THE IMPACT OF CALL ON THE LEARNING AND TEACHING OF ESL
WRITING: A STUDY OF STUDENTS' AND TEACHERS' ATTITUDES

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THE IMPACT OF CALL ON THE LEARNING AND TEACHING OF ESL WRITING: A STUDY OF STUDENTS' AND TEACHERS' ATTITUDES

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ABSTRACT

Computers and computer technologies are gradually becoming ubiquitous tools in some English second language writing classrooms. The aim of this study was to examine the perceptions and attitudes of secondary- and university-level teachers and students in the United Arab Emirates towards the incorporation of computer-assisted language learning (CALL) in ESL writing classes. In addition to that, the study sought to find out teachers' use, if any, of computer technologies in ESL writing classes. The study also attempted to investigate the similarities and differences in the ways teachers and students perceive the use of computers in English language writing classrooms.

To investigate such perceptions and attitudes, surveys and interviews were used to gather data. The study's subjects included 23 secondary- and university-level English teachers and 99 secondary- and university-level English language learners. Findings of this study indicate that the majority of the participating teachers integrated communicative and integrative tools of CALL in their ESL writing classes. Results also showed that the majority of the participants, both teachers and students, were in favor of the incorporation of CALL in ESL writing classes. What is more, results also revealed that students' and teachers' perceptions were more similar than different. Implications for a successful incorporation of CALL in ESL writing classes included the conduction of needs analysis for both teachers and students to investigate their familiarity with the CALL tools that are to be incorporated. Also suggested is the supply of state-of-the-art facilities and equipment in schools and institutes of higher education to encourage teachers and students to use CALL. Pedagogical implications included the implementation of classroom management strategies such as monitoring

students' use of CALL while engaged in writing activities. Finally, the study also calls for further research to look into the impact of CALL on classroom management, and the similarities and differences in the use of CALL in writing classes across various government schools.

TABLE OF CONTENTS

Chapter

TABLES

ACKNOWLEDGEMENTS

DEDICATION

To *Omii* and *Obooi*, loving you always and forever.

CHAPTER 1

INTRODUCTION

Purpose of the Study

The technology industry has been a rather rapidly changing industry that has revolutionized a multiplicity of fields across human society. The field of education, like many other establishments, has been profoundly impacted by technology (Hassanien, 2006; Latio, 2009). Additionally, Means, Olson, and Ruskus (1997) state that "educators, policy-makers, and business and other community groups are looking to technology as a tool for reshaping and improving education" (p. 1). However, counter arguments exist in which various researchers argue that technology has not had as large an effect on the educational industry as Means et al. (1997) suggest. For instance, Labbo and Place (2010) mention, "overall impact in the classroom has been less robust, so teachers who take the time to thoughtfully integrate computer technologies into the classroom are doing cutting-edge work in the field" (p. 17). Citing Cuban (2001), Hofer and Owings-Swan (2005) have similarly stated that "while medicine and other professions have been transformed using technology, education has remained relatively unchanged by the exponential advances in computing power, access and usability" (p. 102).

What is more, Hussein (2010) indicates that "today there are very few UAE classroom teachers that use computers in their classrooms" (p. 70). While I feel that this specific statement sounds like a generalization that might not necessarily apply to all learning contexts in the UAE, my personal observations are not dissimilar to Hussein's. Through my subjective observations, I have perceived a few English language learning contexts that have taken initiatives to integrate computer technologies, however, the majority of the classes that I have observed throughout my practicum and internship experiences convinced me that less than expected technology integration takes place in language writing classes in some UAE schools and some UAE institutions of higher education. In addition to that, Al Shammari (2008) asserts that "there is a lack of literature on [the] CALL field in the Gulf of Arabia, particularly, on learner attitudes" (p. 124). Ismail, Almekhlafi, and Al-

Mekhlafy (2010) similarly argue that "in the context of the UAE, studies involving technology integration in language teaching and learning are minimal" (p. 41). Although several researchers have investigated the effects of CALL on second/foreign language learning in the context of the United Arab Emirates, illustrated in studies conducted by Al-Ali (2010), Al Mazrooei (2010), Al Mekhlafi (2006), Al Mekhlafi (2004), Alsheikh (2010), Candela (2010), Gunn and Kassas (2010), Hussein (2010), Odeh (2008), Schmitt (2008), and Shine (2010) only a few premium studies have explored the effects of computer technologies on second language writing skills. Therefore, in order to further investigate this phenomenon, and to answer the claims made above, and in an attempt to expand on and contribute to the existent literature, this study sought to examine the following questions:

1. Do secondary- and university-level English language teachers in the UAE integrate computer technologies in their writing classes? If yes, how? If not, why not?

2. What are the attitudes of secondary- and university-level English language teachers and students in the UAE toward the integration of computer technologies in writing classes?

3. What are the similarities and differences in the ways teachers and students perceive the use of computer technologies in English language writing classrooms?

Significance of the Research

As noted earlier, though the notion of technology integration is not altogether new, it is still not widely adopted in various UAE language writing contexts. This research reveals English teachers' usage of technology, specifying how and when they integrate computer technologies in their writing lesson plans, if any. In addition to that, the study reports students' opinions on technology integration, demonstrating their views on whether they would like to see it implemented more or less often in their language writing classrooms, as well as if and when they would like it to be implemented.

What is more, examining this particular phenomenon resulted in a better understanding of the significant impact of computer technologies in the teaching and learning of ESL writing. This research supplies teachers and administrators in UAE schools and higher educational institutions with a review of recent literature of the integration of computer technologies in the process of teaching and learning writing. The research also enhances teachers' understanding of the integration of computer technologies as it sheds light on the extent to which the application of CALL impacts on language learners' writing skills. Furthermore, it is hopped the findings obtained from the study provoke teachers' and administrators' awareness of the concept of incorporating computer assisted language learning in writing classes. It is hoped that the research will encourage teachers and administrators to evaluate and appraise such integration with what they think suits their contexts.

Context

Ever since the inauguration of the federation, education has been a priority in the United Arab Emirates. Thus, immense reform and development have taken place in order for education to comply with global standards and in order to hone the learning and teaching environment to meet challenges of the current technology-active century (Candela, 2010; Hussein, 2010). What is more, and as Candela (2010) explains, "information technology education in the UAE has taken a top priority" (p. 60). Among the many strategies and compliances that have emerged within the past several years was the Sheikh Mohammed Bin Rashid Information Technology Education Project (ITEP). Launched in the year 2000, the ITEP has provided Information Technology (IT) training for high school students in around 40 government secondary schools in the two emirates of Dubai and Abu Dhabi. The program has provided students various computer skills, from as simple as starting up a computer to as complex as creating a full-featured website. This program was initiated with the goal of promoting IT literacy and creating a UAE Knowledge Economy (*UAE Education Center*, n.d).

While the ITEP program has focused exclusively on IT education, other programs and strategies have emerged to merge IT and computer technologies with an

3

array of school subjects. For instance, one reform movement known as Madares Al Ghad (MAG) has been incepted with the focal objectives of providing students with better English language and computer skills. The MAG schools have provided laptops for teachers, equipped classrooms with computers, and provided computer labs with wi-fi and internet access for students' and teachers' use (Kanaan, 2008). Other public schools, such as model schools, have also taken measured steps to integrate computer technologies in the teaching and learning of various subject studies. Teachers in these two kinds of schools are pushed by their administration and the Ministry to hone their skills in computer use in order to integrate them efficiently in their teaching. Additionally, in a move to raise teachers and education personnel's IT literacy and prepare them to use computer technologies, teachers in the United Arab Emirates are required to attain International Computer Driving Licenses (Mussallam, 2003).

While the Ministry of Education and the Knowledge and Human Development Authority have been very active in incorporating computer technologies in their strategies and regulations, the Ministry of Higher Education and Scientific Research is not unlike the Ministry of Education for patronizing integrated computer technologies in its mission statements. Both federal institutions and private institutions in the UAE promote learning in a technical and a computer savvy environment in teaching different studies and subjects, among which are English writing skills.

Many universities and institutions of higher education also compel their students and teachers to have basic computer knowledge skills. While the majority of the skills have to be attained prior to entering colleges and universities, many universities offer required courses in computer use and application. Among these courses are Zayed University's COL 110 course, American University in Dubai's COMP 101, and Higher Colleges of Technology's COMP 100 course. Such institutions do not only provide a theoretical preparation to computers, but also, as Candela (2010), illustrates students are trained in its practical use. As such, institutions are equipped with latest technologies to hone the learning that takes place within their classrooms. Candela further states that such "institutions are at the vanguard of Information Technology and its applications to Second Language

Teaching. Students are promptly introduced to the personal computer and versed on its advantages, disadvantages, and the perils associated with a new technology within their reach" (p. 63).

It is worth repeating that despite the fact that many attempts have been initiated to integrate computer technologies in the region's schools and universities, according to my personal observations and knowledge, very little rigorous research has been done to investigate what teachers and students think about such integrations, specifically so in the field of English language writing. Thus many questions with regard to the phenomenon of CALL in writing remain unanswered. Moreover, as Candela (2010) urges, further research and investigations should be done to unveil attitudes towards the integration of computer technologies. In this light, it is hoped that this study will be deemed significant as it attempts to fill this gap.

Overview of the Chapters and Appendices

Chapter One includes an introduction to the topic of the study, its purpose, significance, research questions, and context. Chapter Two presents a review of the literature relevant to the study. It starts by defining the term "writing" and its pedigree in the teaching and learning of second language learning. The review of literature then attempts to define the term "technology," moving on to illustrate the historical background behind the emergence and evolution of CALL. The chapter also illustrates the advantageous and disadvantageous effects of CALL on ESL writing. In addition to that, the chapter reviews the perceived effects of CALL on writing skills that have been found in recent related studies. It concludes with suggestions for implications of CALL in ESL writing contexts. Chapter Three presents a description of the study's subjects, their number, nationality, teaching and learning experiences. The chapter also describes the methodology, the procedures, and the instruments that were utilized to collate and analyze the provided data. What is more, it provides basic information with regards to the locations in which the study took place. Chapter Four includes a report of the significant findings, as well as a thorough analysis of the data, while Chapter Five consists of the following sections: summary of the findings, a

discussion of the limitations, directions for further research, suggestions for implications, and final thoughts.

This research paper also includes six appendices: Appendix A is the teachers' survey. Appendix B is the students' survey. Appendix C is the bilingual Arabic-English version of the survey. Appendix D is the teachers' semi-structured interview questions. Appendix E is the students' semi-structured interview questions. Appendix F presents the university-level teachers' survey results. Appendix G presents the secondary-level teachers' survey results. Appendix H is the university-level students' survey results. Finally, Appendix I is the secondary-level students' survey results.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter includes six sections, organized as follows: The first section begins with defining "writing," the second language theories encompassing its teaching, and the stages in which it is taught and learned. The chapter then moves on to provide a description of what constitutes the term "technology" and how computers and CALL fall into its categories. The second section surveys the historical pedigree of CALL, how it started, and its evolutionary association with various language learning methods and approaches. The third section reviews the advantageous effects of CALL on ESL writing skills that have been found in related studies across various contexts. As a counterpart to its previous section, the fourth section illustrates the disadvantageous effects of CALL on ESL writing skills, as some obstacles and hindrances related to the implantation of CALL in ESL writing classes are highlighted. The following section reviews perceived effects of CALL on ESL writing that have been found in recent studies. With the sixth section, the chapter concludes with discussion of pedagogical implications of CALL in ESL writing contexts.

Writing in ESL

What Is Writing?

