning Experience

Writing experience and previous writing instruction might affect writing strategies. As confirmed by prior researchers (Aljamhoor, 1996; Chaaban, 2010; El-Mortaji, 2001; Fageeh, 2003), writing strategies are largely controlled and directed by writing experience and previous writing instruction (Cumming, 1989; Roca de Larios & Murphy, 2001; Sasaki & Hirose, 1996). For example, Sasaki and Hirose (1996) attributed skilled Japanese university EFL students’ attentiveness to overall organization while planning and writing more than their less skilled counter to subjects’ previous writing experience. Similarly, Leki (1995) stated all ESL participants reported some sort of dependence on previous writing experience during the study. In addition, Roca de Larios and Murphy (2001) stated the writer’s educational contexts can provide L2 writers with different learning opportunities and demands. The writer’s educational background has also been found to influence the type of planning strategies used. Cumming (1989) reported L2 writers with technical writing backgrounds tended to frame their compositions in advance (advanced planners), while writers with literacy background tended to enhance their mental representations as the composing progressed (emergent planners). From the data analysis gathered in the current study, students’ writing development appeared to be influenced by the past learning experience in relation to English writing in various ways.

First, Kuwaiti students’ general approach to learning, which can be described as exam-oriented and assigns importance to final grades, appeared to be an outcome of their past learning experience. Students focused more on the grade and less on the subject being taught.
Interviews with professors revealed they believed students only study to pass the tests and to graduate with high scores for the sake of finding better jobs, but not to learn how to develop and improve language skills. Exam orientation is indirectly promoted by teachers through the type of instruction they introduce in class, which directs students to rely on memorization in their learning. This approach for learning appeared to continue even after the students reached the university level. This finding is evident in students’ reliance on memorizing as a way of assuring high marks on exams. This factor negatively affects students’ perceptions about the nature of English writing as a means to achieving a grade, rather than as a skill that must be cultivated and developed. Furthermore, students may gain a false perception of the importance of writing and the essential aspects of English academic writing, such as revising for local grammatical correctness rather than to genuinely improve the message of the writing.

Second, the participants’ limited exposure to English and their experience with writing, both in L1 and in L2, pose a challenge for their writing development. In their interviews, the teachers made it clear that students do not like to write in English because students lack proficiency in English (see Section 5.3). Providing an additional perspective, the analysis of the professor’s interviews revealed students would be more willing to use English only if they were confident in their English language skills. Similar findings were reported by Leki (2001), who stated, “in countries without a tradition of teaching L1 writing, students may not bring to the EFL class much sense of what is involved in creating extended prose or know how to go about it” (p. 201). This may explain that those participants who relied more on L1 in the present study were more likely to have an unstructured approach to writing.

In this vein, students’ writing seems to be significantly influenced by their Arabic L1 instruction. Students lack knowledge of the basic principles of Arabic writing (see Sections 2.3 & 2.4), as they do not receive instruction regarding Arabic composition. Usually students receive a topic and are asked to write about it, rather than provided with guidance on cognitive writing practices. This process implies students are used to Arabic free writing, which does not depend on particular rules, as they write anything that comes to their mind in a manner that is similar to the act of speaking. Thus, Arabic EFL university students rely heavily on instruction in writing processes and may develop negative attitudes toward potentially positive aspects of the writing process, such as using L1 in strategic ways.

As discussed in Section 2.3, several issues exist in the current Kuwaiti primary system with respect to the mandatory EFL courses. The English textbook is believed to be integrated and communicative in a class of usually more than 35 students. Also, in relation to the productive skills, speaking and writing, these skills are hard to be managed and developed in
45-minute classes with such a large number of students for only 5 days a week. A gap exists between theory and practice in English language classes in the public schools of Kuwait. The English language course typically requires fewer cognitive skills and little exposure to the target language. Furthermore, English classes focus on grammar and reading comprehension with stress on memorization. Accordingly, students do not write unless for homework or exams. With the large number of students in class, teachers find it difficult to teach their students the needed skills and strategies. Students get bored and passively sit in class, and they perceive that teachers do all the talking (Al Darwish, 2017; Al-Rubaie, 2010; Rashed, 2017).

Large class sizes lead to teachers focusing on grammatical errors in feedback, which are easier to locate. In the Kuwait University College of Arts, average class size in the first year is 49 students, whereas in the second year it drops to 22 students. On average, course size in the College of Arts is 34 students (Kuwait University, 2016). As a result, instructors may focus on feedback that is simpler to provide, such as grammatical errors, especially in the first-year writing instruction (Leki, 2001). This may have led to the students’ seeming perception that revision is primarily a sentence-level, localized process, as revealed in the present study. This focus on grammatical errors could also negatively influence the students’ perceptions of the purpose of writing as it reduces this skill to an occurrence of display of grammatical rules. This finding was consistent with Leki (2001) who stated, “focus on grammatical correctness in written work in the FL or even in L1 may lead students to regard the purpose of writing as being the production of grammatically correct text” (p. 201).

6.4.2 Influence of University-Level Writing Instruction on the Writing Process

As previously discussed, Arabic writing instruction in Kuwait is not emphasized, and this is especially true within an EFL context. Thus, learner’s past learning experience appeared to pose a challenge for teachers of writing at the university. Leki (2001) stated the real challenge that faces teachers is “to meet students where they are in terms of language and writing skill and taking them forward” (p. 205), but this can be difficult given pressure on Kuwaiti EFL instructors to make students quickly conform with academic English writing. Writing teachers find themselves obliged to bridge any gaps in the students’ knowledge of L2, and at the same time they are required to introduce domain-specific knowledge.

In line with this observed problem, growing concern among SLA researchers has been expressed over the role of the native speaker in language teaching and SLA research; however, the native speaker model remains firmly established in SLA research and language teaching (Cook, 1999). In other words, teachers, researchers and people in general have often
taken it for granted that L2 learning is a special case in which one group can be properly judged by the standards of another (Cook, 1999). When the L2 users’ grammar differs from native speakers, when their pronunciation betrays where they come from, when their vocabulary differs from native usage, these are treated as signs of their failure to become native speakers, not of their success in their own terms (Cook, 1999). Just as it was once claimed that women should speak like men to succeed in business, black children should learn to speak like white children, working class children should learn the elaborated language of the middle-class, so L2 users are commonly seen as failed native speakers (Cook, 1999). Consequently, language teaching should be more aware of the student as a potential and actual L2 user and less concerned with the monolingual native speaker (Cook, 1999). Cook (1999) claims that very few L2 users could be mistaken for native speakers; thus, most L2 learners reconcile themselves to ‘failing’ to reach the native speaker target, and this can lead to negative affect and overall lesser proficiency in L2. English is used frequently in Kuwait, but the results suggest that the type of foreign teachers who teach English, particularly English writing, need more extensive training to limit negative beliefs, like the complete taboo against L1 use. Writing instruction, guided by specific teaching practices, seemed to influence the students’ writing strategies in the present study; therefore, it is all the more important that appropriate expectations and effective instruction be implemented among Kuwaiti EFL learners at the postsecondary level.

The data analysis revealed students’ writing development is influenced by certain teaching practices. As a potential negative implication of this experience, the data suggest students receive different instruction by different teachers regarding how to write and how to manage their writing process. Participants stressed some strategies while neglecting others, depending on the personal experience of the instructor. Hence, this can be confusing for students who do not have enough knowledge of the L2. Apart from the previous factors mentioned in Section 6.4 and their influence on development of writing in general, certain factors appear to be interfering during the actual writing process. First, students’ application of certain strategies simply because their teachers stressed using them in class is one way in which strategy instruction interferes with the writing process. In addition, the application to conforming the teachers’ demand is a clear illustration of contextual mediation in the writing process. The participants followed the teachers’ instruction and tried to write under the belief that this process would secure them high grades.

Regarding writing strategy instruction, the data revealed teachers do not stress strategies enough (see Section 5.3). It emerged from the data that the teaching of strategies is
inconsistent, and this was clear because some teachers stressed certain strategies although others did not mention any strategies. Although the teachers reported they tend to teach writing as a process, some of their teaching practices contradicted this claim. Teachers responses to their students’ written products, in which they treat their students’ texts as finished products rather than drafts, demonstrate this finding. The feedback they provided included error correction as well as comments about the content of the texts. This practice contradicts the principles of the process approach of teaching writing, which require teachers to lead students through several revision cycles rather than simply responding to texts as final products (Ferries & Hedgcock, 2005).

However, some positive outcomes suggested writing instruction could benefit Kuwaiti EFL writers. The researcher found the majority of the participants used some writing strategies (planning, reading, revising, and editing) more frequently than the rest of the other strategies. This contrasted the previous findings that suggested Arabic students had little adherence to the writing process (Al-Amer, 2000; Al-Semari, 1993; El-Aswad, 2002; El-Mortaji, 2001; Fageeh, 2003). The findings regarding students’ use of writing process instruction supported Sasaki’s (2004) findings, which indicated the participants improved their English proficiency, quality, fluency, and confidence after receiving instruction in using planning and revision strategies. The professors indicated in their interviews that they provided process-based writing instruction. In addition, Rao (2007) found a measurable positive influence on the participants’ writing performance after explicit instruction regarding brainstorming strategies. According to the professors’ interviews, students are encouraged and instructed to use some writing strategies in their writing process, such as planning (local planning and outlining), reading (reading the topic sentence), revising (word choice) as well as editing (spelling and grammar), in addition to coherence and cohesion (see Section 5.3). Therefore, providing EFL student writers with explicit strategy instruction can be helpful in allowing them to develop their writing skills.

Teaching the writing process is essential because it transfers even more readily than language proficiency (Freidlander, 1990). In the belief that L1 literacy facilitates the development and success of second-language literacy skills, researchers in the 1990s began to broaden the scope of their studies by investigating how learners’ past writing experience affect their L2 writing development. For example, Cumming (1989) found ESL learners’ writing expertise is more likely to affect the quality of writing than L2 proficiency. Friedlander (1990) noted ESL writers write better in matched conditions (e.g., L1-related topics in L1 and L2-related topics in L2) than in mismatched conditions.
An additional place where instruction could improve is in L1 use to teach L2, and with developing appropriate expectations for EFL learners. Cook (1999) suggests that teachers should see the L1 as a positive factor in the class rather than as a negative factor that has to be endured, which may simply be putting more positive light on what already happens in many classrooms. A second suggestion is to introduce activities that deliberately involve both languages, as such activities in teaching can develop the student as an L2 user not an imitation native speaker. These suggestions would place more emphasis on the successful L2 user and to use the L1 more in teaching (Cook, 1999). Together with the attitude change, these can bring language teaching back to the reality that it is helping people to use second languages, not to imitate native speakers (Cook, 1999). By integrating use-based assignments and adjusting expectations of English and the taboo against Arabic in English writing, EFL instructors could improve affect towards written English.