While many think of the skill of composition as writing, the term writing is by no means confined to this narrow definition alone. Cornbleet and Carter (2001) state that it is very difficult to provide a "simple, one-dimensional answer to the question 'What is writing?'" (p. 6). The reason it is so difficult to come up with one unanimous definition of the term writing, goes back to the fact that writing constitutes a wide range of activities and sub-activities (Cornbleet & Carter, 2001). As Gebhard (2006) illustrates, the skill of writing constitutes several sub-skills and conventions, such as

word choice, use of appropriate grammar (such as subject-verb agreement, tense, and article use), syntax (word order), mechanics (such as punctuation, spelling, and handwriting), and organization of ideas into a coherent and

cohesive form. However, writing also includes a focus on audience and purpose, as well as a recursive process of discovering meaning. (p. 211)

In his inspection of writing as a skill in English language, Harmer (2001) does not only consider the art of composition the sole skill of writing, but rather considers handwriting, spelling, layout, and punctuation as important sub-skills of writing.

Having stated the above, that is precisely why different definitions have emerged in an attempt to define the "umbrella" term of writing. For instance, writing, in Babatunde's (1997) view, "is a productive skill in language use in which the writer attempts to concretize his perception and understanding of the world" (p. 3). While Babatunde's definition of writing is grounded within a cognitive domain, De Laroise and Murphy (2001) argue that socialists associate the skills of writing with context. De Laroise and Murphy explain that writing, to social constructionists, is "a social act that can only occur within a specific context and for a specific audience" (p. 26). On the other hand, Cumming (2001) views writing in a second language as a three-part activity, in which a second language learner focuses on the features and conventions of a text, the composition processes learners go through when writing, and the context in which the writing is produced. Cumming further includes that these three dimensions come with micro and macro elements and illustrates them in the table below:

Figure 1: What does a person learn when writing in a second language? (Cumming, 2001, p. 3).

	Micro	Macro
Text	Syntax & Morphology	Cohesive devices
	Lexis	Text Structure
Composing	Searches for word and syntax	Planning
	Attention to ideas & language concurrently	Revising
Context	Individual development	Participate in discourse community
	Self-image or identity	Social change

ESL Writing in History

Celce-Murcia (2001) argues that "the ability to express one's ideas in writing in a second language or a foreign language and to do so with reasonable coherence and accuracy is a major achievement; many native speakers of English never truly master the skill" (p. 205). Therefore, it is not completely surprising to observe ESL/EFL students' overwhelmed and discomposed expressions when dealing with this specific language skill. Teachers and language researchers have long been trying to come up with methods and approaches that will lessen students' anxiety and make successful learning experiences of writing activities. The majority of the theories revolving around the teaching of ESL writing are to a great extent on par with theories and practices that have been formed for the purposes of teaching writing to native speakers of English. The only difference is that the ones presented in ESL contexts were done so "as much as a decade or more later" (Reid, 1993, p. 21) than they were presented in the first language teaching contexts.

The 1960s witnessed audiolingual approaches in the teaching and learning of ESL/EFL writing skills. The audiolingual method primarily focused on speech and oral production. This, in turn, "meant that writing served a subservient role: to reinforce oral patterns of the language" (Raimes, 1991, p. 408). As such, writing activities were used predominantly to focus on oral skills, such as pronunciation, form, and grammar (Reid, 1993). In those classes, students were asked to work with exercises that consisted of "sentence drills–fill-ins, substitutions, transformations, and completions" (Raimes, 1991, p. 408). This was roughly the case up until the mid 1970s. In the mid 1970s the widely-acclaimed process writing approach emerged. The process writing approach first appeared in first language writing classes. As Deqi (2005) explains, this approach in writing "developed largely out of the dissatisfaction on the part of the writing teachers with the traditional approach to teaching composition that had its primary emphasis on 'product'" (p. 2). Deqi further explains that "early reformers criticized the product approach saying that its primary goal was teaching literature rather than writing" (p. 2). Consequentially, when second language teachers observed the process writing approach's success and acceptance in the first language classes, they brought it into their own second language classes (Nunan,

1999). So then, what is the process writing approach? While according to Badger and White (2000) there isn't a uniform definition of the process writing approach, most researchers agree that this particular approach emphasizes the process which students go through to produce a piece of writing as opposed to the exclusive emphasis placed on the final product as in traditional writing approaches (Deqi, 2005; Matsuda, 2003). The process writing approach is also defined as a recursive series of activities which students go through before submitting their compositions for final grading (Kroll, 2001). According to Kroll, students following the principles of the process approach engage in activities such as "drafting and receiving feedback on their drafts, be it from peers and/or from the teacher, followed by revision of their evolving texts" (p. 221). Reid (1993) states that "as teachers incorporated process teaching into their classes, writing became 'freer' as a result of student discovery activities, journal writing, and lowered anxiety levels" (p. 33).

In the mid-1980s, as Raimes (1991) explains, two new approaches to teaching writing composition surfaced known as the content-based approach and a specific focus on academic writing. Raimes argues that "those who perceived [process writing] as an obsession inappropriate for academic demands and for the expectations of academic readers shifted their focus from the processes of the writer to content and to the demands of the academy" (p. 410). Therefore, these two approaches emerged to parallel the content and academic subjects that were offered in universities and higher institutions of education, targeted specially to international university students (Matsuda, 2003).

As mentioned previously, many approaches have emerged in the past few decades matching approaches emerging in first language classes. Among those approaches was the communicative competence approach. According to Reid (1993), "These communicative approaches stress the purpose of a piece of writing and the audience for it" (p. 39).

Also among the approaches that have come to arisen in the past few decades is the genre approach (Hyland, 2003; Tardy, 2006). The genre approach in writing refers to "abstract, socially recognized ways of using language" (Hyland, 2003, p. 140). Harmer (2001) asserts that the key to success in genre writing is to have knowledge of

the subject that is to be written about, the normative conventions and techniques of the genre being written in, and the audience and context towards which the writing is targeted. According to Hyland (2007), the genre approach to writing appeared in the seventies due to the communicative approaches that took center stage at that period of time, which stressed the importance of learning language within a defined context to accomplish particular language objectives. It has also been argued that the genre approach also emerged as an approach criticizing principles of the whole language approach (Hicks, 1997). It is noteworthy to mention that emergence of a new approach did not coincide with the demise of a previous one, but rather previous approaches still continued to exist along the continuum (Raimes, 1991). Reid (1993) argues that while many approaches have only appeared for a short while, many of these approaches are still widely used. Reid further adds that "the research and teaching experience from the field of NES composition continue to influence the field of ESL composition, mostly in positive ways" (p. 46). What is more, I feel it is important to point out that though the literature illustrates that composition is not the only sub-skill of writing, in this research paper the term writing is largely referred to the art of composing writing.

Writing Stages

To illustrate the kinds of activities and techniques used in teaching ESL writing, while essential, is beyond the scope of this research. Having said that, the following section briefly touches on the kinds of stages ESL writing includes. When going through the process of composing a piece of writing, many researchers argue that students go or at least should go through the following stages: pre-writing, writing, and revising (McGowan, 1992; Naeem, 2007; Zamel, 1983). In the pre-writing stage, students set the initial stones in creating a text (McGowan, 1992). Pre-writing encompasses activities that include, but are not limited to, brainstorming, clustering, questioning, free writing, information gathering, etc. (Gebhard, 2006). The following stage, the writing stage, also known as the drafting stage (Gebhard, 2006), is the physical stage in which students engage in putting their ideas into a text "by putting it onto paper, [or] perhaps onto a computer via an input keyboard"

11

(McGowan, 1992, p. 297). According to Simard (1997), this stage incorporates activities such as "composing and inscribing" (para. 7). The third stage, revising, is the stage where everything comes together. According to McGowan (1992), "this last activity involves evaluating, editing, and revising the text to ensure that it 'reads well' and is generally free from 'bad style' errors" (p. 298).

CALL in ESL Writing

What Is Technology?

In the past decades, technological tools, computers specifically, have gone through drastic changes. Consequently, such tools are gradually playing important roles in numerous educational contexts, being integrated into various educational processes, in both teaching and learning. As a matter of fact, Haley and Austin (2004) suggest that the widespread use of technologies, such as computers and the internet, have had a great impact on the way elements of literacy, reading, and writing are perceived and produced. They add that technological devices, including computers, trigger certain language use, affecting the way "we read, how we write, and how we use written language to learn and communicate with others" (p. 308). But to what extent, if any, does the integration of computer technologies in the teaching and learning of writing in an ESL context help in enhancing students' writing proficiency?

Prior to discussing the effects of computer-assisted language learning in enhancing ESL learners' writing skills, it is of great necessity to explain what specific elements or devices constitute the term technology–an umbrella term that includes computers. When discussing technology and technological devices, people often associate such terms with computers. However, as Haley and Austin (2004) explain, the term technology constitutes numerous devices not confined to computers. Rather, they further elaborate that such devices can be categorized as traditional devices, as well as modern ones. Traditional technological devices can include media instruments, such as cassettes, television, and VHS, as well as radios and voice recorders, and software programs that include word possessors, spreadsheets, and database organizers, similar to the ones available in Microsoft Office programs that are available on almost every functioning computer. As for the more modern kinds of

technology tools integrated into classrooms, Haley and Austin (2004) assert that they, in turn, consist of the World Wide Web (WWW), e-mails, blogs, and CD-ROM software programs. It is worth mentioning that this research will focus on those that have to do specifically with computers.

As for computer-assisted language learning (CALL), Levy (1997) defines it broadly as the "the search for and study of applications of the computer in language teaching and learning" (p. 1). Although many definitions of CALL have emerged throughout these past years, many of these definitions conform to Levy's widely cited one. For instance, Gamper and Knapp (2002) restate Levy's definition in that CALL is "the use of new media and information technologies, for language learning and teaching" (p. 329). Also adhering to Levy's definition is that of Egbert (2005), as she asserts that "CALL means learners learning language in any context with, through, and around computer technologies" (p. 4). As such, it is noteworthy to mention that the technological tools that are referred to in this paper are the ones that are associated with computers, computer software programs, and the internet infrastructure.

How It All Started

The beginning of CALL and its usage is associated with the audiolingual approach and other empiricist approaches that surfaced in the 1960s and 1970s (Fotos & Browne, 2004; Levy, 1997). According to Levy (1997), the behavioral nature of these approaches–revolving around the principles of habit formation, imitation, stimulus, and reinforcement–made it possible for such approaches to emerge in language laboratories, where students practiced tasks that included the above mentioned principles. Additionally, Levy explains that the systematic and static nature of such practices, which were, roughly speaking, devoid of any kind of meaningful and authentic interaction, made them "readily programmable on the computer" (p. 15). In these contexts, "CALL consisted mainly of drill-and-practice programs" (Fotos & Browne, 2004, p. 5), thus, constituting what Lee (2000) refers to as "Behaviorist CALL." However, by the end of the 1970s, and with the emergence of communicative language learning approaches, the shift in CALL moved from being systematic with the focus on language form and accuracy to employing meaningful interaction, and therefore the focus shifted to include the enhancement of language

fluency. Naeem (2007) explains that "communicative CALL corresponds to cognitive theories which stress that learning is a process of discovery, expression, and development. Popular CALL software developed in this period includes text reconstruction programs and simulations" (p. 62). Fotos and Browne (2004) further elaborated that communicative CALL included programs, such as "language games, reading and writing practice, text construction, cloze tests, and puzzles." (p. 5)

In recent years, the shift moved from focusing on communicative CALL to integrative CALL. According to Lee (2000), communicative CALL has been met with skepticism since it has been widely implemented in an ad hoc and segregated manner. On the other hand, Lee (2000) points out that integrative CALL compensates for this demerit of communicative CALL, as integrative CALL "seeks both to integrate the various skills of language learning (listening, speaking, writing, and reading) and to integrate technology more fully into language teaching" (para. 7).

As for the historical background of integrating CALL in enhancing the skill of writing in specific, Nunan (1999) points that "without doubt, a major impetus to writing pedagogy has come in recent years with the rapid growth of word processors, as well as the use of the internet as a means of communication" (p. 272). Nunan further states,

> In fact, Stephen Marcus, a specialist in the use of technology in writing, maintains that process writing really became feasible with the development of word processing. Prior to that, the physical act of writing by hand was so laborious that it was unrealistic to expect writers to produce more than one or two drafts of their work. (p. 272)

Fotos and Browne (2004) explain that one of the most important activities instilled in CALL is writing. Writing within a CALL approach includes sub-activities of "word processing, test analysis, and desktop publishing, often combined with communication over LAN" (p. 9). They further explain that such sub-activities trigger both students' focus on language accuracy and language fluency by "engaging in meaningful discourse and creating knowledge through interaction" (p. 9). Braine (2004) indicates that learning and teaching writing through computer technologies

have gone through some phases of evolution from being exclusively asynchronous–delayed use of messages–to being synchronous–instant writing interactions.

The Advantageous Effects of CALL on ESL Writing Skills

Recent studies and research that have investigated the impact of computer use and the integration of technology on enhancing ESL writing are, in fact, not generic in their nature. On the contrary, according to Pérez-Sotelo and González-Bueno (2003), most of these research studies "have [rather] focused on an analysis of discourse and content-oriented components of writing proficiency" (p. 870). Therefore, it was difficult to find consensus among various research that advocated similar effects because it is very rare for research within this field to be conducted on the same computer-oriented issues. For instance, where one study investigated the effect of employing synchronous tools in teaching ESL writing, another would investigate asynchronous ones; of course the written format or the writing skill investigated would most likely be discrepant as well, not to mention the context in which the research study took place.

Having said that, several studies conducted to examine the effects of computer use on ESL writing skill have revealed many common positive attributes and promising results from this kind of incorporation. The first advantage lies in the fact that the implementation of CALL and the use of computer technologies in ESL writing contexts have been found to promote autonomy (Pérez-Sotelo & González-Bueno, 2003; Warschauer, 1996). CALL gives language learners numerous opportunities to take control and responsibility for their own learning. For instance, language learners engaged in sending and receiving communicative e-mails are "in a position of greater control over their own learning since they can determine the level, quality, and amount of participation" (Pérez-Sotelo & González-Bueno, 2003, p. 869). Similar results can also be perceived from learning writing in synchronous and asynchronous blogs and chatrooms, since in most cases students can go back and forth to their writing and observe their improvement and, thus, it helps them to see their levels of strength and weakness in writing and try to address them.

Another advantageous effect of teaching and learning ESL writing within CALL approaches is the authenticity of learning experiences they provide for language learners (Chuo, 2007), especially when learners engage in synchronous computer activities, where they are writing for authentic purposes and have actual audiences to write to and to get feedback from. On this note, Nishikiori (2007) points out that "publishing their writing online gives students a purpose for writing since there is always an authentic audience" (p. 17). Nishikiori (2007) further illustrates that "writing online allows learners to interact with an authentic audience through commenting on each other's writings which creates meaningful context between the writer and the audience" (p. 17). Thus, it seems that the use of computer technologies in ESL writing classes do not only provide students the opportunity to fulfill meaningful tasks, but also, they seem to provide them with numerous forums in which they can practice authentic language use with their ESL peers and/or native speakers of the target language.

Moreover, Pérez-Sotelo and González-Bueno (2003) indicate that the incorporation of computer technologies in writing classes provides ample opportunities for students to obtain input. By reading other written works completed either by their peers or provided by their teachers, learners receive input, either implicitly or explicitly, about various forms, strategies, and styles incorporated in particular writing activities.

Also, when it comes to the positive effects of computer-integrated activities, Hyland and Hyland (2006) illustrate some advantages of employing computer technologies in ESL writing classes. They assert that such devices give students confidence in sharing their written work with their peers and instructor and in getting feedback from them. Additionally, it provides low-achieving students the confidence to publish their work. They also state that computer-mediated feedback in writing classes contribute to the production of quality written products and enhanced feedback activities, where students "focus on larger chunks of writing and work on macro-revisions" (p. 93). As such, instead of focusing their attention on issues of language accuracy, second language writers are able to focus their attention on language fluency and issues of organizing meaning and putting forth their ideas

16

through the use of computer technologies. Hyland and Hyland (2006) add that another merit of computer-mediated feedback lies within the systematic ways in which documents can be stored, since feedback and threads provide students with infinite opportunities to revisit their work. Therefore, because of their automated storing mechanics, computer technologies can, in turn, help improve students' metacognitive awareness of their language learning needs and abilities, and encourage students to self-correct their errors and mistakes, which goes back to the first advantage included in this section, helping students become autonomous and responsible second language writers.

On the effects of synchronous interaction between learners when engaging in computer-mediated feedback, DiGiovanni and Nagaswami (2001) claim that language learners are "more focused when providing feedback during real time electronic interaction than when engaging in traditional face-to-face peer revision groups" (p. 94). Again, this advantage refers back to the systematic way in which electronic feedback can be saved automatically, allowing students to access the feedback made by their peers and/or instructor (Hyland & Hyland, 2006).

When it comes to the positive impact of word processors on the process of writing, Phinney (1996) states that "students who use word processors have been said to spend more time writing to alter revision behavior…to make more and different types of revisions…to show less of a tendency towards writers block…and to improve their attitudes toward writing" (p. 138). Abo Rizk (2010) similarly adds that "writing with a word processor has several advantages over writing by hand. With both kinds of programs, the writing process constitutes a continuous spiral of writing, revising and editing" (p. 7).

The Disadvantageous Effects of CALL on ESL Writing Skills

Despite all these promising illustrations, research has revealed that there are also many disadvantages and limitations associated with the implication of CALL and the incorporation of computer technologies in the teaching and learning of writing within ESL contexts (Chen, 2005; Lee, 2004). The ultimate limitation in such studies is indeed in the diversity of technology, because technology on its own includes numerous gadgets, software programmes, and tools, while at the same time writing

skills incorporate a vast number of sub-skills, activities, tasks, and genres. Therefore, it should be expected that studies in this field will include conflicting findings and lack generic results. Additionally, Lee (2004) adds that "given the conflicting findings shown in various studies, particular research outcomes seem to be dependent on research contexts and specific details of the research procedures" (p. 7). For that reason, Lee adds that "the issue of computer-related effects on writing has to be clarified within each research context" (p. 7).

In addition to that, another disadvantage of incorporating computer technologies in writing classes is that students unfamiliar with the mechanics of using computers will be greatly disadvantaged. A study conducted by Matsumura and Hann (2004) revealed that students with high levels of computer anxiety resulting from their unfamiliarity with using computers achieved less than those who were comfortable using computers. In another study, conducted by Jackowski-Bartol (2001), it was found that students not competent in typing and keyboarding skills found the use of word processors in writing tedious. Jackowski-Bartol adds that the subjects of his study faced difficulties in transferring their thoughts into typed words. He includes that for his study's participants "typing what others have written was easier for the students than typing while going through the thought process needed for writing" (p. 11).

Moreover, teaching writing via computers can be ineffective unless it is associated with clear writing instructions and adequate instructional materials, and such CALL cannot replace in-class instruction (High, Hoyer, & Wakefield, 2002). Another barrier that often confronts teachers and students when implementing and using CALL is relevant to time constraints (Franklin, 2007; Jackowski-Bartol, 2001). Lee (2000) argues, "Engaging in Computer-assisted Language Learning is a continuing challenge that requires time and commitment" (para. 28). Lee also states that "instructors [tend] not to use technologies that require substantially more preparation time" (para. 27). In addition, Al-Mekhlafi (2004) explains that novice users refrain from using CALL tools, in particular the internet, because they find it time-consuming.

Furthermore, Huh and Hu (2005) point out that "much of the current CALL literature expounds on the benefits of computer use in language learning" (p. 13). Similarly, Felix (2008) observes that one of the common inefficiencies found in CALL research is in the tendency of researchers to focus excessively on the positive aspects when reporting their findings. Felix argues that "many studies still lack a discussion of limitations which, in an environment where perfectly controlled designs are near impossible, is most surprising" (p. 148). As such, the lack of discussion of the limitations in CALL research is considered in and of itself a limitation of CALL. This, in turn, leads such research studies to lose some of their findings' credibility. As Huh and Hu (2005) explain, "researches' biased assumptions, the lack of discussion of negative study results, and the effort to show only positive aspects of computer technology use might cause CALL studies to present improper findings" (p. 15).

Perceived Effects of CALL on ESL Writing in Recent Studies

A recent study conducted by Liang (2010) sought to investigate the effects of synchronous online peer response group on EFL students' revision on writing. The study took place in an EFL writing course provided by a Taiwanese university. The course was taught through a process writing model. Students enrolled in this course had to attend it for a period of three hours per week for duration of 18 weeks—a semester. The main aim of this course "was for students to help each other write clear and well-reasoned prose" (Liang, 2010, p. 48). In order to do that, the student took part in online and synchronous peer review activities which took place in a computer laboratory "during the class time as part of the class requirement…[these] online sessions offered students opportunities to discuss and review peer drafts at different stages of the writing process" (p. 48). Findings obtained from this study revealed that the students in this study "students in this study tended to focus more on content discussion than on meaning negotiation" (p. 55). In addition to that, Liang argues that synchronous collaboration in and of itself does not necessarily vouch for students' engagement in revision, rather she argues that such engagement are best be supported by the instructors. She further elaborates on this point by stating that "writing

instructors may need to proactively model, scaffold and support revision-related online discourse if it is to be of benefit" (p. 45)

Fidaoui, Bahous, and Bacha (2010) conducted a study to explore how effective the integration of CALL was in motivating fourth grade students to produce improved writing skills. Their research, like mine, also looked into students' and teachers' attitudes towards the integration of CALL in English language classrooms. The subjects of Fidaoui et al's research study engaged in the following CALL activities: "keyboarding, word processing, desktop publishing, presentation, file management, information management, page making, drawing skills and use of the Internet, and reinforce specific skills through educational games" (p. 153). All of these activities were practiced in the computer lab once every week for a period of three months. Through the use of research instruments such as observations, interviews, and questionnaires, it was found that both the students and the teachers expressed positive perceptions towards the use of CALL in ESL writing. The researchers further explain that the subjects of the study thought that the use of CALL "enabled them to have fun, while at the same time attempting to produce creative, neat, organized, error-free written products. It helped them express their feelings and gather relevant information to fulfill the requirements of their writing tasks" (p. 164). What is more, the researchers state that to effectively integrate CALL in writing activities, English language teachers and researchers must thoroughly plan for such integration.

Another study conducted to verify the positive impact of computer technologies in an ESL writing context was conducted by Al-Jarf (2002), who conducted experimental research in which two groups of female Saudi freshman college students participated. Both groups were in an ESL writing course provided by the college they attended. The two groups were first tested before the experiment to record their proficiency level; the test results revealed that the experimental group achieved lower writing scores than the control group before the experiment. The experiment then began, with the experimental group being provided with various computer-mediated and technological tools as instructional materials. They were given "an online (web-based) course, some WWW resources, e-mail and word

20

processing in ESL writing instruction from home, in combination with traditional writing instruction" (p. 4). Using these various tools, the experimental group engaged in an assortment of writing activities. They were assigned to compose paragraphs, to create stories and poetry, and to publish them via online threads. Also, they searched for and gathered information from different websites, and they engaged in process writing by revising their compositions and correcting their errors and mistakes, whilst the control group only received traditional face-to-face instructions in the classroom. At the end of the experiment, which also marked the end of the term, the two groups were tested again. The results indicated that the experimental group "made more gains as a result of web-based instructions. They became more proficient, made few errors and could communicate easily and fluently" (p. 2). Consequentially, Al-Jarf (2002) argued that both the CALL and the technological tools incorporated in writing lessons played crucial roles in enhancing struggling students' writing skills in ESL.