Professors’ interviews revealed they encourage students to focus on checking the coherence and cohesion of their writings, and this writing emphasis translated to awareness of cohesive devices among the majority of the participants. Ghasemi (2013) and the current study shared the emphasis on the role of cohesion in creating a coherent text that aligns with a prescribed linguistic model, underscoring the role of instruction in achieving this objective. Ghasemi stated instructors should emphasize the use of cohesive devices to increase students’ understanding of these factors. Al Sharoufi (2014) attempted to create a new framework for teaching academic writing through applying the new concept of lexical cohesive trio, which combined reference (anaphoric, cataphoric), lexical repetition, and lexical phrases, to university participants in Kuwait. The findings showed a significant improvement in using lexical cohesion as a result of using the framework in instruction (Al Sharoufi, 2014). This finding indicates using this new framework enhances students’ ability to write coherent essays. In other words, using the lexical cohesive trio increased textual and lexical cohesion. In contrast to the current study, this process pertains to cohesion, particularly reference, as well as lexical and substitution cohesion. The multivariate analysis reflected a high correlation between those cohesive devices and text coherence (see Section 6.2.3.2). Both studies, however, indicated that focused instruction and additional guiding elements, such as the model developed by Al Sharoufi, suiting the nature of the students can help students to master cohesive devices and thus be able to produce a cohesive and coherent text. In the present study, the researcher suggested students were aware of cohesive devices, but may not be applying some in appropriate manners, as lexical cohesion and conjunction use were not
associated with improved text quality. This may stem from an emphasis on drilling, rather than on feedback and application.

The results showed a significant burden of improving writing strategies falls to instructors. For example, students are not motivated to develop and improve their writing skill unless the lecturer provides them with enough feedback on their writing. Providing students with prescriptive writing strategies limits power of strategy instruction, as instructing different types of strategies is typically assumed to provide a detailed understanding of the differences and similarities that exist across writing strategies. Instructing students to use and understand different types of strategies helps them work more strategically and overcome many obstacles. Moreover, participants, both students and instructors, felt not enough time is dedicated to explaining all the writing strategies available to students, and their strategic knowledge is incomplete and reflected in the type of strategies they employ while writing and the adequacy of their application.

6.4.2.1 Challenges for University-Level EFL Instruction

Kuwaiti EFL instructors seemed to face several challenges in providing instruction. As revealed in the interviews, instructors formed their personal interpretation of what academic writing entails (see Section 2.5). Leki (2001) stated, “in EFL settings it is possible that language teachers are drafted into teaching writing without being fully aware of what teaching writing entails or how to implement writing instruction” (p. 201). One outcome is that teachers accidently transfer to their students any inappropriate writing instruction that they have been subjected to.

Another factor influencing the learning and teaching of writing is the large number of students in classrooms (see Section 2.5). This creates an obstacle for students who might be interested in participation in their class, particularly those students who are aware their low level of proficiency could be intimidated by the large numbers of other students (Chaaban, 2010); further, it creates difficulty for the teacher to provide adequate feedback. Large classes also led to the need for professors to account for multiple proficiency levels of students. Those professors found it difficult to differentiate their classes for the range of proficiency levels in the class. As a result, many low proficiency students are deprived of the chance of actually learning when the information presented is suitable for more advanced learners whether on content or language level. However, when the information presented is easy, proficient learners experience boredom and frustration. According to the professors’ interviews, students’ avoidance to be engaged in social strategies with their peers, such as not sharing and comparing their written work with their peers, may reflect negatively on students’
writing output. However, the lack of engagement with this strategy may stem from an awareness of the differing levels of proficiency and the discomfort with one’s own English proficiency.

Furthermore, the lack of authentic materials on writing strategy instruction limits both the teacher’s role and the students’ motivation to participate more actively. This complements the study of Alnufaie (2014), who stated helpful strategy instruction entails providing learners with detailed and organized materials, including definitions, examples, pictures, functions, and tasks on strategy use. However, such materials should be supplementary to textbooks and never be a substitute. Moreover, when students reach the university level, they become frustrated when they realize the huge gap between the type of writing they were exposed to for many years during their pre-university education and the type of writing they are supposed to produce for their English courses.

When the second language is different from the first language, difficulties in students’ accuracy occur in relation to syntax and ideas in the academic writing of L2, as well as the directionality of writing (Arabic written from right to left). In addition, Arabic nominal (noun) sentences do not contain a verb; thus, a direct translation in English would sound awkward (Tibi et al., 2016). Some Arabic letters sound different such as ح and ꞑ, while English letters sound different P and V. In vocabulary, the meanings of L2 words affect the meanings of their twins in the L1, i.e. the meaning of the English word feel (sense) affects the understanding of the Arabic word فيل (elephant) in Arabic people who know English. Another example is the meaning of the English word safe (secured) affects the understanding of the Arabic word سيف (sward) in Arabic. In syntax, L1 grammaticality judgments are also affected by the L2, in that L2s have different reactions to middle verb constructions in their L1 from monolinguals. Several experiments show L2 users become slightly slower at processing the L1 as they gain proficiency in an L2 (Magiste, 1986). Therefore, EFL learning among Arabic speakers has some specific linguistic interactions that require effective and thorough understanding of both English and Arabic in order for students to adequately learn English. Further, when the L2 users’ grammar differs from native speakers, when their pronunciation betrays where they come from, when their vocabulary differs from native usage, these are treated as signs of their failure to become native speakers (Cook, 1999). Thus, instructors must set clear and appropriate expectations, and provide instruction with knowledge not only of English or of Arabic, but of the interactions between the two. Teachers of Kuwaiti second language learners need more preparation curriculum and programs regarding writing instruction for L2 students, as well as professional development curricula to improve teachers’ knowledge of instructional
practices in teaching writing based on students’ problems. The importance of authentic instruction and informed instructors becomes especially clear when one understands the importance and ubiquity of English use in modern Kuwaiti society.

6.4.3 Cultural Practices and Beliefs about English That Influences Writing Processes

This section will discuss the influence of Arabic on the students’ written products and the way they think. Roca de Larios and Murphy (2001) pointed out that writing context is shaped by cultural, historical, and institutional settings where writing takes place. The analysis of quantitative and qualitative data showed the use of Arabic was seen to be a strategy the participants used during their writing process when they encountered problems in vocabulary retrieval.

One way the sociocognitive theory explains the results is through the finding that writing appeared to be mediated by the writers’ L1 (Arabic) language and culture. The participants tended to transfer to Arabic as a way of writing characterised by indirectness to their English writing process. In other words, indirect, unstructured writing processes were characterized by increased use of L1 within this sample. Given that writing in English is primarily characterized by directness, this type of influence may inhibit Arabic EFL writers from truly espousing the hallmarks of what is considered academic English.

At Kuwait University, students in the sciences must communicate proficiently in English to participate in their majors. As members of the disciplinary community, these participants are required to produce texts that conform with the rules of academia as well as to the criteria established in their specific field, but they lack the basic knowledge of what writing entails. In the field of linguistics and its related strands, proponents of the ‘new-speaker’ concept increasingly contested labels such as ‘non-native’, ‘second-language’, ‘L2’ speaker or ‘learner’ (O’Rourke & Pujolar, 2013). Kuwaiti English requirements, such as the expected use of proficient English in the university, recognize the value of English use in globalization, while potentially setting expectations that are not attainable for non-native speakers or the new-speakers of English without effective instruction. Focus on L2 users reaching the same level as native speakers may fail to acknowledge the developments in language in the context of globalization and the degree to which the language will develop and adapt to new sets of social and economic conditions (O’Rourke & Pujolar, 2015). Given the linguistic differences between Arabic and English languages, or between new and native-speakers of the language, when Arabic-speaking students are expected to attain standardized
English (O’Rouke & Pujolar, 2013), effective curriculum and quality L2 instructors are essential.

Research has looked at struggles non-native speakers experience in pursuit of recognition as ‘authentic’ speakers (O’Rouke & Pujolar, 2013). The ideology of authenticity, according to Woolard (2008), locates the value of minority and any language, in its relationship to a particular community. Therefore, who gets to be defined as an authentic speaker in minority language context is often tied up with the romantic ideal of the native speaker, whose origins can be traced to a bounded homogeneous speech community within a particular territory and set against a clear historic past. O’Rouke and Pujolar (2013) point out that the link between authenticity and identity can thus be used to constrain the use of a minority language by speakers who do not fit the native speaker criteria and who see themselves as not sounding sufficiently ‘natural’ compared to those who are perceived as ‘real’ speakers. Further, the standard expectation of EFL students’ proficiency is not reasonable in the State of Kuwait, due to instructional limits and the lack of teachers’ training. Additional implications of the study findings for instruction are addressed later in this dissertation (see Section 7.2). Because of high expectations and instructional deficiencies, EFL learning may be subjected to additional pressure that results in a negative affective commitment towards writing. This negative reaction may have influenced results, such as the feeling that there was not enough time to revise and the negative perception of using L1 in L2 writing.

Both teachers’ and students’ data indicate students rely on Arabic in one way or another when they compose in English. Despite teachers’ avoidance of Arabic in classrooms, students seem to find this a difficult habit to resist, especially in the planning and problem-solving functions. Professors stated the use of L1 influences the writing habits of students reflecting hesitation in writing when not being sure of their accuracy, as the students usually make avoidable mistakes. Despite the lack of Arabic writing instruction, students have absorbed the Arabic style of writing through many years of exposure to Arabic texts, which may result in difficulty when adopting another style of writing. Therefore, Arabic influences students’ English writing, as a demonstration of their cultural identity. The findings of the present study, regarding the influence of L1 (Arabic), resonates with Leki (2001) who found, the more imbued with first language rhetorical references the writer is, the greater the distance that the writer may need to go in order to adopt FL cultural and genre references in writing, and perhaps the greater resistance the writer may amount about going that distance. (p. 202)
Use of cohesive devices, specifically reference, was also a cognitive behaviour that resulted in higher quality texts within this sample that seemed to be influenced by the participants’ L1 experiences. The use of cohesive devices, and creation of cohesive text, is linked to both cognitive and sociocultural factors. For example, Qaddumi (1995) investigated the possible sources and solutions to the problem of textual incoherence and cohesion of the participants’ writings in both Arabic and English. The cultural, rhetorical, and linguistic backgrounds of Arabic were presented as variables affecting students’ performance in cohesive writing in both Arabic and English (see Section 5.3). The next section includes a summary and conclusion of the chapter.

6.5 Summary and Conclusion of the Chapter

The researcher used a mixed methods design of both qualitative and quantitative methodologies to yield detailed information and overcome assumed drawbacks. The textual analysis of students’ written samples helped to provide a more complete picture of their attitudes toward the writing process, the strategies used in their writing, and the most frequently-used cohesive devices and the quality of their written products. The data were collected through four research methods: questionnaires, think-aloud protocols, semistructured interviews, and text analysis. The researcher used a methodological triangulation through combining both qualitative and quantitative data to establish validity and reliability. The researcher analysed texts from the three data sets—the think-aloud protocol, semistructured interview, and the questionnaire—to investigate the most-frequent and the least-used cohesive devices students employ in their writing process. The written texts of the students were scored based on the taxonomy of cohesive devices developed by Halliday and Hasan (1976). Moreover, the researcher used Perl’s (1981) coding scheme to analyse the think-aloud protocols and semistructured interviews. The researcher aimed to gain access to students’ experience as learners of English in general, and English writing in particular, to see how their writing was shaped or influenced by L2, which was essential to investigating the composing process of students and the effect of using L1 when writing in English as a second language. Hence, the researcher searched for possible influence of L1 on students’ L2 writing, and to provide answers about certain attitudes and behaviours of students when composing in English as a second language (L2). In addition, the researcher performed a multivariate analysis to explore not only the relationship between strategy use and text characteristics, but also the internal relations between strategy uses. The factor analysis connected Research Questions 1, 2, and 4 to find a relevant link and relationship between the three research questions.
The main study findings relate to the effect of L1 on L2 writing, cohesion, gender, and the relationship between strategy use and text characteristics. Most students were proactive and took some actions before they started writing in English (e.g., planning strategies). Students’ learning strategies need to be encouraged and supported. The analysis indicates participants do use their L1 in a variety of ways, making it a problem in writing, rather than a potential strategic tool. Halliday and Hasan’s (1976) cohesion framework was adopted to analyse Kuwaiti undergraduate students’ use of cohesive devices. The researcher quantitatively analysed data through identifying the frequency and the types of cohesive devices used by the participants, and by evaluating the overall quality of the students’ written products. According to the results, a notable difference existed in the students’ use of cohesive devices in terms of frequency and variety. Students frequently employed certain types of cohesive devices (reference, conjunction, and lexical) while neglecting to use the others (substitution and ellipsis). The results suggest the students need to be exposed to focused instruction that addresses the appropriate use of cohesive devices. The analysis also revealed the correlation coefficient between writing scores and reference cohesive device is positive and statistically significant.

This study has shown the difficulty Kuwaiti undergraduate students of English face in their English descriptive writing, and their attitudes toward the writing process. In addition, strategy use and approaches to writing vary depending on the gender of the participant. The females tended to score better on their texts than the males by employing more global planning and revision strategies. To the best of the researcher’s knowledge, no prior researcher has addressed Kuwaiti students’ writing strategies in terms of cohesion and quality in English writing. Thus, this topic contributes to the dearth of research regarding the EFL writing strategies, particularly in the Kuwaiti context. In the context of the present study, some differences appear by the relatively small cohorts used in the qualitative methods; however, it could be also related to the different approaches used to analyse data obtained from different instruments. The following chapter provides a discussion of the limitations of the present study and recommendations based on the findings.
Chapter 7: Conclusion, Implications, and Recommendations

7.1 Introduction

Through this study, the researcher investigated the writing strategies that Kuwait undergraduate students who are studying EFL use in their writing. The results were interpreted using the sociocognitive framework of EFL writing from students’ perspective. The researcher adopted a mixed methods research design utilizing various research instruments for triangulation purposes: questionnaires, think-aloud protocols, semistructured interviews, and textual analysis of students written products. The participants in this study were 128 Kuwaiti college students of English in the first and second year of study at Kuwait University, College of Arts. The researcher employed Petric and Czárl’s (2003) writing-strategy questionnaire for the data collection. The participants’ writing texts were assessed for quality according to the criteria of Jacob et al. (1981), considered as guidance for the scoring process, to investigate the performance of the participants as well as their use of writing strategies. This study is significant in that the researcher applied the sociocognitive approach to English learning for university students in Kuwait to understand the writing behaviours of students in EFL classrooms in Kuwait, and also potentially to a wider extent in the Arabian Gulf, because the role of English in the education systems across the Gulf area is similar.

The main study findings relate to the influence of L1 on L2 writing, cohesion, gender, and the relationship between strategy use and text characteristics. Most students are proactive in taking some actions before they start writing in English, including written and mental planning. The analysis indicates participants use their L1 in a variety of problematic ways, rather than as a potential strategic tool. Regarding cohesion, the findings revealed a notable difference in the students’ use of cohesive devices in terms of frequency. Students frequently used certain types of cohesive devices (reference, conjunction, and lexical) while neglecting to use the others (substitution and ellipsis). The analysis also revealed the correlation coefficient between writing scores and reference cohesive device is positive and statistically significant, but the other cohesive devices did not have a relationship with score. In addition, strategy use and approaches to writing vary depending on the gender of the participant. The females tended to score better on their texts than the males, which may relate to females’ increased tendency to use global planning and revising practices.

The results suggest the participants need to be exposed to different writing skills and genres, along with the effective writing strategies, to improve their writing. The findings of this study will result in subsequent improved student learning outcomes in the teaching and learning of L2 writing, specifically in Kuwait. Support for a sociocognitive approach for the
teaching of ESL/EFL writing is provided in this study because it seems that social factors may be influencing the cognitive writing processes of students. The result of the study may provide teachers with a broader context of EFL writing strategies for language learners and emergent users whose first language is one other than English. The present chapter serves to elucidate the implications for practice, the contribution of the research, the limitations of the study, and recommendations for future researchers.

7.2. Implications for Writing Teachers and Course Designers

This section provides implications for L2 writing instruction. The researcher offers suggestions for writing course designers in Kuwait, and the Arabian Gulf countries, because the role of English in the education systems across the Gulf area is similar. In the light of the data obtained from this study, the following list details the implications.

1. The interviews with both teachers and students revealed that both groups can sometimes be aware of many of the writing problems, especially those related to cohesion, but such awareness alone does not resolve all problems; systematic and gradual remedial actions are the professional and practical solutions that should be adopted in such cases. On the teachers’ end, Liu and Braine (2005) noted instructors should explicitly introduce writing concepts but should also develop focussed activities designed to illustrate the concepts in writing contexts. The social context should emphasize appropriate writing strategies consistent with EFL literature, such as strategic use of L1 (Wang, 2004). However, instructors must also be cognizant of the social forces shaping their students’ writing processes, as evident through the differences in male and female writing processes. Thus, the results supported a sociocognitive approach to interpreting students’ writing behaviours, which future instructors and curriculum designers should consider.

2. Teachers need to emphasize expanding learners’ ability to use the different cohesive devices because these devices play an important role in the L2 writing process, and because varied cohesive devices seem not to have received as much attention as they deserve in the classroom. The study findings suggest cohesive devices are used with some frequency, including use of references and lexical cohesion, but indicated rare use of other devices. The results showed reference, a commonly used cohesive device, related to overall score, but other cohesive devices did not relate to score. However, this may be because students employ the devices frequently, but not correctly. The analysis of the professors’ interviews revealed they instruct students on using cohesive devices in their writing, and the
students’ responses attest to a focus on generating coherent text, but this focus was not evident in the writing. Therefore, explicit instruction with examples as well as focused activities on using different cohesive devices should be provided and developed by the writing teachers at an earlier stage in students’ education. Through direct and applied instruction, students can become more aware of the importance of cohesive devices in accomplishing the writing task and consequently use them effectively and appropriately (Liu & Braine, 2005). The results of this study suggest Kuwaiti EFL students should be trained on the use of cohesive devices that they tend to avoid in their writing, such as conjunctions, substitution, and ellipses. In addition, more focused instruction, accompanied by tailored drills, is needed in class to train students to use all cohesive devices correctly. Hung and Thu (2014) stated the “teacher’s role should be realized in raising the learner's attention to the significance of [cohesive device] use in the task of essay writing” (p. 10). Hung and Thu also suggested using regular in-class activities to provide supplementary cohesive devices exercises, and purposely insist learners correct their cohesive device use errors in essay writing practice.

3. EFL instructors in Kuwait should emphasize L1 use during the planning stage, when the writer concentrates on the meaning and not the single word, rather than during the text creation process. Strategic use of L1 is an indispensable element of writing in another language (Wang, 2004), and can help writers in decision making and idea generation regarding what way the transfer of writing skills across languages is socially mediated. The study results suggested that students currently use their L1 sparingly in their writing, with approximately two-thirds of students reporting never using L1. When students do use L1, the use may not be strategic. The literature review indicated suggestions that the application of L1 writing abilities to the L2 context may at times be viewed as a conscious pragmatic choice motivated by task demands (Uzawa, 1996) and dependent on the quantity and quality of previous literacy experience (Cumming, 1989). As revealed by the data, L1 use was not related to writing skill, but use of L1 was associated with an unstructured writing process, as is common in Arabic writing processes. Instructors should reinforce cognitive writing processes consistent with producing coherent English texts and should also expose their students to the use of English in authentic contexts and provide them with tasks that lead to the use of English in
authentic contexts, especially during the drafting phase (Krashen, 1984; see Section 3.7).

4. One potential for the use of English in authentic contexts in relation to writing is the use of peer feedback. Instructors should encourage and support peer correction and social interaction with respect to EFL writing, specifically pointing out the benefits of peer feedback. The analysis of the teachers’ interview revealed students avoid engaging in social strategies, as they prefer not to share and compare their written work with their peers, which may reflect negatively on their writing output. This was consistent with Al-Qurashi (2005), who found Saudi students did not perceive increased support through peer feedback. To emphasize peer feedback, teachers can introduce the importance of peer feedback in class, provide their students with the principles of peer responses, and ask students to exchange drafts (Chaaban, 2010).

Such activities can create interaction among students because teachers usually give a topic and ask students to write individually. Peer interaction in L2 regarding EFL writing ensures that students may discuss their work and interact with their classmates before submitting to the writing teacher, thereby increasing their linguistic and writing development. For example, Frawley and Lantolf (1985) noted linguistic and cultural factors that encourage the L2 learning process are interaction with the family and peer groups in L2 and social activities that make learners involved in learning experiences that enhance their linguistic development. Al-Qurashi (2009) further indicated positive perceptions of peer feedback led to improved writing of texts. MacDonald and Pinheiro (2015) suggested the L2 interaction could increase the language acquisition of pairs who have similar second language proficiency. Thus, corrective peer feedback helps students to improve their writing strategies.

5. The instructors are advised to read the students’ written products and constantly provide feedback so that the writers can work on their written products to improve them. Because of the teacher-centred policy and educational system in Kuwait, the participants of this study were found to heavily rely on their teachers as their only reference. Students reported taking instructor feedback seriously in their writing processes. Feedback that targets developing students’ focus on cohesion and use of writing strategies specifically would be beneficial, as it is a corrective step that positively affects the quality of the students’ EFL writing (Alharthi, 2012). Liu and
Braine (2005) suggested the writing teachers’ responsibility is to comprehend and then explain the marking and assessing criteria in the class, and thereby to enhance students’ awareness of what contributes to the quality of writing.

6. The findings of this study suggest Kuwaiti male and female students may approach their writing in different ways. Teachers’ and students’ awareness of these differences should be raised as part of the teaching process to ensure that male and female students receive targeted instruction to support their writing approach. The results show strategy use and approaches to writing vary depending on the gender of the participant, which may necessitate differing writing instruction focuses. Specifically, male students may need more guidance on global revision strategies, although female students may require more guided instruction regarding reading the prompt and making final revisions. Students’ lack of awareness (or increasing awareness in some cases) of some of their writing problems based on gender should be considered whether in instruction or in the writing curriculum to specify the appropriate remedial action that each problem necessitates.

7. The results regarding writing practices, including cognitive practices and the sociocultural practices that influenced them, suggested the need for a sociocognitive approach to writing instruction (Atkinson, 2002; Roca de Larios & Murphy, 2001). Flowers (1989) and Roca de Larios and Murphy (2001) stated the study of cognitive processes in isolation from the contexts in which they occur may turn these processes into meaningless patterns of behaviour, because the writing task and the writer’s response are framed by social relationships and purposes operating in specific writing situations. This may cause students to not complete thorough writing processes, such as planning and careful revision. According to Roca de Larios and Murphy (2001), L2 learning is not merely a cognitive process, but is bound to the writers’ social and cultural assumptions and pragmatic considerations. As such, writers acquire problem-solving representations and strategies from social interaction with peers, teachers, readers, and texts, but the actual repertoire of strategies exists in the interpretation and use that each individual writer makes of them (Flower, 1994). However, personal contexts should not be excluded at the expense of the academic contexts. In addition, the study of genres and discourse communities should not neglect the mental processes by which writers create and decide on meanings (Roca de Larios & Murphy, 2001). Therefore, instructors and writing curricula designers should
understand sociocognitive elements affecting Kuwaiti students’ writing processes and consider these factors while providing EFL instruction (see Sections 3.8 and 6.4).