A third study by Chuo (2007) looked into the impact of WebQuest writing instruction on Taiwanese English learners' writing skills and performance. Similar to the study of Al-Jarf (2002), the participants in Chuo's study were also divided into two groups: an experimental group and a control group. Prior to the intervention, both the experimental and the control groups were provided with a pretest that included a writing task, so as to delineate the degree of impact the WebQuest would have, if any, on their performances following the implementation. Following the pretest, the intervention was executed. The subjects of the study attended two types of classes, a traditional one in which they were given traditional instruction without being exposed to any kind of web-based input, and a WebQuest instructional classroom which took place in a computer laboratory. In the laboratory class, students browsed through Internet resources incorporated in a WebQuest model consisting of five stages: an instructional stage, a task stage, a procedural stage, an organizational stage, and a concluding stage. The control group, on the other hand, was only exposed to a traditionally instructed classroom. They did not use a WebQuest or have any other type of technological input.

After a period of 14 weeks, a posttest was given to both groups. The findings revealed that the experimental group's writing competency greatly improved

compared to their performances in the pretest. The findings obtained in the study also revealed that the experimental group experienced less apprehension and anxiety in writing. It bears mentioning that although this finding points to the fact that the WebQuest tasks incorporated in the study had had a hand in enhancing the experimental group's writing performances, it also points to the positive effect traditional in-class instruction had on improving students' writing performances, as even the control group's writing showed improvement. As such, it becomes inevitable to question whether the WebQuest had any sound impact on improving students' writing skills, since there were other variables—the in-class instruction, for instance—that might have had an effect on improving students' writing. On the whole, however, the study's findings indicated that the students in the experimental group "had a favorable perception of the [WebQuest Writing Instruction] program, recognizing more advantages than disadvantages of language learning through web resources" (Chuo, 2007, p. 1).

Implications of CALL in ESL Writing Contexts

One of the main reasons word processors are considered valuable tools in computer-assisted ESL writing classes is because they are used so commonly; almost everyone is familiar with using computers in general, can engage in word processing, and is familiar with its various tools and gadgets (de Szendeffy, 2005). Therefore, teachers, in most cases, can assume that students are relatively familiar with utilizing word processors, consequently resulting in teachers spending less time in the classroom teaching students the basics of using word processors. The other reason why word processors are one of the most widely used tools in computer integrated language learning classrooms is their accessibility. Unlike many other computer and technological software, word processors do not need internet access in order to function. Additionally, in any running computer there has to be a word processor; therefore, teachers will not have to work as hard in making it available for the students as they do when dealing with other computer-mediated software programs.

Other than using word processors in implementing process writing approaches and their incorporated techniques of drafting, revising, and editing, de Szendeffy

(2005) suggests that teachers interested in employing process writing approaches for beginner students can ask them to modify a "rough draft" of an unmodified, unrevised, and unedited paragraph. Students will then have to use a word processor in identifying the mechanics, format, and grammatical errors it contains and try to correct them in order to produce a well written final draft. De Szendeffy indicates that this activity will not only provide students with opportunities to get acquainted with various tools installed in word processors, such as highlighting, dragging items, tracking changes, reviewing, deleting, cutting, and pasting, but it also serves as initial practice for students to get familiar with procedures of process writing, such as revising and editing.

Another useful application of CALL in writing classes is via emails and keypals. For example, Haley and Austin (2004) suggest that ESL teachers arrange with other language teachers to provide opportunities for their students to interact with one another. Haley and Austin also recommend that teachers arrange for their ESL students to interact with native speakers via e-mail. De Szendeffy (2005) observes that "the personal and informal form and authentic nature of email writing is more accessible to students, especially low level writers, than formal essay writing. Some keypals, furthermore, will continue to correspond beyond their assignments" (p. 65). As for the skills gained from such an activity, de Szendeffy asserts that students who engage in e-mail correspondence with keypals will get the opportunity to recognize the forms included in writing e-mails such as address, closure, e-mail related vocabulary items, and writing clearly and concisely.

Moreover, another method of incorporating computer technologies in ESL writing classrooms is for teachers to ask students to engage in WebQuests. According to Dodge (1995), a WebQuest is an "inquiry-oriented activity in which some or all of the information that learners interact with comes from resources on the Internet" (para. 2). Besides fostering writing skills, as observed by Chuo (2004), WebQuests assist in improving learners' skills in researching and gathering data and using the WWW. Having provided these implications, teachers should be cautious when providing students with such tools; they have to evaluate their appropriateness prior to implementing them, taking into consideration various factors and variables that would

determine their usefulness, such as proficiency level, age, cultural values, and even gender.

The CALL studies presented in this chapter mainly portrayed positive attitudes towards its incorporation in ESL writing context, while very little of its mishaps and ineffective qualities were expressed. That is why it is of a great necessity to thoroughly examine teachers' and students' attitudes of such incorporation, in order to provide palpable evidence to whether it is truly perceived positively by teachers and students, alike. My thesis study attempts to investigate this particular issue, as its primary goal is to look into teachers' and students' attitudes towards the incorporation of CALL in ESL writing classes. Also noted from the literature review is the lack of CALL studies conducted within the region of United Arab Emirates. As such, this thesis study attempts to take a step towards contributing to and expanding on this field.

CHAPTER 3

METHODOLOGY

Design of the Study

The elemental aim of this study was to explore the perceptions and attitudes of secondary- and university-level teachers and students in the United Arab Emirates towards the incorporation of computer-assisted language learning (CALL) in ESL writing classes. In addition, the study highlighted whether secondary- and university-level English language teachers integrate computer technologies in their writing classes. This thesis investigated teachers' reasons for incorporating CALL, as well as their justifications for not incorporating it, if they were found to refrain from incorporating it. In addition to that, the study also tried to examine secondary- and university-level students' attitudes towards the integration of CALL in English writing classes.

Moreover, the study also illustrated the similarities and differences in the ways teachers and students perceive the use of computer technologies in English language writing classrooms. As a means of addressing the investigations illustrated above, the following research questions were posed:

1. Do secondary- and university-level English language teachers in the UAE integrate computer technologies in their writing classes? If yes, how? If not, why not?

2. What are the attitudes of secondary- and university-level English language teachers and students in the UAE toward the integration of computer technologies in writing classes?

3. What are the similarities and differences in the ways teachers and students perceive the use of computer technologies in English language writing classrooms?

This research study encompassed both qualitative and quantitative methods of data collation. Quantitative data were gathered through two surveys designed and distributed to students and teachers separately (see Appendix A, B, and C). The surveys included Likert-scale statements through which the respondents had to rate

25

the level of their agreement to the presented statements in accordance with the following rating format: strongly agree, agree, uncertain, disagree, and strongly disagree.

The qualitative data, in turn, were obtained through open-ended questions that were provided at the end of the surveys in order to give the participants the opportunity to further comment on the topic at hand. In addition to that, semi-structured interviews, conducted with volunteering participants, also served as a means of providing qualitative data (see Appendix D and E). These interviews allowed the participants to put forth any additional comments and perceptions they had towards the use of computer technologies in ESL writing classes. Volunteers for the interviews were recruited through the circulated surveys, as at the end of the surveys a statement was provided that asked the surveyed participants to specify whether they would consent to being interviewed. Those who were in favor of being interviewed were asked to provide their names and contact numbers.

It is noteworthy to mention that instead of using the jargon term "CALL," the simpler term "computer technologies" was used in the surveys and interviews to make it comprehensible to all participating subjects. Therefore, for purposes of this study, the two terms are interchangeable.

Participants

The subjects of this study consisted of four groups of participants: university-level English language teachers, university-level English language learners, secondary-level English language teachers, and secondary-level English language learners.

The first group, university-level teachers, included 13 Arab and international native and non-native English language instructors—five from the USA, one from Pakistan, one from Britain, one from Iraq, one from Egypt, one from Iran, one from Poland, one from Tunisia, and one from Palestine. The participants in this group consisted of three male teachers and 10 female teachers. Their average years of experience in teaching was 16.1 years, one being the lowest and 41 the highest. As for their average years of teaching in the United Arab Emirates, it was 9.7 years, one

being the lowest and 28 the highest. Moreover, the majority of the participants in this group (10 out of 13) indicated that they had received special training and professional development in incorporating computer technologies in teaching. The majority of the participants in this group (eight out of 13) also stated that they were required by their institutions to incorporate CALL in teaching. Out of the 13 participants, seven indicated that they always used computer technologies. What is more, six out of 13 teachers evaluated their skills in using computer technologies as being "very good," three others indicated that it is "adequate," while the remaining three stated that it "needs improvement." The participants in this group were chosen from the American University of Sharjah IEP program, the American University of Sharjah's Department of Writing Studies, and the University of Sharjah's IEP program.

The second group, which consisted of 40 university-level English language learners, included students from various nationalities. The majority of the students (24 out of 40) were Emiratis. As for the rest of the study's subjects, two were Saudis, one was Syrian, one was Omani, one was Chinese, one was from Djibouti, one was Sudanese, one was Kuwaiti, one was from Iran, and the remainder opted not to disclose their nationalities. None of the participants in this group indicated that their first language was English. Whereas the majority of the participants in this group reported that they had been learning English for 12 years, there were some students who indicated that they had begun learning it only recently. For instance, one student indicated that he had been learning English for six years, while another indicated that he had been learning it for the past three years. The ages of the participants in this group ranged from 17-23 years old. Out of 40 students, 20 indicated that they "usually" use computers and laptops, while 10 out of 40 indicated that they sometimes use them. As for their skills in using computer technologies, 15 out of 40 thought that their skills are "very good," 11 of them indicated that their computer skills are "excellent," while another 11 thought that they are "adequate." The participants from the second group were chosen from the American University of Sharjah IEP program, and the University of Sharjah's IEP program.

The third group consisted of 10 Arab and international male and female secondary-level teachers. Of the ten participants, four were Egyptians, one Syrian,

one Palestinian, one Pakistani, and two Tunisians. The participants comprised five male and five female teachers. Their accumulative average years of teaching experience was 18.8 years, while their accumulative average teaching years in the UAE was 14.9 years. Six out of 10 of them indicated that they had received professional development in incorporating computer technologies in teaching. Similar to the first group, the majority of the participants in this group (nine out of 10) also indicated that they are required by their institutions to incorporate computer technologies in their teaching plans. Moreover, the majority (six out of 10) of the participants in this group indicated that they always use computer technologies. Also, six out of 10 of them seem to possess "very good" skills in using computer technologies.

The participating population of the fourth and final group consisted of 59 students, divided into 27 male and 32 female students, in grades 10, 11, and 12. The students had all indicated that they were Emirati nationals. Their ages ranged from 15 to 17. Moreover, all of the participants in this group pointed to Arabic as being their first language. Their years of studying English as a second language in school ranged from 10-13 years. The majority of the students in this group (37 out of 59) indicated that they "usually" use computers. Also, more than half of them indicated that their skills in using computer technologies are "excellent." The participants from the third and fourth group were selected from Waset Model School for Higher Education (Girls) and Omar Bin Al Khatab Model School for Boys (see Table 1).

My justification for choosing government schools over private schools is because they are regularized by the Ministry of Education, which constantly supervises them and requires a standardized format in teaching their students. As a result, I would, to a degree, control the variable of working with different contexts. Also in an attempt to control variables, I chose two private universities that are closest in context, the American University of Sharjah and University of Sharjah. While at the offset of the research I intended to conduct my research in public universities, the prolonged procedure and the numerous requirements that were asked to be met by said universities prevented me from conducting my research there. Therefore, for

28

reasons of convenience, primarily, the study took place in private universities instead of public ones.

Table 1: *Demographics of the Participants*

Locations	Number of Participants			
	Female Teachers	Male Teachers	Female Students	Male Students
Universities	10	3	30	10
Secondary Schools	5	5	32	27
Total	23		99	
Total Number of Participants = 122				

Locations

The research study took place in the following locations: The American University of Sharjah's Intensive English Program, The University of Sharjah's Intensive English Program, Waset Model School for Higher Education (Girls) and Omar Bin Al Khatab Model School for Boys. Owen, Young, and Compton (2008) describe,

> For students entering a tertiary educational institution, writing is an essential skill. In an academic environment and later in a career, being able to communicate ideas through the written medium is crucial for effective learning, the building of knowledge, and the expression of opinions. As such, the goals of any English language medium college preparatory programme include promoting critical thinking skills, improving writing proficiency, and enhancing the ability to communicate effectively in the second language. (p. 259)

The two university-level locations taking part in this study, The American University of Sharjah as well as the University of Sharjah, seem to hold the missions mentioned above in great value, as documented in their mission statements.