8. The lacking coherency in the EFL writing in this analysis suggested Kuwaiti students at the primary levels must be provided with frequent opportunities to practice writing, not just rely on one class of writing per week (State of Kuwait, 2014). More practice and use of authentic English are needed to improve students’ writing (Krashen, 1984). More writing practice will help students and particularly the less proficient writers to become more effective writers (Sasaki, 2004).

7.3 Contribution of the Research

Previous researchers investigating Kuwaiti EFL students explored writing problems and strategies separately, or cohesion and coherence problems separately. To the best of the researcher’s knowledge, this is the first study in the Kuwaiti context that involves investigating both the writing strategies and the cohesion of students’ written products. The researcher integrated different methods for triangulation purposes to investigate the writing strategies from students’ perspective, and the quality of their writing in terms of cohesion. Therefore, this researcher attempted to fill some of the gaps in the literature relating to studies on the English writing processes used in the Arab world in general, and the Kuwaiti context in particular. Such gaps included the following:

1. This study is the first sociocognitive approach to EFL in the Kuwaiti context. The sociocognitive approach proposed by Atkinson (2002) combined the cognitive into the social based on the belief that a person’s mind exists simultaneously both in the head and in the world. Pedagogically, as Atkinson suggested, dynamic types of class activities or what is called collaborative learning may be encouraged and supported by the sociocognitive theory. The study contributes to the field of writing because the researcher exposed sociocognitive areas that need further investigation and provided more insights into the writing processes of Kuwaiti undergraduate students, including the instruction of professors and the courses offered. It contributes to the understanding of the writing strategies that Kuwaiti EFL undergraduate students employed while carrying out a narrative writing task.

2. The findings of the data analysis of the current study can be used to improve and enhance Kuwaiti EFL writing instruction, which can, in turn, contribute to improving the quality of the written products of Kuwaiti EFL students. This emphasis may help Kuwaiti students meet the demand for fluent English to better
participate in scientific majors and in business endeavours in Kuwait through increased English proficiency.

3. The researcher investigated the relationship between cohesion, text quality, and strategy use. The identified links can contribute to teachers and researchers increasing their understanding of how students in the Kuwaiti EFL context deploy strategies to generate cohesive text. The lack of relationship between the students’ use of cohesive devices, specifically lexical cohesion and conjunction and their ability to use them correctly to better their texts, should be filled by focused instruction that addresses the appropriate use of cohesive devices. The problem of using cohesive devices in L2 writing is prevalent among Arab students in general and Kuwaiti students in particular. This finding emphasizes that Arab students have a problem with cohesive devices in general (Khalil, 1989; Taher, 1999).

4. This researcher investigated the significant relationship between the writing strategies and gender; thus, it is expected for the results to be of interest to other researchers conducting research on the effect of gender on the four skills of language, and potentially for gender studies. The study demonstrated significantly the different practices of female and male Kuwaiti students. Therefore, the study opens up the potential for future researchers to investigate sociocognitive factors that might contribute to the gendered differences.

A summary of the research contribution is presented in the following Figure 11.
7.4 Limitations of the Study
The researcher aimed to undertake this study with rigour to generate objective, unbiased results based on the data collected. Chapter 4 outlined the methodology choices and process intended to ensure rigour. However, a number of limitations to the study exist that should be considered in interpreting the results:

1. The sample size of participants was not large and consisted of a variety of student groups, rather than the same students across different portions of the study. This result was because of the cultural context in Kuwait, where research studies involving students are not common. For this reason, students were unwilling to participate in this research in large numbers. The researcher collected data from different student groups within the same broad students’ population of EFL learners. However, the written texts produced by every student were a means of triangulating accounts of strategy use and text outputs. In addition, the approach in the think-aloud and qualitative interviews necessitated small numbers of participants.

2. A broader range of instruments could have been administered to provide more perspectives, specifically through an objective observer. For example, the present study did not include class observation. Observation research methods could be more informative when supported by using video and audio-recording, to obtain deeper insights into students’ behaviours during the writing process, and to help the participants remember their thinking process during the think-aloud protocol pertaining to their performance of given writing tasks.

3. Another potential limitation was the inclusion of only first-year and second-year students. The larger the group is, the more diverse are the members’ educational backgrounds, and the more reliable and representative results the researcher can determine. First-year and second-year students were chosen because of the sequence of writing courses providing more access to student participants earlier in their academic careers. In addition, this helped create a sample that was more uniform in terms of their writing proficiencies.

4. Conducting think-aloud protocols and interviews with participants was an important stage in the process of data collection, but the tools had limitations. For example, think-aloud protocols, questionnaires, and interviews are subject to inherent biases with respect to participants’ abilities to reflect on their writing processes. Researchers should triangulate data and analyse not only the repetitive processes,
but also the internalized dialogue represented by the student in the writing process (Prior, 2001).

7.5 Suggestions for Further Research

According to the researcher’s examination of the literature, the present study is the first to take place in the Kuwaiti context and involve the investigation of the type of writing strategies used by EFL learners, the connection of the strategies to gender, as well as the quality of their writing in terms of cohesion. Thus, extensive scope exists for further studies in this particular field:

1. Future researchers should trace the microlevel cohesive devices and the success of their use, rather than the frequency, as examined in the present study, to shed more light on whether and how Kuwaiti EFL students employ cohesive devices and the cohesive devices’ contribution to the EFL writing scores. Such work could contribute significantly to EFL language curricula in Kuwait.

2. The researcher of this study focused on first-year and second-year undergraduate students. Other researchers can investigate the type of writing strategies and cohesive devices used by different demographics of EFL student writers. This will provide a more comprehensive picture of the problem under study. Future researchers may also collect data from the writing of the first- and second-year students as well as implement the findings of the study in the process of teaching them, and then these findings can be implemented in the new curriculum design and evaluated for their effectiveness.

3. The current study did not involve use of class observations, which may be more informative regarding the orientation of writing instruction at Kuwait University and may help to triangulate the self-report data elucidated through the think-aloud protocols and interviews. Further research, therefore, could include class observations to elicit more information about the problematic areas of writing faced by the students at Kuwait University (or any other academic institution), so that the reality of writing instruction is clearly diagnosed, and more comprehensive solutions can be provided.

4. One recommendation stemming from a limitation of the present study is to integrate reading and reading abilities in considering EFL instruction and writing, specifically with regard to cohesion. Liu and Braine (2005) referred to the importance of the reading element in the writing class and suggested “reading should be integrated in the teaching of writing” (p. 634). According to Abdul
Rahman (2013) and Liu and Braine, the more the students read in the writing class, the more they become sensitive and aware of the components and features of English writing, specifically cohesive devices, which were a potential problem faced by the students in this study. The researcher focused on reading only in terms of the writing process, including reading the prompt and reading the generated text, rather than on the reading abilities of students in English and how those abilities influenced students’ writing. Future researchers may consider highlighting the role of reading in employing cohesive devices. Similarly, future researchers should consider integrating reading scores and proficiencies as a variable in further understanding Kuwaiti EFL writers.

5. The researcher analysed one type of writing task (narrative). Future researchers could add more genres, such as argumentative writing task, letters, summaries, and stories, to see how cognitively demanding those genres are regarding the writing process (Cumming, 1989). In addition, changing the writing task, or conducting qualitative think-aloud protocols across various writing tasks, may influence the use of L1 (El-Mortaji, 2001; Friedlander, 1990; Wang, 2003; Wang & Wen, 2002), and therefore may provide increased understanding of how Kuwaiti students employ L1 in more unfamiliar writing contexts.

6. The researcher investigated the writing process without considering the role of motivation as an important factor that promotes the writing process. Future researchers could study the effect of motivation on the written product of Arab EFL students, which would provide the field with new results and a better understanding of what drives the writing task. For example, exam orientation emerged in professors’ interview responses as a potential motivational issue that inhibits students’ engagement with the writing process. Future researchers may choose to include this as a variable or a phenomenon for investigation.

7. Finally, more research is needed regarding the nature of cognitive processes, such as goal setting, and how precisely these processes originate from and interact with a writer’s awareness of the target text’s social context. Such studies may yield a clearer picture of writing as a sociocognitive activity. To address the needs of EFL students, future researchers should also explore ways to teach students the meta-language for the mental execution of cognitive processes as well as the language for realizing the expected genre practices. The findings of such results will stimulate discussion among writing teachers regarding the potential of
sociocognitive frameworks for developing students’ competence in academic writing and will inform more effective, evidence-based pedagogical methods.

7.6 Conclusion

In Chapter 1, the researcher outlined the primary aim and objective of the study. Chapter 2 presented the general background information about the context of the study through a discussion of the demographic and historical background of Kuwait, as well as the educational system and curricular context in Kuwait. Chapter 3 detailed the relevant literature in the areas of the writing strategies and cohesion in EFL writing to specify the gap in the literature filled by the current study. In Chapter 4, the researcher investigated the relevant methodology, and then presented the data analysis in Chapter 5. Chapter 6 outlined the findings of the four research questions.

In this final chapter, the researcher summarised the findings of the research and the gap in the literature. This study is significant in that the researcher applied the sociocognitive approach to English learning for university students in Kuwait to understand the writing behaviours of students in EFL classrooms in Kuwait, and also potentially to a wider extent in the Arabian Gulf, because the role of English in the education systems across the Gulf area is similar. The present study is the first to take place in the Kuwaiti context and involve the investigation of the type of writing strategies used by EFL learners, the connection of the strategies to gender, as well as the quality of their writing in terms of cohesion. The findings of the data analysis of the current study can be used to improve and enhance Kuwaiti EFL writing instruction, which can, in turn, contribute to improving the quality of the written products of Kuwaiti EFL students.
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Appendix A: Oxford’s Strategy Inventory for Language Learning Questionnaire – Pilot Study

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

Maysoon Al-Zankawi
Ph.D. Student (Research)
School of Education
Trinity College Dublin
University of Dublin
Academic Supervisor
Dr. Ann Devitt

You are invited to participate in this research project carried out by Maysoon Al-Zankawi, Ph.D. Student (Research). Your participation is voluntary. Even if you agree to participate now, you can withdraw at any time without any consequences of any kind.

The study is designed to investigate the writing problems of Kuwaiti students and the strategies and attitudes they use in their writings. The thesis approach which will be applied in actual teaching settings in the classrooms is based on the identified communicative errors made by students of English. The validity and effectiveness of this approach will also be tested and assessed.

If you agree to participate in this research, you will be kindly requested to complete a questionnaire. This will take place in the classroom. The researcher will explain to you the procedure in details before completing the questionnaire. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they make in their writing process and how to apply effective strategies to improve their writing skills.

All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.
If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

Signature of Research Participant

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

-----------------------------------------  ---------------------
Signature of participant                  Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study.

Maisoun Al-Zankawi
Ph.D. Student (Research)
Trinity College of Dublin
University of Dublin
E-mail: alzankam@tcd.ie

-----------------------------------------  ---------------------
Signature of researcher                   Date
Strategy Inventory for Language Learning Questionnaire

This form of the SILL is for student of a second language (SL). Please, read each statement and fill in the bubble of the response (1,2,3,4, or 5) that tells HOW TRUE THE STATEMENT IS.

1. Never or almost never true of me
2. Usually not true of me
3. Somewhat true of me
4. Usually true of me
5. Always or almost always true of me

Answer in terms of how well the statement describes you. Do not answer how you think you should be, or what other people do. **There are no rights or wrong answers** to these statements.

**Part A**

1. I think of relationships between what I already know and new things I learn in the SL. O1 O2 O3 O4 O5
2. I use new SL words in a sentence, so I can remember them O1 O2 O3 O4 O5
3. I connect the sound of a new SL word and an image or picture of the word to help me remember the word. O1 O2 O3 O4 O5
4. I remember a new SL word by making a mental picture of a situation in which the word might be used. O1 O2 O3 O4 O5
5. I use rhymes to remember new SDL word. O1 O2 O3 O4 O5
6. I use flashcards to remember new SL words. O1 O2 O3 O4 O5
7. I physically act our new SL words. O1 O2 O3 O4 O5
8. I review SL lessons often. O1 O2 O3 O4 O5
9. I remember new SL word or phases by remembering their location on the page, on the board, or on a street sign. O1 O2 O3 O4 O5
Part B

10. I say or write new SL word several times. O1 O2 O3 O4 O5
11. I try to talk like native SL speakers. O1 O2 O3 O4 O5
12. I practice the sounds of SL. O1 O2 O3 O4 O5
13. I use the SL words I know in different ways. O1 O2 O3 O4 O5
14. I start conversations in the SL. O1 O2 O3 O4 O5
15. I watch SL language TV shows spoken in SL or to movies spoken in SL. O1 O2 O3 O4 O5
16. I read for pleasure in the SL. O1 O2 O3 O4 O5
17. I write notes, messages, letters, or reports in the SL. O1 O2 O3 O4 O5
18. I first skim an SL passage (read over the passage quickly) then go back and read carefully. O1 O2 O3 O4 O5
19. I look for words in my own language that are similar to new word in the SL. O1 O2 O3 O4 O5
20. I try to find patterns in the SL. O1 O2 O3 O4 O5
21. I find the meaning of an SL word by dividing it into parts that I understand. O1 O2 O3 O4 O5
22. I try not to translate word for word. O1 O2 O3 O4 O5
23. I make summaries of information that I hear or read in the SL. O1 O2 O3 O4 O5

Part C

24. To understand unfamiliar SL word, I make guesses. O1 O2 O3 O4 O5
25. When I can’t think of a word during a conversation in the SL, I use gestures. O1 O2 O3 O4 O5
26. I make up new words if I do not know the right ones in the SL. O1 O2 O3 O4 O5
27. I read SL without looking up every new word. O1 O2 O3 O4 O5
28. I try to guess what the other person will say next in the SL. O1 O2 O3 O4 O5
29. If I can’t think of an SL word, I use a word or phrase that means the same thing. O1 O2 O3 O4 O5
Part D

30. I try to find as many ways as I can to use my SL.  
31. I notice my SL mistakes and use that information to help me do better.  
32. I pay attention when someone is speaking SL.  
33. I try to find out how to be a better learner of SL.  
34. I plan my schedule, so I will have enough time to study SL.  
35. I look for people I can talk to in SL.  
36. I look for opportunities to read as much as possible in SL.  
37. I have clear goals for improving my SL skills.  
38. I think about my progress in learning SL.

Part E

39. I try to relax whenever I feel afraid of using SL.  
40. I encourage myself to speak SL even when I am afraid of making a mistake.  
41. I give myself a reward or treat when I do well in SL.  
42. I notice if I am tense or nervous when I am studying or using SL.  
43. I write down my feelings in a language learning dairy.  
44. I talk to someone else about how I feel when I am learning SL.

Part F

45. If I do not understand something in SL, I ask the other person to slow down or say it again  
46. I ask SL speakers to correct me when I talk.  
47. I practice SL with other students.  
48. I ask for help from SL speakers.  
49. I ask questions in SL.  
50. I try to learn about the culture of SL speakers.

Appendix B: Pilot Semistructured Interview

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

Maysoon Al-Zankawi
Ph.D. Student (Research)
School of Education
Trinity College Dublin
University of Dublin
Academic Supervisor
Dr. Ann Devitt

You are invited to participate in this research project carried out by Maysoon Al-Zankawi, Ph.D. Student (Research). Your participation is voluntary. Even if you agree to participate now, you can withdraw at any time without any consequences of any kind.

The study is designed to investigate the writing problems of Kuwaiti students and the strategies and attitudes they use in their writings. The thesis approach which will be applied in actual teaching settings in the classrooms is based on the identified communicative errors made by students of English. The validity and effectiveness of this approach will also be tested and assessed.

If you agree to participate in this research, you will be kindly requested to write a paragraph related to a specific topic. The topic of the writing task is a familiar one which is close to your experience. This topic was chosen among many alternatives that were supposed to be similar to the topics studied in class or assigned in exams. Moreover, a semistructured interview will be used following the writing task. This will take place in the classroom. The researcher will explain to you the procedure in details before starting the semistructured interview. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they
make in their writing process and how to apply effective strategies to improve their writing skills.

All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.

If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

Signature of Research Participant

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

---------------------------------------------------------------
Signature of participant  Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study

Maisoun Al-Zankawi
Ph.D. Student (Research)
Trinity College of Dublin
University of Dublin
E-mail: alzankam@tcd.ie

---------------------------------------------------------------
Signature of researcher  Date
Questions of the Pilot's Semistructured Interview

1- How do you write?
2- What do you do when you write?
3- Do you plan before writing?
4- What did you do in your piece of writing?
5- Does your topic sentence give the main idea of your paragraph?
6- Did you include an introductory sentence and a concluding sentence in your paragraph?
7- Did you indent before writing your paragraph?
8- Did you use a correct punctuation (capitalization, commas, periods)?
9- Did you check the spelling of the words you are not sure about?
10- Did you use a correct verb form? Did you check the grammar of your paragraph?
Appendix C: Writing-Strategies Questionnaire

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

Maysoon Al-Zankawi
Ph.D. Student (Research)
School of Education
Trinity College Dublin
University of Dublin
Academic Supervisor
Dr. Ann Devitt

You are invited to participate in this research project carried out by Maysoon Al-Zankawi, Ph.D. Student (Research). Your participation is voluntary. Even if you agree to participate now, you can withdraw at any time without any consequences of any kind.

The study is designed to investigate the writing problems of Kuwaiti students and the strategies and attitudes they use in their writings. The thesis approach which will be applied in actual teaching settings in the classrooms is based on the identified communicative errors made by students of English. The validity and effectiveness of this approach will also be tested and assessed.

If you agree to participate in this research, you will be kindly requested to complete a questionnaire. This will take place in the classroom. The researcher will explain to you the procedure in details before completing the questionnaire. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they make in their writing process and how to apply effective strategies to improve their writing skills.

All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.

265
If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

Signature of Research Participant

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

-----------------------------------------
Signature of participant               Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study

Maisoun Al-Zankawi  
Ph.D. Student (Research)  
Trinity College of Dublin  
University of Dublin  
E-mail: alzankam@tcd.ie

------------------------------------------
Signature of researcher               Date
Questionnaire

A. General Questions

1. Gender (Please circle): Male Female

2. What is your native language?

3. How many years have you been studying English?

4. Did you attend a writing course in English before coming to this class?
   (Please circle):
   Yes No

If Yes, how many semesters have you completed?

5. What types of texts do you generally write in English? (Please circle)
   E-mails Letters Notes Essays Articles Reports Others

6. Do you like writing in English? (Please circle):
   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

   Explain your choice:

7. Why have you chosen this course?
   Compulsory for work reason for pleasure
   Other:

---------------------------------------------------------------
B. The Writing Process

In this part, you will find statements about the different stages of writing in English: prewriting, first draft writing, and revising and writing final version. Please read each statement and write the number that is true for you.

1. **Never** or almost never true for me (Zero or less than 10%)
2. Usually **not** true for me (30% or less)
3. Somewhat **true** of me (about 50%)
4. Usually **true** for me (more than 70%)
5. Always or almost always **true** for me (Over 90%)

B.1. Before I start writing a paragraph in English:

Please write the appropriate number:

<table>
<thead>
<tr>
<th>Before I start writing a paragraph in English …</th>
<th>Never true 1</th>
<th>Usually not true 2</th>
<th>Somewhat true 3</th>
<th>Usually true 4</th>
<th>Always true 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I make a timetable for the writing process.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Before I start writing I revise the requirements.</td>
<td></td>
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</tr>
<tr>
<td>3. I look at a model written by a native speaker or more proficient writer.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>4. I start writing without having a written or mental plan.</td>
<td></td>
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</tr>
<tr>
<td>5. I think about what I want to write and have a plan in my mind, but not on paper.</td>
<td></td>
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</tr>
<tr>
<td>6. I note down words and short notes related to the topic in English / or in Arabic (underline language used).</td>
<td></td>
<td></td>
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<tr>
<td>7. I write notes or an outline of my paragraph in English / or Arabic (underline language used).</td>
<td></td>
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</tr>
</tbody>
</table>

- Other things I do before I start writing a paragraph in English:

................................................................................................................................................................

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268
B.2. When writing in English:

Please write the appropriate number:

<table>
<thead>
<tr>
<th>When writing in English …</th>
<th>Never true 1</th>
<th>Usually not true 2</th>
<th>Somewhat true 3</th>
<th>Usually true 4</th>
<th>Always true 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I start with the introduction.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I stop after each sentence to read it again.</td>
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<td></td>
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</tr>
<tr>
<td>3. I stop after a few sentences or a whole paragraph, covering one idea.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. I reread what I have written to get ideas how to continue.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5. I go back to my outline and make changes in it.</td>
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<td></td>
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</tr>
<tr>
<td>6. I write bits of the text in my native language and then translate them into English.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>7. I check grammar and vocabulary.</td>
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<tr>
<td>8. I simplify what I want to write if I don’t know how to express my thoughts in English.</td>
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</tr>
<tr>
<td>9. If I don’t know a word in English, I write it in my native language and later try to find an appropriate word in English.</td>
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</tr>
<tr>
<td>10. If I don’t know a word in English, I find a similar English word that I know.</td>
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</tr>
<tr>
<td>11. If I don’t know a word in English, I stop writing and look up the word in the dictionary.</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>12. I use a bilingual dictionary.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I use a monolingual dictionary.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I ask somebody to help out when I have problems while writing.</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Other things I do when writing in English:

………………………………………………………………………………………………
………………………………………………………………………………………………
………………………………………………………………………………………………
B.3. When revising:

Please write the appropriate number:

<table>
<thead>
<tr>
<th>When revising …</th>
<th>Never true 1</th>
<th>Usually not true 2</th>
<th>Somewhat true 3</th>
<th>Usually true 4</th>
<th>Always true 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I read my text aloud.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. I only read what I have written when I have finished the whole paper.</td>
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<tr>
<td>3. I check the spelling in my writing (with a spell checker or dictionary).</td>
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<tr>
<td>4. When I have written my paper, I hand it in without reading it.</td>
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<tr>
<td>5. I use a dictionary when revising.</td>
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</tr>
<tr>
<td>6. I make changes in vocabulary.</td>
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</tr>
<tr>
<td>7. I make changes in sentence structure.</td>
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</tr>
<tr>
<td>8. I make changes in the structure of the paragraph.</td>
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</tr>
<tr>
<td>9. I make changes in the content or ideas.</td>
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</tr>
<tr>
<td>10. I focus on one thing at a time when revising (e.g., content, structure).</td>
<td></td>
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</tr>
<tr>
<td>11. I drop my first draft and start writing again.</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I check if my paragraph matches the requirements.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I check if my paragraph has unity (i.e. all the sentences are about the topic).</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>14. I check if my paragraph has coherence (i.e. my paragraph flows smoothly from Beginning to end).</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>15. I leave the text aside for a couple of days and then can see it in a new perspective.</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>16. I show my text to somebody and ask for his / her opinion.</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>17. I compare my paper with the paragraphs written by my friends on the same topic.</td>
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</tr>
<tr>
<td>18. I give myself a reward for completing the assignment.</td>
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</tr>
<tr>
<td>19. I check my mistakes after I get the paper back from my teacher with feedback and try to learn from it.</td>
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</tr>
</tbody>
</table>

- Other things I do when revising:

..................................................................................................................................................................................