The American University of Sharjah IEP and Department of Writing Studies

The American University of Sharjah's (AUS) IEP is a language center that offers students English language skills that will assist them in passing the Test of

English as a Foreign Language (TOEFL). Because English is the language of instruction in AUS, students have to attain a score of 530 paper-based and 78 internet-based to be able to enroll in their selected majors. Students who do not attain such scores are then placed in the university's IEP program. The English courses that are offered in the IEP program consist of skills such as reading, writing, grammar, listening, and TOEFL training. All of these skills are taught throughout the IEP program, which constitutes five levels.

The 2010-2011 AUS undergraduate catalog explains that the Department of Writing Studies at the American University of Sharjah provides students of all majors with foundational writing courses. The purpose of this department "is to provide students with the academic language, critical thinking and rhetorical foundations essential to writing and reading successfully in a university environment" (p. 102). Instructors in the Department of Writing Studies provide students with "instruction [that] combines reading and writing with the grammar, vocabulary, and organizational skills necessary to [help them] proficiently present academic materials in the various rhetorical genres of writing across the curriculum" (p. 102).

The University of Sharjah IEP

Similar to The American University of Sharjah's IEP program, the Intensive English Program at the University of Sharjah is a language institution that offers students English skills that consist of reading, writing, listening, speaking, and grammar. It is structured around four levels, one General English Program and three Intensive English Program levels. However, unlike the American University of Sharjah, students enrolled in University of Sharjah's IEP can opt to enroll either in the IELTS or in the TOEFL program. In order to be able to matriculate in the degree programs and majors of their choices, students have to achieve either a 500 TOEFL score or an IELTS Band score of five as a minimal requirement.

Secondary Government Model Schools

The two other locations chosen for this research investigation were the Waset Model School for Higher Education (Girls) and Omar Bin Al Khatab Model School

for Boys. Model schools are a form of public schools in the UAE which are exclusively open to UAE nationals. While both regular public schools and model schools are supervised by the Ministry of Education, and share similar curriculum plans, and have to follow similar rules and compliances, they are not entirely similar. For one thing, admission to Model schools is not free. Students have to pay a relatively small tuition fee to be enrolled. Also, new enrollees to Model schools have to sit for English, Arabic, and Mathematic exams before being admitted. As part of model-school policies, only those who attain a score of 80% and above will be eligible for enrollment. It is worth noting that test-takers consist of students coming from other types of governmental schools and private schools; students transferring from other model schools do not sit for this test. Model schools are also known for encompassing well-maintained facilities that might not be available in regular public schools. Among these facilities are computer laboratories with internet access and relevant computer technologies that are made available in the classrooms and various resource rooms.

Development of the Instruments

Surveys

As a method of obtaining quantitative and qualitative data, survey instruments were developed to be completed by the designated participants. The majority of the survey statements and questions stemmed from the research questions, while the rest were developed in accordance with thoughts that were reported in relevant literature and published research studies. The surveys that were distributed to secondary-level students were translated into Arabic, with the help and supervision of two Masters of Translation students and one veteran Arabic teacher, in an attempt to ensure the validity and reliability of the findings, and as an attempt to make the survey clear and comprehensible to all participants. The surveys, both the teachers' as well as the students', constituted three sections (see Appendix A, B, and C). The first section of the surveys included demographic questions, such as gender, age, nationality, educational level, etc. The second section consisted of Likert-scale ranking statements, organized as follows: 17 statements in the teachers' surveys and 18

statements in the students' surveys. These statements were developed to explore teachers' and students' perceptions of the integration of computer technologies in English writing classes. As stated earlier, those statements included five response categories: strongly agree, agree, uncertain, disagree, and strongly disagree.

Furthermore, the third section of the surveys contained several open-ended questions–three in the students' surveys and four in the teachers'–so as to provide qualitative data concerning the participants' views of the integration of computer technologies in writing classes. The statements specifically asked the participants to write additional comments they had regarding the use of computer technologies in writing classes, to specify uses of computer technologies that they thought are useful, to specify uses of computer technologies that they have found to be effective and ineffective, and to explain the reservations, if any, they had towards the integration of computer technologies in English writing classes. It should be noted that the grammatical errors and misspellings that occurred in the participants' written responses were not edited. Also worth mentioning is the fact that some secondary and university level students' Arabic responses to the open-ended question were literally translated into English by me.

Prior to carrying out the research, and in the period between July 13th 2010 and August 10th 2010, both teachers' and students' surveys were piloted with a convenient sample of teachers and students. The pilot study was conducted with four students, two secondary-level students and two-university level students, and four English language teachers. The reason I chose to pilot the study was to increase reliability and validity of the surveys, as well as to achieve quality and efficiency. Piloting the study helped me in modifying a few of the surveys' basic features. For instance, whereas the high school students' surveys were entirely translated into Arabic, I have decided after the piloting session to make it bilingual—to include the original English statements beneath the Arabic ones. This was done because through the participants' responses, I got the feeling that several assets of the statements were lost in translation. Moreover, though I originally intended to distribute English surveys to the university-level students, the instructor at the University of Sharjah's IEP recommended me to have them translated into Arabic as well, arguing that the

majority of the students in the lower IEP levels would not be able to thoroughly respond in English. As such, their surveys, like the ones circulated to the secondary-level students, were bilingual. What is more, an additional demographic question was added to the secondary- and university-level teachers' surveys, in which they were asked to verify whether they had had any special training or professional development in incorporating technology in teaching. Additional questions were also added to the teachers' and students' interview questions—questions 7, 8, and 9 in teachers' interview questions, and question 7 in the students' interview questions (see Appendix D and E).

As for the administration of the survey instruments, though I personally administered the surveys to one university and one secondary school, I did not obtain formal consent from the other secondary school's and the other university's administrations to personally conduct the surveys. However, I asked classroom teachers and instructors to help in administrating them. In order to ensure the reliability and validity of the surveys' results, I met with the classroom teachers and instructors beforehand to go through the surveys together. This was done in an attempt to ensure that the surveys would be clear and unambiguous to all participating respondents.

Interviews

As previously mentioned, interviewees were recruited through the surveys. The participating respondents indicated whether they would like to be interviewed and, accordingly, provided their names and contact numbers. As such, nine interviews were conducted with four teachers and five students. The interviewees were asked a number of semi-structured questions that further delved into their views and attitudes towards the integration of computer technologies in English language writing classes (see Appendix D and E). The interviews took about 15-30 minutes each, and most took place in the schools' and universities' facilities. Two interviews were conducted through the phone for convenience.

Through the interviews, I was able to gather comprehensive perceptions of students' and teachers' attitudes towards CALL in UAE schools and universities. The

participants did not only provide insights into their thoughts and attitudes, but they also provided insights into current pedagogy and practices that takes place in their writing classes. For instance, I received descriptions of how often teachers integrate computer technologies in writing classes, when students like for computer technologies to be integrated, and what some of the writing skills that teachers prefer to teach via computer technologies. Such discussions helped me in providing further insights on pedagogical implications and also helped in demonstrating some of the research's limitations, suggestions, and recommendations. It should be noted that I literally translated students' interview responses into English since their interviews were conducted in Arabic.

Data gathered from the surveys were analyzed to determine the frequencies and percentages of the responses. Since MS Excel was used in the calculation of the data, it is important to note that the numbers do not always add up to a 100%. This simply is because the decimals were rounded up to whole number, since including the decimals would be difficult to read and follow. Finally, qualitative data attained from the interviews and open-ended questions are analyzed descriptively and supported by the use of quotes.

CHAPTER 4

DATA ANALYSIS AND FINDINGS

The data analysis and findings of this study are presented in this chapter. The findings were attained from the participation of an accumulative number of 23 teachers, working in two secondary-level schools and two university-level institutions, out of which four were interviewed—one male and three female teachers. In addition to that, this chapter also illustrates the findings gathered from 99 students enrolled in various secondary- and university-level institutions. As for the students, five out of 99 were interviewed—one female and four male students. The study's results are sorted into three sections; each section addresses one of this study's research questions. The first section answers the first research question: Do secondary- and university-level English language teachers in the UAE integrate computer technologies in their writing classes? If yes, how? If not, why not? The second section covers the second research question which investigated the attitudes of secondary- and university-level English language teachers and students in the UAE toward the integration of computer technologies in writing classes. As for the third and final section, it answers the third research question: What are the similarities and differences in the ways teachers and students perceive the use of computer technologies in English language writing classrooms?

Teachers' Use of CALL in Writing Classes

Analysis of the quantitative and qualitative data pointed out that nearly all of the participating teachers in this study make use of CALL in their English language learning classes. This finding was realized through the study's instruments—the surveys and the interviews. The demographics present in the first part of the surveys helped in attaining this finding. In specific, these demographics asked the respondents to answer some questions. One question asked was "How often do you use a computer/laptop?" to which 13 out of 23 of the respondents indicated that they always do. Also, another demographic question that examined teachers' use of CALL in writing asked the participating teachers to specify whether they are required by their

35

institution's administration to use computer technologies in the classes they teach, to which 17 out of the 23 respondents indicated they are, in fact, required by their administration to incorporate them. Responses to a third demographic question, "Have you had any special training/professional development in incorporating computer technologies?" implied that the majority of the teachers had had some forms of professional development with regards to the implementation of computer technologies in teaching, as out of the 23 total participants 16 verified that they have indeed undergone some sort of training in its incorporation.

Additionally, responses to the Likert-scale survey statements also indicated that the majority of the teachers in this study use CALL in their writing classes. Specific Likert-scale statements that helped in reaching to this finding were statements 1, 8, 14, and 17, which all suggested that the majority of the teachers in this research study do implement CALL in their writing classes (see Appendix F and G). In addition, all of the open-ended questions that were entailed in the third part of the survey also pointed to this finding.

Furthermore, the interviews also pointed to the fact that the majority of the participating teachers incorporate CALL in their writing classes, as all four interviewed teachers, when explicitly asked if they use computer technologies in their writing classes, indicated that they often do. Since the majority of the teachers indicated being required by their institutions to use computer technologies in teaching writing, in the follow-up interviews I asked the teachers if they would have used them had they not been required, and they all indicated that they would have. In fact, one female interviewee said, "In my previous college where computers weren't very available, I used to drag in the projector." In comparison, a second female interviewee also reported that if it was not mandatory to use it, she would have still used it, as she mentioned, "Yes, if students were motivated by it, I would go for it." Another respondent remarked through the survey that they are not required to use computer technologies, "but we all do."

As for the second part of the research question, it examined how teachers–of those who agreed that they incorporate CALL when teaching writing skills–use these tools. Analysis of the qualitative data, from the interviews and the open-ended

questions of the surveys, illustrated that the majority of the teachers (8 out of 23) in this study use CALL in the pre-writing stages of writing to help students generate ideas concerning the intended topic. Some teachers further specified using prompts, such as video clips, youtube, pictures, and PowerPoint in this specific stage of writing. To illustrate, a male secondary-level teacher said in an interview that "using youtube or short video clips to introduce or reinforce a task is an effective way of provoking ideas for writing." Holding similar views, a female-secondary level teacher wrote that one specific use of CALL in writing that she has found to be effective is through "eliciting ideas, information from pictures, tables, diagrams, short interview, short videos."