..................................................................................................................................................................................
Appendix D: Writing Task Followed by the Writing Strategy Questionnaire

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

Maysoon Al-Zankawi
Ph.D. Student (Research)
School of Education
Trinity College Dublin
University of Dublin
Academic Supervisor
Dr. Ann Devitt

You are invited to participate in this research project carried out by Maysoon Al-Zankawi, Ph.D. Student (Research). Your participation is voluntary. Even if you agree to participate now, you can withdraw at any time without any consequences of any kind.

The study is designed to investigate the writing problems of Kuwaiti students and the strategies and attitudes they use in their writings. The thesis approach which will be applied in actual teaching settings in the classrooms is based on the identified communicative errors made by students of English. The validity and effectiveness of this approach will also be tested and assessed.

If you agree to participate in this research, you will be kindly requested to write a paragraph related to a specific topic. The topic of the writing task is a familiar one which is close to your experience. This topic was chosen among many alternatives that were supposed to be similar to the topics studied in class or assigned in exams. This will take place in the classroom. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they make in their writing process and how to apply effective strategies to improve their writing skills.
All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.

If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

Signature of Research Participant

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

----------------------------------------------------------  ----------
Signature of participant                                    Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study

Maisoun Al-Zankawi
Ph.D. Student (Research)  
Trinity College of Dublin
University of Dublin
E-mail: alzankam@tcd.ie

----------------------------------------------------------  ----------
Signature of researcher                                    Date
Writing 1 (10 points)

Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

10. Your visit to a country (or a large city)
11. A memorable wedding or funeral
12. An experience that showed how appearances can be deceiving
Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

1. A memorable journey
2. A frightening experience
3. A trip that you would like to take
Appendix E: Main Study Semistructured Interview

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

Maysoon Al-Zankawi
Ph.D. Student (Research)
School of Education
Trinity College Dublin
University of Dublin
Academic Supervisor
Dr. Ann Devitt

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If you agree to participate in this research, you will be kindly requested to write a paragraph related to a specific topic. The topic of the writing task is a familiar one which is close to your experience. This topic was chosen among many alternatives that were supposed to be similar to the topics studied in class or assigned in exams. Moreover, a semistructured interview will be used following the writing task. This will take place in the classroom. The researcher will explain to you the procedure in details before starting the semistructured interview. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they
make in their writing process and how to apply effective strategies to improve their writing skills.

All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.

If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

Signature of participant

Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study

Maisoun Al-Zankawi
Ph.D. Student (Research)
Trinity College of Dublin
University of Dublin
E-mail: alzankam@tcd.ie

Signature of researcher

Date
Questions of the Semistructured Interview

1- What are the things that really make you feel upset in writing?

2- Do you plan before writing? If yes, do you plan your ideas globally or outlining them in details before you started writing?

3- When you started writing, did you note down words and short notes related to the topic in Arabic?

4- Did your topic sentence give the main idea of your paragraph?

5- Did you include an introductory sentence and a concluding sentence in your paragraph?

6- Did you write a draft before you start writing?

7- Did you check the spelling of the words you are not sure about? How did you check the spelling (dictionary, rereading)? How long did you spend on this task?

8- Did you revise and reread what you have written? Why?

9- Did you check the content of your writing before handing it in?

10- Did you check if your paragraph has coherence (i.e. your paragraph flows smoothly from beginning to end)?
Appendix F: Writing Task Followed by the Semistructured Interview

Kuwait University
ELU Arts
English 142

Name: ------------------
Number: -----------
Section: -----------

Writing 2 (10 points)

Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

1. A memorable movie you have watched
2. A frightening experience
3. A trip that you would like to take

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Appendix G: Writing Task during the Think-Aloud Protocol

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

_Maysoon Al-Zankawi_
_Ph.D. Student (Research)_
_School of Education_
_Trinity College Dublin_
_University of Dublin_
_Academic Supervisor_
_Dr. Ann Devitt_

You are invited to participate in this research project carried out by _Maisoun Al-Zankawi, Ph.D. Student (Research)_._ Your participation is voluntary. Even if you agree to participate now, you can withdraw at any time without any consequences of any kind.

The study is designed to investigate the writing problems of Kuwaiti students and the strategies and attitudes they use in their writings. The thesis approach which will be applied in actual teaching settings in the classrooms is based on the identified communicative errors made by students of English. The validity and effectiveness of this approach will also be tested and assessed.

If you agree to participate in this research, you will be kindly requested to do a think-aloud protocol while performing a writing task. This think-aloud protocol will be recorded. This will take place in a classroom setting. The researcher will explain to the students the procedure in details before doing the talk aloud protocol. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they make in their writing process and how to apply effective strategies to improve their writing skills.
All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.

If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

Signature of Research Participant

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

-----------------------------------------
Signature of participant               Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study

Maisoun Al-Zankawi
Ph.D. Student (Research)
Trinity College of Dublin
University of Dublin
E-mail: alzankam@tcd.ie

-----------------------------------------
Signature of researcher               Date
Writing 2 (10 points)

Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

1. Your first day at college
2. A vacation trip from your childhood
3. An account of a difficult decision that you had to make
Appendix H: Semistructured Interview with Teachers

School of Education
Research Participant Information and Consent form
An Investigation of EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students

*Maysoon Al-Zankawi*
*Ph.D. Student (Research)*
*School of Education*
*Trinity College Dublin*
*University of Dublin*
*Academic Supervisor*
*Dr. Ann Devitt*

You are invited to participate in this research project carried out by *Maysoon Al-Zankawi, Ph.D. Student (Research)*. Your participation is voluntary. Even if you agree to participate now, you can withdraw at any time without any consequences of any kind.

The study is designed to investigate the writing problems of Kuwaiti students and the strategies and attitudes they use in their writings. The thesis approach which will be applied in actual teaching settings in the classrooms is based on the identified communicative errors made by students of English. The validity and effectiveness of this approach will also be tested and assessed.

If you agree to participate in this research, you will be kindly requested to take part in a semistructured interview with the researcher. This will take place at your office. The researcher will explain to you the procedure in details before starting the semistructured interview. There may not be a direct benefit for you from participating in this research.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they make in their writing process and how to apply effective strategies to improve their writing skills.

All information obtained during this research is strictly confidential, and all compiled data will be secured and anonymous.
If you have any questions or seek further clarification and information about this research, you may contact me directly or you may contact any of the other instructors involved in this research.

Signature of Research Participant

I understand what is involved in this research and I agree to participate in the study. I have been given a copy of this form.

-----------------------------------------    ---------------------
Signature of participant                      Date

Signature of Researcher

The participant has submitted his informed consent to participate in this study.

Maisoun Al-Zankawi
Ph.D. Student (Research)
Trinity College of Dublin
University of Dublin
E-mail: alzankam@tcd.ie

-----------------------------------------    ---------------------
Signature of researcher                      Date
Questions of the Teacher’s Semistructured Interview

1- How many years of experience do you have in teaching English?
2- What do you teach in writing classes every semester?
3- Do you instruct students on how to write English?
4- Do you instruct students to use writing strategies in their writing process? If yes, which strategies?
5- Do you encourage students to practice English writing?
6- Do you provide feedback when students produce written work? If yes, what is the focus of the feedback you provide?
7- Do you encourage students to use the dictionary to check the spelling of the words they are not sure about? If yes, is it a bilingual or monolingual dictionary?
8- What are the problems that students face when they write in English?
9- What do you think influence the writing habits of students?
10- What are the problems that face you when you teach writing?
11- Do you think that students use L1 when composing in L2?
12- Do you think that students face difficulties in writing English in terms of generating text that is cohesive and coherent?
13- Do you think that students like to write in English? Why? Why not?
14- Do you think that students are motivated to develop and improve the writing skill?
   Why? Why not?
Appendix I: Permission Letter

An Application of a Questionnaire,
Interviews, Think-Aloud Protocols, and Writing Task

Professor / Hayat Al-Hajji
Dean of College of Art
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The researcher / Maisoun Al-Zankawi is conducting a research to obtain a Ph.D. Degree in Education, School of Education, Trinity College Dublin, University of Dublin.

The study is designed to investigate the EFL Writing Strategies and Cohesion of Kuwaiti Undergraduate Students. The research requires an application of a questionnaire, interviews, think-aloud protocols, as well writing task.

This research may benefit students of English in allowing them to reflect on their current strategies they use for their English writing by enlightening them about the errors they make in their writing process and how to apply effective strategies to improve their writing skills.

Thank you for your fruitful cooperation

The Researcher
Maisoun Al-Zankawi
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Appendix J: Data of the Global Statistics of the Writing Strategies-Questionnaire Responses

Table J1. *Global Statistics of the Responses to Questions About “Before-Writing-in-English”*

<table>
<thead>
<tr>
<th>Before Writing Variables</th>
<th>Always true</th>
<th>Usually true</th>
<th>Somewhat true</th>
<th>Usually not true</th>
<th>Never true</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I make a timetable for the writing process</td>
<td>9 (9.0)</td>
<td>13 (13.0)</td>
<td>29 (29.0)</td>
<td>24 (24.0)</td>
<td>25 (25.0)</td>
<td>2.57</td>
<td>1.25</td>
</tr>
<tr>
<td>- Before I start writing I revise the requirements</td>
<td>61 (61.0)</td>
<td>16 (16.0)</td>
<td>15 (15.0)</td>
<td>5 (5.0)</td>
<td>3 (3.0)</td>
<td>4.27</td>
<td>1.08</td>
</tr>
<tr>
<td>- I look at a model written by a native speaker or more proficient writer</td>
<td>13 (13.0)</td>
<td>17 (17.0)</td>
<td>25 (25.0)</td>
<td>23 (23.0)</td>
<td>22 (22.0)</td>
<td>2.76</td>
<td>1.33</td>
</tr>
<tr>
<td>- I start writing without having a written or mental plan</td>
<td>7 (7.0)</td>
<td>15 (15.0)</td>
<td>23 (23.0)</td>
<td>18 (18.0)</td>
<td>37 (37.0)</td>
<td>2.37</td>
<td>1.30</td>
</tr>
<tr>
<td>- I think about what I want to write and have a plan in my mind, but not on paper</td>
<td>32 (32.0)</td>
<td>22 (22.0)</td>
<td>28 (28.0)</td>
<td>7 (7.0)</td>
<td>11 (11.0)</td>
<td>3.57</td>
<td>1.31</td>
</tr>
<tr>
<td>- I note down words and short notes related to the topic in English/or in Arabic</td>
<td>20 (20.0)</td>
<td>32 (32.0)</td>
<td>14 (14.0)</td>
<td>14 (14.0)</td>
<td>20 (20.0)</td>
<td>3.18</td>
<td>1.43</td>
</tr>
<tr>
<td>- I write notes or an outline of my paragraph in English/or in Arabic</td>
<td>17 (17.0)</td>
<td>23 (23.0)</td>
<td>24 (24.0)</td>
<td>16 (16.0)</td>
<td>20 (20.0)</td>
<td>3.01</td>
<td>1.37</td>
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Table J2. *Global Statistics of the Responses to Questions About “When-Writing-English”*

<table>
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<tr>
<th>When Writing Variables</th>
<th>Always true</th>
<th>Usually true</th>
<th>Somewhat true</th>
<th>Usually not true</th>
<th>Never true</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>- I start with the introduction</td>
<td>58 (58.0)</td>
<td>22 (22.0)</td>
<td>13 (13.0)</td>
<td>5 (5.0)</td>
<td>2 (2.0)</td>
<td>4.29</td>
<td>1.01</td>
</tr>
<tr>
<td>- I stop after each sentence to read it again</td>
<td>23 (23.0)</td>
<td>31 (31.0)</td>
<td>26 (26.0)</td>
<td>13 (13.0)</td>
<td>7 (7.0)</td>
<td>3.50</td>
<td>1.18</td>
</tr>
<tr>
<td>- I stop after a few sentences or a whole paragraph, covering one idea</td>
<td>20 (20.0)</td>
<td>36 (36.0)</td>
<td>33 (33.0)</td>
<td>8 (8.0)</td>
<td>3 (3.0)</td>
<td>3.62</td>
<td>0.99</td>
</tr>
<tr>
<td>- I reread what I have written to get ideas how to continue</td>
<td>44 (44.0)</td>
<td>29 (29.0)</td>
<td>12 (12.0)</td>
<td>11 (11.0)</td>
<td>4 (4.0)</td>
<td>3.98</td>
<td>1.17</td>
</tr>
<tr>
<td>- I go back to my outline and make changes in it</td>
<td>7 (7.0)</td>
<td>24 (24.0)</td>
<td>30 (30.0)</td>
<td>23 (23.0)</td>
<td>16 (16.0)</td>
<td>2.83</td>
<td>1.17</td>
</tr>
<tr>
<td>- I write bits of the text in my native language and then translate them into English</td>
<td>10 (10.0)</td>
<td>20 (20.0)</td>
<td>14 (14.0)</td>
<td>21 (21.0)</td>
<td>35 (35.0)</td>
<td>2.49</td>
<td>1.40</td>
</tr>
<tr>
<td>- I check grammar and Vocabulary</td>
<td>35 (35.0)</td>
<td>26 (26.0)</td>
<td>27 (27.0)</td>
<td>10 (10.0)</td>
<td>2 (2.0)</td>
<td>3.82</td>
<td>1.09</td>
</tr>
<tr>
<td>- I simplify what I want to write if I don’t know how to express my thoughts in English</td>
<td>26 (26.0)</td>
<td>33 (33.0)</td>
<td>29 (29.0)</td>
<td>8 (8.0)</td>
<td>4 (4.0)</td>
<td>3.69</td>
<td>1.07</td>
</tr>
<tr>
<td>- If I don’t know a word in English, I write it in my native language and later try to find an appropriate word in English</td>
<td>20 (20.0)</td>
<td>17 (17.0)</td>
<td>21 (21.0)</td>
<td>14 (14.0)</td>
<td>28 (28.0)</td>
<td>2.87</td>
<td>1.50</td>
</tr>
<tr>
<td>- If I don’t know a word in English, I find a similar English word that I know</td>
<td>36 (36.0)</td>
<td>38 (38.0)</td>
<td>19 (19.0)</td>
<td>3 (3.0)</td>
<td>4 (4.0)</td>
<td>3.99</td>
<td>1.02</td>
</tr>
<tr>
<td>- If I don’t know a word in English, I stop writing and look up the word in the dictionary</td>
<td>27 (27.0)</td>
<td>20 (20.0)</td>
<td>24 (24.0)</td>
<td>19 (19.0)</td>
<td>10 (10.0)</td>
<td>3.35</td>
<td>1.33</td>
</tr>
<tr>
<td>- I use a bilingual dictionary</td>
<td>38 (38.0)</td>
<td>21 (21.0)</td>
<td>18 (18.0)</td>
<td>12 (12.0)</td>
<td>11 (11.0)</td>
<td>3.63</td>
<td>1.38</td>
</tr>
<tr>
<td>- I use a monolingual Dictionary</td>
<td>10 (10.0)</td>
<td>8 (8.0)</td>
<td>20 (20.0)</td>
<td>20 (20.0)</td>
<td>42 (42.0)</td>
<td>2.24</td>
<td>1.34</td>
</tr>
<tr>
<td>- I ask somebody to help out when I have problems while writing</td>
<td>22 (22.0)</td>
<td>21 (21.0)</td>
<td>19 (19.0)</td>
<td>18 (18.0)</td>
<td>20 (20.0)</td>
<td>3.07</td>
<td>1.44</td>
</tr>
</tbody>
</table>
Table J3. Global Statistics of the Responses to Questions About “When-Revising”

<table>
<thead>
<tr>
<th>When Revising Variables</th>
<th>Always true</th>
<th>Usually true</th>
<th>Somewhat true</th>
<th>Usually not true</th>
<th>Never true</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td>N (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- I read my text aloud</td>
<td>17 (17.0)</td>
<td>16 (16.0)</td>
<td>13 (13.0)</td>
<td>19 (19.0)</td>
<td>35 (35.0)</td>
<td>2.61</td>
<td>1.52</td>
</tr>
<tr>
<td>- I only read what I have written when I have finished the whole paper</td>
<td>17 (17.0)</td>
<td>25 (25.0)</td>
<td>26 (26.0)</td>
<td>17 (17.0)</td>
<td>15 (15.0)</td>
<td>3.12</td>
<td>1.30</td>
</tr>
<tr>
<td>- I check the spelling in my Writing</td>
<td>25 (25.0)</td>
<td>24 (24.0)</td>
<td>22 (22.0)</td>
<td>17 (17.0)</td>
<td>12 (12.0)</td>
<td>3.33</td>
<td>1.34</td>
</tr>
<tr>
<td>- When I have written my paper, I hand it in without reading it</td>
<td>2 (2.0)</td>
<td>3 (3.0)</td>
<td>13 (13.0)</td>
<td>26 (26.0)</td>
<td>56 (56.0)</td>
<td>1.69</td>
<td>0.95</td>
</tr>
<tr>
<td>- I use a dictionary when Revising</td>
<td>12 (12.0)</td>
<td>16 (16.0)</td>
<td>24 (24.0)</td>
<td>28 (28.0)</td>
<td>20 (20.0)</td>
<td>2.72</td>
<td>1.29</td>
</tr>
<tr>
<td>- I make changes in Vocabulary</td>
<td>8 (8.0)</td>
<td>22 (22.0)</td>
<td>40 (40.0)</td>
<td>18 (18.0)</td>
<td>12 (12.0)</td>
<td>2.96</td>
<td>1.10</td>
</tr>
<tr>
<td>- I make changes in sentence Structure</td>
<td>7 (7.0)</td>
<td>16 (16.0)</td>
<td>39 (39.0)</td>
<td>24 (24.0)</td>
<td>14 (14.0)</td>
<td>2.78</td>
<td>1.10</td>
</tr>
<tr>
<td>- I make changes in the structure of the paragraph</td>
<td>3 (3.0)</td>
<td>13 (13.0)</td>
<td>40 (40.0)</td>
<td>21 (21.0)</td>
<td>23 (23.0)</td>
<td>2.52</td>
<td>1.08</td>
</tr>
<tr>
<td>- I make changes in the content or ideas</td>
<td>5 (5.0)</td>
<td>11 (11.0)</td>
<td>23 (23.0)</td>
<td>34 (34.0)</td>
<td>27 (27.0)</td>
<td>2.33</td>
<td>1.14</td>
</tr>
<tr>
<td>- I focus on one thing at a time when revising</td>
<td>4 (4.0)</td>
<td>26 (26.0)</td>
<td>35 (35.0)</td>
<td>23 (23.0)</td>
<td>12 (12.0)</td>
<td>2.87</td>
<td>1.06</td>
</tr>
<tr>
<td>- I drop my first draft and start writing again</td>
<td>6 (6.0)</td>
<td>13 (13.0)</td>
<td>18 (18.0)</td>
<td>27 (27.0)</td>
<td>36 (36.0)</td>
<td>2.26</td>
<td>1.24</td>
</tr>
<tr>
<td>- I check if my paragraph matches the requirements</td>
<td>31 (31.0)</td>
<td>35 (35.0)</td>
<td>20 (20.0)</td>
<td>13 (13.0)</td>
<td>1 (1.0)</td>
<td>3.82</td>
<td>1.05</td>
</tr>
<tr>
<td>- I check if my paragraph has Unity</td>
<td>24 (24.0)</td>
<td>37 (37.0)</td>
<td>31 (31.0)</td>
<td>6 (6.0)</td>
<td>2 (2.0)</td>
<td>3.75</td>
<td>0.96</td>
</tr>
<tr>
<td>- I check if my paragraph has Coherence</td>
<td>19 (19.0)</td>
<td>35 (35.0)</td>
<td>32 (32.0)</td>
<td>9 (9.0)</td>
<td>5 (5.0)</td>
<td>3.54</td>
<td>1.06</td>
</tr>
<tr>
<td>- I leave the text aside for a couple of days and then I can see it in a new perspective</td>
<td>7 (7.0)</td>
<td>15 (15.0)</td>
<td>18 (18.0)</td>
<td>22 (22.0)</td>
<td>38 (38.0)</td>
<td>2.31</td>
<td>1.31</td>
</tr>
<tr>
<td>- I show my text to somebody and ask for his/her opinion</td>
<td>18 (18.0)</td>
<td>15 (15.0)</td>
<td>28 (28.0)</td>
<td>17 (17.0)</td>
<td>22 (22.0)</td>
<td>2.90</td>
<td>1.39</td>
</tr>
<tr>
<td>- I compare my paper with the paragraph written by my friends on the same topic</td>
<td>11 (11.0)</td>
<td>14 (14.0)</td>
<td>21 (21.0)</td>
<td>22 (22.0)</td>
<td>32 (32.0)</td>
<td>2.50</td>
<td>1.36</td>
</tr>
<tr>
<td>- I give myself a reward for completing the assignment</td>
<td>16 (16.0)</td>
<td>15 (15.0)</td>
<td>23 (23.0)</td>
<td>17 (17.0)</td>
<td>29 (29.0)</td>
<td>2.72</td>
<td>1.44</td>
</tr>
<tr>
<td>- I check my mistake after I get the paper back from my teacher with feedback and try to learn from it</td>
<td>55 (55.0)</td>
<td>22 (22.0)</td>
<td>10 (10.0)</td>
<td>7 (7.0)</td>
<td>6 (6.0)</td>
<td>4.13</td>
<td>1.21</td>
</tr>
</tbody>
</table>

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## Appendix K: Text Quality of the 100 Questionnaire Students