Two participating teachers also pointed through the interview and survey questions to using CALL in fostering the sub-writing skill of researching and gathering information for a given writing topic. To emphasize this point, a female university-level teacher signified that she has found it effective to teach writing with CALL through tools that help students in "searching for research." Having said that, most teachers did not mention the specific CALL tools and programs that they use or encourage their students to use to research and attain essential information about certain topics. Although four teachers mentioned incorporating word processors, MS Word to be exact, in their writing classes, the majority of them did not provide additional information as to what writing purposes they believe these tools serve. Only one university-level teacher explained in the open-ended section of the survey that she encourages the use of "word processors for $2^{nd}/3^{rd}$ drafts."

In addition, one female university-level teacher and one male secondary-level teacher said they use desktop presentation tools, such MS PowerPoint and overhead projectors, in providing students with models and writing samples. For instance, the female teacher wrote in the open-ended section of the survey, "I love using the projector to demonstrate APA formatting skills, show samples of student work from semesters past." By the same token, the male teacher indicated that one specific use of CALL he implements is through "providing and analyzing the written model visually."

Also, three female university-level teachers explained using online discussion boards; however, the way in which they implemented discussion boards were not similar to one another. For example, one female teacher explained that she uses discussion boards "for submissions," through which students submit their written works electronically, while another indicated that she uses it to promote collaborative writing and journaling.

Other features of CALL that are being used by the teachers in this study include e-mails, PowerPoint presentations, online dictionaries, supplementary websites to the lessons, and writing evaluation software. It is worth mentioning that two of the teachers who professed experiencing the writing evaluation software, Criterion, held it in aversion. In answer to an interview question, a male secondary-level teacher exclaimed that it is "very difficult to assess students' writing [through criterion because] they are not personal." A female university-level teacher similarly argued, "We have [sent] 160 submissions to a grading program called CRITERION—the comments and suggestions for improvement are too difficult for my 001 students to benefit from."

In general, it seems that the majority of the teachers in this study made use of communicative and integrative CALL in their writing classes. While both university-level teachers and secondary-level teachers illustrated that they use programs that are relevant to communicative CALL, it was interesting to find that only university-level teachers indicated that they use integrative CALL tools.

Teachers' and Students' Attitudes

University-Level Teacher's General Attitudes

Results elicited from university-level teachers' surveys indicated that the 13 secondary school teachers in this group seemed to maintain overall well-disposed attitudes towards the integration of computer technologies in ESL writing classes. For instance, the first statement in the survey which sought to find out whether teachers use computer technologies to motivate their students revealed that 77% of the teachers strongly agreed or agreed. One female teacher indicated through the open-ended questions that it is a must to use computer technologies in order to mirror the dynamic

changes of the century. She wrote, "In today's day and age, I think using computer technologies help students because they are already typically very computer savvy, so it appeals to their learning interests." Another female teacher similarly wrote "We must use it because of today's world—it's a reality and it also saves time." Additionally, in a follow-up interview, a female teacher reported that she is in favor of integrating computer technologies in ESL writing classes because "it taps into students' learning preferences." As for teachers' successfulness in integrating computer technologies when teaching the skills of writing, 61% of the respondents in this group strongly agreed or agreed, while 31% were uncertain.

Another statement in the survey that looked into teachers' general attitudes towards the integration of computer technologies in teaching ESL writing was the 14th statement. This statement sought to unveil teachers' attitudes towards pen-and-paper writing activities, and whether they preferred to use them over computer-enhanced writing activities. Teachers' responses to this statement exhibited an assortment of varying attitudes, as 46% of the respondents agreed that they do in fact prefer to foster pen-and-paper writing activities over using computer technologies, while 8% of them were uncertain, and another 46% of them disagreed or strongly disagreed. One male teacher commented in the open-ended questions' section of the survey that computer technologies "should compliment, but never replace pen-and-paper writing activities." Also, a female teacher interviewee explained that for in-class writing activities, she prefers to foster pen-and-paper writing activities. She further described her inclination for reading students' handwriting. She explained that she thinks that "handwriting is very personal."

Moreover, in terms of university-level teachers' attitudes towards the unreliability of computer technologies, it was revealed that only 8% of the respondents strongly agreed, while 15% maintained uncertainty, and 77% disagreed or strongly disagreed. One respondent who seemed to agree with this statement, wrote that one of the ineffective qualities of computer technologies she has witnessed in her writing classes was the "Irreliability–disconnection of the current."

With regards to the participants' responses to statement 17, the findings showed that 31% of the teachers strongly agreed or agreed to facing difficulties in

teaching writing through the integration of computer technologies, whereas 61% of the responding teachers strongly disagreed or disagreed to having such difficulties (see Table 2).

Table 2: *University-level Teachers' General Attitudes*

No.	Statements	SA	A	U	D	SD
1.	I use computer technologies when teaching writing to motivate my students.	4 *31%*	6 *46%*	2 *15%*	1 *8%*	0 *0%*
8.	My attempts to integrate computer technologies when teaching writing have been successful.	2 *15%*	6 *46%*	4 *31%*	0 *0%*	1 *8%*
14.	I prefer to foster pen-and-paper writing activities than to incorporate computer technologies in the classroom.	0 *0%*	6 *46%*	1 *8%*	5 *38%*	1 *8%*
15.	I believe that computer technologies cannot be relied on.	1 *8%*	0 *0%*	2 *15%*	3 *23%*	7 *54%*
17.	I have some difficulties in applying computer technologies when teaching writing.	1 *8%*	3 *23%*	1 *8%*	5 *38%*	3 *23%*

University-level Teachers' Perceptions of the Advantages

Results attained from the university-level teachers' surveys, demonstrated that the majority of those teachers appeared to uphold positive attitudes towards the statements that dealt with the merits of incorporating CALL in ESL writing. For example, the results pointed out that 61% of the teachers strongly agreed or agreed to the statement "I think that exposing students to internet sources is a good way to provide written models." The participating teachers also seemed to think that the use of computer technologies in writing classes helped in promoting writing for authentic purposes, since more than three-quarters of them expressed their strong agreement or agreement. In an answer to an open-ended question, one university-level teacher wrote "Through computer technologies I…can encourage authentic writing." What is more, many of the respondents believed that the use of computer technologies in writing classes can boost low-achieving students' confidence in publishing their writing pieces, for 76% of them strongly agreed or agreed, 15% maintained uncertainty, and the remaining15% disagreed. Another statement that dealt with the merits of using computer technologies was statement 5. This statement sought to

reveal whether the teachers in this group thought that computer technologies can be helpful in promoting students to become autonomous learners. It was thus found that while 8% of them disagreed and 15% were uncertain, 77% of them strongly agreed or agreed.

As for computer technologies' effectiveness in helping students in researching for their written topics, the majority of the respondents in this group believed they are indeed effective, as 69% strongly agreed or agreed. In addition to that, nearly all of the teachers believed that the incorporation of computer technologies, word processors in specific, help students to better revise their written work, as 92% of them strongly agreed or agreed. In terms of computer technologies' impact on promoting collaborative writing, 69% of them strongly agreed or agreed. In fact, one respondent commented in the open-ended questions that "through computer technology I can motivate peer correction." Similarly, in a follow-up interview, a volunteering teacher explained that in the writing classroom, collaboration with peers would be very difficult without the use of computer technologies. She further elaborated that, in fact, "students often expect for computers to be used as a means for collaboration."

As for the statement "I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings," which happens to be among the statements that looked into the merits of using computer technologies, the majority of the responses were in agreement with the statement, as 85% of the respondents strongly agreed or agreed (see Table 3).

Table 3: *University-level Teachers' Perceptions of the Advantages*

No.	Statements	SA	A	U	D	SD
2.	I think that exposing students to internet sources is a good way to provide written models.	3 *23%*	5 *38%*	3 *23%*	1 *8%*	1 *8%*
3.	I believe that using computer technologies can promote writing for authentic purposes	4 *31%*	6 *46%*	3 *23%*	0 *0%*	0 *0%*
4.	I think using computer technologies can provide low-achieving students the confidence to publish their written work	1 *8%*	8 *62%*	2 *15%*	2 *15%*	0 *0%*
5.	I think that computer technologies can help students become autonomous learners.	1 *8%*	9 *69%*	2 *15%*	1 *8%*	0 *0%*
6.	I think incorporating computer technologies can help students in researching their written topics.	4 *31%*	5 *38%*	4 *31%*	0 *0%*	0 *0%*
7.	I think that the incorporation of word processors (e.g Microsoft Word) can help students to better revise their writing.	3 *23%*	9 *69%*	1 *8%*	0 *0%*	0 *0%*
9.	I think that the use of computer technologies can promote collaborative writing.	3 *23%*	6 *46%*	4 *31%*	0 *0%*	0 *0%*
10.	I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings.	4 *31%*	7 *54%*	2 *15%*	0 *0%*	0 *0%*

University-level Teachers' Perceptions of the Disadvantages

      The survey statements that dealt with the shortcomings of using computer technologies, received an assortment of incompatible responses from the participating university-level teachers. Whereas two of these statements received strong opposition, one was received with concurrence and another with incertitude. For example, the majority of the responding teachers seemed not to think that the integration of computer technologies in ESL writing classes would cause difficulties in classroom management, as only 15% agreed, whereas 69% of them disagreed or strongly disagreed. In fact, one of the interviewed teachers explained that she has never had problems with the use of computer technologies in writing classes. She further explained: "I have strategies to deal with these problems." She also thought that because students have a task to finish, they are often very involved in trying to complete that task. In addition to that, she also elaborated that she monitors her students while they are using computer technologies in her writing classes, and that is

probably why it is very unlikely for them to wander off task. Another interviewed female teacher similarly explained that it is very unlikely for her to face problems in classroom management when using computer technologies in her writing classes. She explained that even if students were to go off task to check other irrelevant websites, in the university where she works, it is very easy to block students' access to programs other than the one they are working with.

Similarly, the majority of the teachers also negated the concept of the integration of computer technologies in writing classes being a waste of time. To illustrate that, 84% of the teachers in this group strongly disagreed or disagreed. In fact, many teachers commented in the open-ended section of the survey that the use of computer technologies in writing classes actually helps in saving time. Two interviewed female teachers elaborated that only when the applied computer technologies fail to function in their writing classes, then it becomes a waste of time.

On the other hand, another statement that dealt with the drawbacks of the use of computer technologies in ESL writing classes was met with agreement, for it was disclosed that the majority of the teachers thought that students who are not adept with computer technologies will be at a disadvantage in computer integrated classes. This was illustrated through the following statistics: 62% of the teachers strongly agreed or agreed, 8% were uncertain, and 31% of them disagreed. One interviewed teacher explained that to her, this might be the only significant drawback of using computer technologies in the classroom. She explained that she has had a couple of experiences in which she had students who were not aware of very basic uses of computer technologies. In reference to such situations she has experienced, she exclaimed, "I felt bad!"

As for statement 12, it predominantly received different responses. To make a point in case, while 30% of the respondents strongly agreed or agreed that integrating computer technologies when teaching writing can make it easier for the students to plagiarize, the majority were either uncertain (38%,) or disagreed or strongly disagreed (31%) (see Table 4). In her response to an open-ended question, a female teacher wrote, "The worse thing [about using computer technologies in writing classes] is plagiarism. Too many students would rather cheat than write themselves."

Contradicting this statement, however, another respondent thought the use of computer technologies in writing classes "can help educators prevent plagiarism." Likewise, in an interview, one female teacher explained that it is very easy to "catch" students with low-level writing skills, "because it's so obvious," but with students with high-level writing skills, it is a little bit more difficult. Similarly, another interviewee expressed that with applications such SafeAssign and TurnItIn being used in the writing classes, students often opt not to plagiarize because they know that they would easily get caught by these available software programs (see Table 4).

Table 4: *University-level Teachers' Perceptions of the Disadvantages*

No.	Statements	SA	A	U	D	SD
11.	I think that the incorporation of computer technologies when teaching writing can lead to difficulty in classroom management.	0 *0%*	2 *15%*	2 *15%*	4 *31%*	5 *38%*
12.	I think integrating computer technologies when teaching writing can make it easier for my students to plagiarize.	2 *15%*	2 *15%*	5 *38%*	3 *23%*	1 *8%*
13.	I think that students who are not adept with computer technologies will be at a disadvantage in computer integrated classes.	4 *31%*	4 *31%*	1 *8%*	4 *31%*	0 *0%*
16.	I think the incorporation of computer technologies in the classroom can waste class time.	0 *0%*	1 *8%*	1 *8%*	5 *38%*	6 *46%*

Through the open-ended questions in the distributed surveys, the respondents illustrated some of their reservations about using computer technologies in their writing classes, as well as some specified uses of computer technologies that they have found to be ineffective. Two teachers indicated that the lack of available computer labs poses a problem for some teachers who need to incorporate computer technologies in their classes. For instance, one female teacher wrote, "[I have found it ineffective] only when I have not been able to access the technology when needed. This is usually due to too few computer labs available for classes at campus." Another female teacher similarly explained that "access to labs can be limited at times which is a problem." What is more, one male teacher described that his reservations towards incorporating computer technologies in writing classes stems from his observation

that his students do not enjoy its incorporation. He, in turn, commented, "My students in Level 1 and General English prefer the traditional way of teaching (TTT) as they come from public schools." Yet another female teacher demonstrated that her perceived ineffectiveness lies in her observations that students overuse these computer technologies. She elaborated that "students become lazy with spelling and grammar—rely on programs to correct errors." Also, one female teacher reported, "I don't have reservations, but I wouldn't want the class to be 100% focused on computer technology."

University-level Students' General Attitudes

　　The majority of the students in this group maintained overall positive attitudes towards the incorporation of computer technologies in writing classes. Among the most significant statements that looked into students' general attitudes were, 1, 15, and 18. The results suggested that the majority of the students were in favor of the incorporation of computer technologies in writing classes. For instance, of the 40 respondents, 87% of them strongly agreed or agreed that they enjoy using computer technologies in writing classes, while only 13% of them were uncertain and none of them indicated that they disagreed or strongly disagreed. What is more, 72% of the students strongly agreed or agreed that that they would want their English language instructors to use computer technologies more often in their writing classes.

　　Also, when asked to indicate whether they think computer technologies can or cannot be relied on, 20 out of 40 students disagreed or strongly disagreed, while 15 students indicated that they were not certain about this matter (see Table 5). As for students' positive attitudes depicted from the open-ended questions, they too have pointed to students' general positive attitudes. For example, one student wrote, "I'm with [using] computer technologies in English language writing classes." Another similarly stated, "Yes, it improve my writing English and I am with [using] the technologies."

Table 5: *University-level Students' General Attitudes*

No.	Statements	SA	A	U	D	SD
1.	I enjoy using computer technologies in writing classes.	10 *25%*	25 *62%*	5 *13%*	0 *0%*	0 *0%*
15.	I would like my professor to use computer technologies more often in our writing classes.	10 *25%*	19 *47%*	10 *25%*	0 *0%*	1 *3%*
18.	I think computer technologies cannot be relied on. ***1 response missing**	1 *3%*	3 *8%*	15 *38%*	13 *33%*	7 *18%*

University-level Students' Perceptions of the Advantages

  With regards to the university-level students' perceptions of the advantages of incorporating CALL in ESL writing classes, the majority of the participants tended to recognize some of its emphasized advantages. For example, through their responses to the Likert-scale statements, the participating population of university-level students reported that computer technologies played a major role in improving students' spelling and grammar skills, encouraging peer collaboration among students, promoting students to become autonomous learners, and fostering students to produce substantial amounts of high quality of writing. In fact, the elicited statistics showed that 81% of the students strongly agreed or agreed that the use of computer technologies in writing classes helps them with their grammar. In the survey's open-ended section, one student remarked, "I like to use [computer technologies] always in the classes to improve our grammar." Moreover, 33 out of 40 of the respondents signaled that the use of computer technologies in writing classes assist them in producing correctly spelled words. Moreover, in the open-ended questions' section in the survey, one student indicated that one particular use of computer technologies in her writing classes that she has found effective is in "its effect in helping students to recognize spelling mistakes." Similarly, 34 out of 40 students pointed out that the use of computer technologies can help them better edit their written work, while 35 out of the 40 respondents revealed that the use of word processing programs, such as Microsoft Word, helps them in revising their written pieces. One student indicated that she finds it particularly useful to use computer technologies in writing classes since "it helps us to write faster and correct errors." Likewise, another participating

student indicated that what is particularly effective in using computer technologies in writing classes is the ability to facilitate the editing and drafting process of writing: "It's good to improve our writing because in computer we can erase and rewrite." Another benefit of the use of CALL in writing classes that the students recognized was CALL's effect in helping students to brainstorm for the topics they intend to write about, as 29 out of 40 students maintained that this was so.

As for computer technologies' effect in providing students with the confidence to publish their written work, 68% of the students strongly agreed or agreed that this particular feature of computer technologies is beneficial. Also, when asked to respond to the statement that dealt with students' confidence about writing in English when using computer technologies, it was found that a little over half of the students in this group testified to this belief, as 58% of the students strongly agreed or agreed, 33% maintained uncertainty, and only 11% of them disagreed or strongly disagreed. What is more, one female surveyed student illustrated that one specific use of computer technologies in writing classes "increasing my confidence to write in English."

About three-quarters of the respondents (29 out of 39) disclosed that they thought the use of CALL in ESL writing classes is a good asset in driving them to become independent learners. As a matter of fact, in a follow-up interview, one respondent indicated that the use of computer technologies in writing classes fosters students to become independent learners. He further explained that instead of relying on the teacher to answer their inquiries, students can use the computer to look for a certain spelling, or a specific word or a synonym. He elaborated that this, in turn, also saves classroom time.

Whereas the above illustrated statistics predominantly denoted students' agreement, statements 10, 11, 12, and 13 received discrepant attitudes from the students. For instance, in the statement "I tend to write more when I'm writing on the computer," while 15% of the students strongly agreed and 46% of them agreed on it being true, 23% of them were uncertain about it, while the rest tended to disagree and strongly disagree. Furthermore, the participants also provided diverse responses to statement 11, in which it asked the respondents to verify whether they tend to write faster when they are writing on the computer. Although 17% of them strongly agreed

and 35% of them agreed, 35% of them indicated they were uncertain and the rest tended to disagree and strongly disagree. One university-level student pointed out that she sometimes finds it ineffective to use computer technologies in writing classes because she's "a little slow" in typing. Another student suggested that they should first learn how to type fast, through programs such as "Typing Master," in order for the use of computer technologies in writing classes to be effective. Likewise, the statement "I think that using computer technologies can help me better collaborate with my peers in peer reviewing" received 33% strong agreement and 35% agreement, while the remaining 33% denoted students' uncertainty. One agreeing student commented in the open-ended questions of the survey that one of the great assets of having computer technologies in writing classes is that "it helps in cooperating" with others. As for the last statement in this classification, statement 13, 27 out of the 38 students strongly agreed or agreed that they tend to be more relaxed when they write on the computer, seven of them stated that they were not certain, while the rest disagreed and strongly disagreed (see Table 6).

Table 6: *University-level Students' Perceptions of the Advantages*

No.	Statements	SA	A	U	D	SD
2	I think that using computer technologies in writing can help me with my grammar.	9 *23%*	23 *58%*	7 *18%*	1 *3%*	0 *0%*
3	I think that using computer technologies in writing can help me with my spelling.	10 *25%*	22 *55%*	7 *18%*	1 *3%*	0 *0%*
4	I think using computer technologies in writing classes can help me brainstorm the topic I will be writing about.	6 *15%*	23 *58%*	10 *25%*	1 *3%*	0 *0%*
5	I think using computer technologies in writing classes can help me research the topic I will be writing about.	13 *33%*	18 *45%*	9 *23%*	0 *0%*	0 *0%*
6	I think computer technologies can give me the confidence to publish my written work.	7 *18%*	20 *50%*	11 *25%*	2 *5%*	0 *0%*
7	I think that using computer technologies in the writing class can help me become an independent learner ***1 response missing**	12 *31%*	17 *44%*	9 *23%*	0 *0%*	1 *3%*
8	I think that using computer technologies can help me better edit my written work.	13 *33%*	21 *53%*	5 *13%*	1 *3%*	0 *0%*
9	I think that using word processors can help me better revise my written work.	10 *25%*	25 *63%*	4 *10%*	1 *3%*	0 *0%*
10	I think that using computer technologies can help me better collaborate with my peers in peer reviewing.	13 *33%*	14 *35%*	13 *33%*	0 *0%*	0 *0%*
11	I tend to write faster when I'm writing on the computer.	7 *18%*	14 *35%*	14 *35%*	4 *10%*	1 *3%*
12	I tend to write more when I'm writing on the computer. ***1 response missing**	6 *15%*	18 *46%*	9 *23%*	3 *8%*	3 *8%*
13	I tend to be more relaxed when I'm writing on the computer. ***2 responses missing**	8 *21%*	19 *50%*	7 *18%*	2 *5%*	2 *5%*

University-level Students' Perceptions of the Disadvantages

Contrary to my expectations, it was surprising to see the low number of respondents who agreed with the statements that looked into computer technologies' downfalls. Out of the 40 respondents only 14 seemed to agree or strongly agree with the statement "I think integrating computer technologies in writing classes can make it easier for students to plagiarize." On the other hand, 11 students were uncertain and 15 other students disagreed or strongly disagreed. The same was found in the participants' responses to statement 17, which asked the students to affirm whether they think using computer technologies in writing lessons can distract them from

staying on task. An equal degree of agreement and disagreement were found, since 14 students agreed or strongly agreed, while a coinciding number of 14 other students disagreed or strongly disagreed. A number of 12 students elaborated in the open-ended section of the survey that one of the most significant downfalls of having computer technologies in writing classes is that it distracts the students from paying attention to the teachers. Several of these students elaborated that many students tend to log on "to chatrooms and Messenger Instant messaging" instead of focusing on their writing tasks. One female student wrote "Students would tend to visit irrelevant websites." What was most surprising about these two statements is that while they didn't receive much agreement from the students through the Likert-scale statement, the students did not shy away from highlighting those two practices as being ineffective through the open-ended questions (see Table 7).

Table 7: *University-level Students' Perceptions of the Disadvantages*

No.	Statements	SA	A	U	D	SD
16.	I think integrating computer technologies in writing classes can make it easier for students to plagiarize.	3 *8%*	11 *28%*	11 *28%*	9 *23%*	6 *15%*
17.	I think using computer technologies in the writing class can distract me from staying on task.	3 *8%*	11 *28%*	12 *30%*	8 *20%*	6 *15%*

Secondary-level Teachers' General Attitudes

Results indicated that the 10 secondary school teachers in this group seemed to generally uphold favorable attitudes towards the integration of computer technologies in writing classes. In response to the first statement in the survey, 70% of the secondary teachers strongly agreed or agreed that they use computer technologies as motivational tools in ESL writing classes. One male teacher illustrated through the open-ended questions of the surveys that "using ICT technologies facilitates the introduction of topics and motivates Ss to write." Another respondent similarly wrote, "Using computers attracts students' attention."

In terms of teachers' successfulness in integrating computer technologies when teaching writing, more than half of the participating teachers tended to think

that their attempts in incorporating computer technologies bore fruitful results, as 70% of them strongly agreed or agreed. As for their attitudes towards pen-and-paper writing activities, more than half of the respondents (60% disagreed or strongly disagreed) expressed their preferences towards using computer technologies in writing classes over pen-and-paper activities. In addition, responses to statement 15 also revealed that more than half of the participating secondary-level English teachers did not think that computer technologies are unreliable, since 60% of them disagreed or strongly disagreed. However, one female teacher remarked that a specific use of computer technologies she has perceived to be ineffective is when "sometimes computers don't work for one reason or another." A similar percentage of teachers indicated that they do not face difficulties in applying computer technologies when teaching writing (see Table 8).