Table K1. Text Quality of the 100 Questionnaire Students

<table>
<thead>
<tr>
<th>Student</th>
<th>Gender</th>
<th>Scores</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q.S.1</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.2</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.3</td>
<td>F</td>
<td>80</td>
<td>Very Good</td>
</tr>
<tr>
<td>Q.S.4</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.5</td>
<td>F</td>
<td>60</td>
<td>Average</td>
</tr>
<tr>
<td>Q.S.6</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.7</td>
<td>F</td>
<td>60</td>
<td>Average</td>
</tr>
<tr>
<td>Q.S.8</td>
<td>F</td>
<td>90</td>
<td>Excellent</td>
</tr>
<tr>
<td>Q.S.9</td>
<td>F</td>
<td>40</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.10</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.11</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.12</td>
<td>F</td>
<td>30</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.13</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.14</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.15</td>
<td>F</td>
<td>40</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.16</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.17</td>
<td>F</td>
<td>40</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.18</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.19</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.20</td>
<td>F</td>
<td>80</td>
<td>Very Good</td>
</tr>
<tr>
<td>Q.S.21</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.22</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.23</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.24</td>
<td>F</td>
<td>90</td>
<td>Excellent</td>
</tr>
<tr>
<td>Q.S.25</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.26</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.27</td>
<td>F</td>
<td>100</td>
<td>Excellent</td>
</tr>
<tr>
<td>Q.S.28</td>
<td>F</td>
<td>80</td>
<td>Very Good</td>
</tr>
<tr>
<td>Q.S.29</td>
<td>F</td>
<td>40</td>
<td>Very Poor</td>
</tr>
<tr>
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<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.31</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.32</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.33</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.34</td>
<td>F</td>
<td>60</td>
<td>Average</td>
</tr>
<tr>
<td>Q.S.35</td>
<td>F</td>
<td>60</td>
<td>Average</td>
</tr>
<tr>
<td>Q.S.36</td>
<td>F</td>
<td>40</td>
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</tr>
<tr>
<td>Q.S.37</td>
<td>F</td>
<td>40</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.38</td>
<td>F</td>
<td>90</td>
<td>Excellent</td>
</tr>
<tr>
<td>Q.S.39</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
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<td>F</td>
<td>60</td>
<td>Average</td>
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</tr>
<tr>
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<td>F</td>
<td>80</td>
<td>Very Good</td>
</tr>
<tr>
<td>Q.S.43</td>
<td>F</td>
<td>60</td>
<td>Average</td>
</tr>
<tr>
<td>Q.S.44</td>
<td>F</td>
<td>40</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.45</td>
<td>F</td>
<td>90</td>
<td>Excellent</td>
</tr>
<tr>
<td>Q.S.46</td>
<td>F</td>
<td>50</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.47</td>
<td>F</td>
<td>80</td>
<td>Very Good</td>
</tr>
<tr>
<td>Q.S.48</td>
<td>F</td>
<td>90</td>
<td>Excellent</td>
</tr>
<tr>
<td>Q.S.49</td>
<td>F</td>
<td>60</td>
<td>Average</td>
</tr>
<tr>
<td>Q.S.50</td>
<td>F</td>
<td>70</td>
<td>Good</td>
</tr>
<tr>
<td>Q.S.51</td>
<td>M</td>
<td>20</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Q.S.52</td>
<td>M</td>
<td>20</td>
<td>Very Poor</td>
</tr>
<tr>
<td>Student</td>
<td>Gender</td>
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## Appendix M: Data of the Frequency Count of the Cohesive Devices Used by the 128 Students

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| Standard Deviation | 5.7440 | 2.61611 | 3.31224 | 0.73380 | 0.67524 |

TAP.S.= Think-Aloud Student  
I.S.=Interview Student  
Q.S.= Questionnaire Student
## Appendix N: Normalized Counts of the Cohesive Devices Used by the 128 Students

Table N1. Normalized Counts of the Cohesive Devices Used by the 128 Students

<p>| Student | Gender | Score | Reference | Conjunction | Lexical | Substitution | Ellipses | Word Count | Ref. P. 100 words | Conj. P. 100 words | Lex. P. 100 words | Subs. P. 100 words | Elips. P. 100 words |
|---------|--------|-------|-----------|-------------|---------|--------------|----------|------------|------------------|--------------------|-------------------|-------------------|-------------------|-------------------|
| TA.S.1  | M      | 74    | 34        | 3           | 13      | 0            | 0        | 195        | 17.4358974       | 0.5384653         | 6.666666666       | 0                 | 0                 |
| TA.S.2  | M      | 71.5  | 42        | 6           | 6       | 0            | 0        | 196        | 21.4285714       | 0.306122449       | 0.65038759        | 0                 | 0.7519379         |
| TA.S.3  | M      | 42.5  | 30        | 4           | 2       | 1            | 0        | 129        | 23.2558139       | 0.310077519       | 1.55038759        | 0                 | 2.43902439        |
| TA.S.4  | M      | 82.5  | 32        | 5           | 7       | 0            | 3        | 123        | 26.0162601       | 0.406504065       | 5.69105691        | 0                 | 0                 |
| TA.S.5  | F      | 81.5  | 23        | 8           | 5       | 0            | 0        | 116        | 19.8275862       | 0.68965172        | 4.31034482        | 0                 | 0                 |
| TA.S.6  | F      | 67.5  | 21        | 10          | 3       | 1            | 0        | 106        | 19.8113207       | 0.94396226        | 2.83018867        | 0                 | 0                 |
| TA.S.7  | F      | 91    | 27        | 3           | 6       | 0            | 1        | 86         | 31.3953488       | 3.48837209        | 6.9764418         | 0                 | 1.16279069        |
| TA.S.8  | F      | 35    | 14        | 0           | 2       | 0            | 0        | 46         | 30.4347826       | 4.34782608        | 0.34782608        | 0                 | 0                 |
| I.S.1   | M      | 76.5  | 38        | 9           | 2       | 0            | 2        | 150        | 25.3333333       | 1.3333333         | 1.3333333         | 0                 | 0                 |
| I.S.2   | M      | 91    | 35        | 7           | 8       | 0            | 1        | 163        | 21.4723926       | 4.29447852        | 4.90795746        | 0                 | 0.61349693        |
| I.S.3   | M      | 76    | 20        | 4           | 5       | 0            | 0        | 111        | 18.0180180       | 3.60360360        | 4.50450450        | 0                 | 0                 |
| I.S.4   | M      | 65    | 21        | 1           | 11      | 0            | 0        | 84         | 25              | 1.19047619        | 13.0952381        | 0                 | 0                 |
| I.S.5   | M      | 91    | 25        | 5           | 8       | 0            | 0        | 132        | 18.9393939       | 3.78787878        | 6.06060606        | 0                 | 0                 |
| I.S.6   | M      | 83.5  | 23        | 4           | 8       | 0            | 1        | 82         | 28.0487804       | 4.87808487        | 9.75699756        | 0                 | 1.21951219        |
| I.S.7   | M      | 63.5  | 24        | 8           | 8       | 0            | 0        | 99         | 24.2424242       | 8.08080808        | 8.08080808        | 0                 | 0                 |
| I.S.8   | M      | 83    | 20        | 4           | 7       | 0            | 1        | 95         | 21.0526315       | 4.21052631        | 7.6842105         | 0                 | 1.05263157        |
| I.S.9   | M      | 97.5  | 39        | 5           | 13      | 0            | 0        | 141        | 27.6595744       | 3.54609929        | 9.21985815        | 0                 | 9                 |
| I.S.10  | M      | 73.5  | 29        | 8           | 11      | 0            | 0        | 127        | 22.8346456       | 6.29921259        | 8.6614732         | 0                 | 0                 |
| I.S.11  | F      | 94    | 30        | 9           | 7       | 0            | 0        | 114        | 26.3157894       | 7.89473684        | 6.14035087        | 0                 | 0                 |
| I.S.12  | F      | 71.5  | 23        | 2           | 5       | 0            | 0        | 73         | 31.0684932       | 2.73972602        | 6.84931506        | 0                 | 0                 |
| I.S.13  | F      | 82.5  | 21        | 10          | 14      | 0            | 0        | 76         | 27.6315789       | 13.1578947        | 18.4210526        | 0                 | 0                 |</p>
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| Q.S.28 | F 80 | 42 | 13 | 15 | 2 | 1 | 190 | 22.1052631 | 6.84210526 | 11.0579384 | 2 | 0.52631578 |
| Q.S.29 | F 40 | 29 | 7 | 21 | 0 | 0 | 155 | 18.7096774 | 4.51612903 | 13.5483871 | 0 | 0 |
| Q.S.30 | F 50 | 30 | 7 | 14 | 1 | 0 | 160 | 18.75 | 4.375 | 8.75 | 0.625 | 0 |
| Q.S.31 | F 50 | 28 | 8 | 9 | 1 | 0 | 107 | 26.1682243 | 7.47663551 | 8.4121495 | 3 | 0.93457943 |
| Q.S.32 | F 70 | 9 | 5 | 13 | 0 | 0 | 136 | 6.61764705 | 3.67640758 | 9.55882352 | 0 | 0 |
| Q.S.33 | F 70 | 23 | 8 | 13 | 0 | 0 | 122 | 18.5524590 | 6.55737704 | 10.6575377 | 0 | 0 |
| Q.S.34 | F 60 | 27 | 9 | 2 | 0 | 0 | 134 | 20.1492537 | 6.71641791 | 14.9253731 | 0 | 0 |
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| Q.S.38 | F 90 | 49 | 11 | 13 | 0 | 0 | 182 | 26.9230769 | 6.04368560 | 7.14285714 | 3 | 0 |
| Q.S.39 | F 70 | 25 | 10 | 9 | 0 | 0 | 119 | 21.0084033 | 8.40363134 | 7.5602521 | 0 | 0 |
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| Q.S.41 | F 70 | 14 | 6 | 14 | 0 | 0 | 96 | 14.5833333 | 6.25 | 14.5833333 | 0 | 0 |
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SD: 23.2422410 12.9360333 3.80960924 4.40856959 0.909711868 0.70433922 9.00500625 51.6502662 2.60586886 3.29927402 9.73093184 0.67259931 3
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### Appendix P: Questionnaire Factor Analysis Rotated Component Matrix

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* Rotation converged in 58 iterations.
Appendix Q: Student Writing Samples

Female Writing Sample

Kuwait University
ELU Arts
English 142

Writing 1 (10 points)

Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all of the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

9. Your visit to a country (or a large city)
10. A memorable wedding or funeral
11. An experience that showed how appearances can be deceiving

Rainy Day

I will not forget my trip to Tioman the Island of Malisiya forever. When I traveled to this island and did the activity in the see there. One day when we was on the boat for snorkeling activity and the weather was very calm. Suddenly, the sky get dark and rained and the weather get more dark, and the rain was very strong. It’s really was unforgetable day and trip. It was happy and said in a same time. We learned the we shouldn’t go to see trip with out checking weather forecast.
Directions: Write a narrative paragraph about ONE of the following topics. Make sure your paragraph contains all of the elements of a good narrative paragraph. Include vivid descriptive language that paints a real picture of your story in the mind of the reader. Limit your paragraph to ten sentences including the topic sentence and the concluding sentence.

9. Your visit to a country (or a large city)
10. A memorable wedding or funeral
11. An experience that showed how appearances can be deceiving

A memorable journey

I write about For a memorable journey, I travel to Thailand, Mi enjoy in Thailand, I visit the bokt, the bokt is very very beautiful, Mi go the fishing in bokt, and go the Bankok, Mi go the Greys street and go the shopping, the thiland is very very beautiful. I play in pokt and the raething thes play is very enjoy. Thes my paragraph.