Furthermore, just as university-level teachers' responses to some of the open-ended questions accentuated their overall supportive attitudes towards the integration of computer technologies in ESL writing classes, so too did secondary-level teachers' responses. For instance, one female teacher wrote, "It helps a lot," while another indicated that "using computers in English language writing classes can be of great use for students. Their writing can be more academic by using references or checking ideas and structures." Contemplating CALL's effectiveness in writing classes, one male teacher demonstrated that though he was in favor of the use of computer technologies in writing classes, he still believed that "too much of anything gives bad results." Therefore, he called for a moderate use of computer technologies.

Table 8: *Secondary-level Teachers' General Attitudes*

No.	Statements	SA	A	U	D	SD
1.	I use computer technologies when teaching writing to motivate my students.	*3* *30%*	*4* *40%*	*3* *30%*	*0* *0%*	*0* *0%*
8.	My attempts to integrate computer technologies when teaching writing have been successful.	*1* *10%*	*6* *60%*	*3* *30%*	*0* *0%*	*0* *0%*
14.	I prefer to foster pen-and-paper writing activities than to incorporate computer technologies in the classroom.	*0* *0%*	*3* *30%*	*1* *10%*	*5* *50%*	*1* *10%*
15.	I believe that computer technologies cannot be relied on.	*0* *0%*	*2* *20%*	*2* *20%*	*2* *20%*	*4* *40%*
17.	I have some difficulties in applying computer technologies when teaching writing.	*0* *0%*	*1* *10%*	*3* *30%*	*5* *50%*	*1* *10%*

Secondary-level Teachers' Perceptions of the Advantages

The majority of the surveyed secondary-level teachers seemed to express favorable attitudes towards the advantages of using computer technologies in writing. This is exemplified in teachers' responses to statements 2, 3, 4, 5, 6, 7, 9, and 10. For example, in their response to statement 2, which asked the teachers to specify whether they thought that exposing students to internet sources is a good way of providing written models, 90% of them strongly agreed or agreed. Additionally, nearly all of the participating teachers (30% strongly agreed and 60% agreed) demonstrated their beliefs that computer technologies' in promote authentic tasks in ESL writing, similar percentage of teachers also thought that computer technologies can help students become autonomous learners. Also, a little less than three-quarters of the respondents also believed that the use of computer technologies in writing classes can boost low-achieving students' confidence in publishing their writing pieces. As for computer technologies' effectiveness in helping students in researching for their written topics, the majority of the respondents in this group believed that they are indeed effective, as 90% strongly agreed or agreed. What is more, three-quarters of those teachers also believed that the incorporation of computer technologies, word processors in specific, help students to better revise their written work. Interestingly, while the majority of the teachers emphasized their usefulness, two teachers' responses to the open-ended question seemed to portray otherwise. For example, one male teacher thought that

"word processors auto check spelling, which hinders Ss improvement of their spelling skill." Also, another male teacher wrote that his only reservation in integrating computer technologies in writing classes is in "using online programmes that correct Ss work automatically."

In terms of computer technologies' impact on promoting collaborative writing, 78% of the teachers in this group strongly agreed or agreed with the statement. As for teachers' responses to the statement "I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings," the majority of the respondents (80%) strongly agreed or agreed. (see Table 9).

Table 9: *Secondary-level Teachers' Perceptions of the Advantages*

No.	Statements	SA	A	U	D	SD
2.	I think that exposing students to internet sources is a good way to provide written models.	*4* *40%*	*5* *50%*	*1* *10%*	*0* *0%*	*0* *0%*
3.	I believe that using computer technologies can promote writing for authentic purposes	*3* *30%*	*6* *60%*	*0* *0%*	*1* *10%*	*0* *0%*
4.	I think using computer technologies can provide low-achieving students the confidence to publish their written work	*3* *30%*	*4* *40%*	*1* *10%*	*2* *20%*	*0* *0%*
5.	I think that computer technologies can help students become autonomous learners.	*3* *30%*	*6* *60%*	*0* *0%*	*1* *10%*	*0* *0%*
6.	I think incorporating computer technologies can help students in researching their written topics.	*2* *20%*	*7* *70%*	*1* *10%*	*0* *0%*	*0* *0%*
7.	I think that the incorporation of word processors (e.g Microsoft Word) can help students to better revise their writing ***2 responses missing**	*3* *38%*	*3* *38%*	*2* *25%*	*0* *0%*	*0* *0%*
9.	I think that the use of computer technologies can promote collaborative writing. ***1 response missing**	*1* *11%*	*6* *67%*	*1* *11%*	*1* *11%*	*0* *0%*
10.	I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings.	*3* *30%*	*5* *50%*	*1* *10%*	*1* *10%*	*0* *0%*

Secondary-level Teachers' Perceptions of the Disadvantages

　　　　Similar to the results found in university-level teachers' and students' responses, secondary-level teachers also seemed to negate some of the shortcomings of using computer technologies in writing classes. For example, as opposed to what was anticipated, and as portrayed in statement 11, the majority of the responding teachers did not think that the integration of computer technologies in ESL writing classes would imperil classroom management, as only 10% agreed, while 80% of them disagreed or strongly disagreed. Additionally, when it came to the statement "I think the incorporation of computer technologies in the classroom can waste class time," the majority disagreed, since only 20% of them agreed, while 60% disagreed or strongly disagreed. While the responses to statements 12 and 13 did reveal the respondents' disagreement with the illustrated shortcomings of using computer technologies in writing classes, their responses were not as vividly pronounced as with statements 11 and 16, for the former statements tended to receive varying perceptions. To make a point in case, statement 12, which asked the respondents to certify whether they thought the implementation of computer technologies when teaching writing can make it easier for the students to plagiarize, received 40% strong agreement or agreement, 20% uncertainty, and another 40% of disagreement or strong disagreement. One of the teachers who seemed to agree with this statement indicated that some students tend to plagiarize in instances where computer technologies are implemented in the classroom. She wrote, "Some students just copy/paste." A similar case was found in the responses to the 13th statement. 30% of the respondents strongly agreed with the idea that the integration of computer technologies in writing classes would put students who are not adept with using these technologies at a disadvantage, while 20% maintained uncertainty and the remaining 50% registered their disagreement (see Table 10). However, no further explanation was provided by the teachers through the open-ended statements or the interviews.

54

Table 10: *Secondary-level Teachers' Perceptions of the Disadvantages*

No.	Statements	SA	A	U	D	SD
11.	I think that the incorporation of computer technologies when teaching writing can lead to difficulty in classroom management.	*0* *0%*	*1* *10%*	*1* *10%*	*6* *60%*	*2* *20%*
12.	I think integrating computer technologies when teaching writing can make it easier for my students to plagiarize.	*1* *10%*	*3* *30%*	*2* *20%*	*3* *30%*	*1* *10%*
13.	I think that students who are not adept with computer technologies will be at a disadvantage in computer integrated classes.	*3* *30%*	*0* *0%*	*2* *20%*	*5* *50%*	*0* *0%*
16.	I think the incorporation of computer technologies in the classroom can waste class time.	*0* *0%*	*2* *20%*	*2* *20%*	*5* *50%*	*1* *10%*

Secondary-level Students' General Attitudes

The majority of the students in this group maintained overall positive attitudes towards the incorporation of computer technologies in writing classes. The results depicted that the majority of the students were in favor of the incorporation of computer technologies in writing classes. For instance, of the 59 respondents, 88% of them strongly agreed or agreed that they enjoy using computer technologies in writing classes. In fact, as was the case with their teachers, it was depicted from the surveyed secondary-level students' responses to the open-ended questions of the surveys that the majority of them generally held favorable attitudes towards the incorporation of computer technologies in ESL writing classes. For example, one student wrote, "I think it is really good technologies to use it in the English class and especially at writing." Likewise, another student remarked, "I think using computer technologies is better, because it makes the English lesson exciting and fun." Yet, another male student described that "the step of inserting computer technologies in writing classes will be an important, a useful, and a necessary step." What is more, another male secondary-level student indicated in an interview that computer technologies should be used in "every lesson of grammar and paragraph writing to compensate for the lack of materials and resources in the textbook."

What is more, 81% of the students strongly agreed or agreed that that they would want their English language instructors to use computer technologies more often in their writing classes. Also, when asked to indicate whether they thought computer technologies could not be relied on, 65% of the students disagreed or strongly disagreed, 25% were uncertain, and only 5% of them agreed and another 5% strongly agreed (see Table 11).

Table 11: *Secondary-level Students' General Attitudes*

No.	Statements	SA	A	U	D	SD
1.	I enjoy using computer technologies in writing classes.	*20* *34%*	*32* *54%*	*6* *10%*	*1* *2%*	*0* *0%*
15.	I would like my professor to use computer technologies more often in our writing classes.	*32* *54%*	*16* *27%*	*8* *14%*	*1* *2%*	*1* *2%*
18.	I think computer technologies cannot be relied on.	*3* *5%*	*3* *5%*	*15* *25%*	*14* *24%*	*24* *41%*

Secondary-level Students' Perceptions of the Advantages

As for the participants' perceptions of the merits of incorporating CALL in ESL writing classes, the majority of the participants tended to recognize some of its significant advantages. For example, results attained from the Likert-scale responses illustrated that 73% of the students strongly agreed or agreed that the use of computer technologies in writing classes helps them with their grammar. In fact, one male interviewee explained that "computer technologies are very helpful in boosting grammar and vocab skills that are important in writing." Moreover, 80% of secondary-level students signaled that the use of computer technologies in writing classes assists them in producing correctly spelled words. Emphasizing this point, a male secondary student reported in an interview that "computer technologies improve writing styles and spelling, by seeing others students' writings." Another merit of integrating computer technologies in writing classes that the students recognized was their effect in helping students to brainstorm for the topics they intend to write about, as 69% of the respondents strongly agreed or agreed. For instance, one interviewee stated that the "best time to use computer technologies is when we want to brainstorm

for writing it makes learning fun. For example the teacher provide pictures on PowerPoint and asks us to write about what we see, it gives us an idea." As for statement 5, which looked into whether the students thought using computer technologies in writing classes can help them research the topic they will be writing about, it too received favorable attitudes, as out of the 59 respondents, 88% strongly agreed or agreed. To make a point in case, one male interviewee illustrated that "for example in autobiographies, google and facebook would provide materials and information for writing autobiographies." As for computer technologies' effect in providing students with the confidence to publish their written work, 66% revealed their strong agreement or agreement, and 34% their uncertainty. In addition to that, students' answers to the statement "I think that using computer technologies in the writing class can help me become an independent learner" illustrated that more than half of the students agreed, as 24% of them chose to check "Strongly Agree," and 42% "Agree." In a follow-up interview, one participant thought that the use of computer technologies in writing classes promotes autonomy, which, in turn, saves time: "[It] saves so much time, specially when a student has a question instead of wasting the class' time its better to just log on the computer and ask your question."

In terms of computer technologies' effectiveness in assisting students to edit their written work, 82% of the students strongly agreed or agreed, 12% were uncertain, and 7% disagreed. Similarly, statement 9 received overall assent from the participating students, because 97% strongly agreed or agreed that computer technologies, in particular word processors, are an important asset in encouraging students to revise their written work. In an interview, a male interviewee indicated, "Mostly it improves spelling, grammar, all by using Microsoft word." Likewise, the statement "I think that using computer technologies can help me better collaborate with my peers in peer reviewing" received 70% strong agreement or agreement. In an interview, one student suggested that "Facebook can be entertaining and helpful in some activities on Facebook, I can learn new vocabs and styles from looking at my peers' writings." Students' responses to the statement "I tend to write faster when I'm writing on the computer," disclosed that 85 % of the students strongly agreed or agreed. Furthermore, the participants also provided positive responses to statement

12, which asked the respondents to verify whether they tend to write more when they are writing on the computer. It was found that 73% strongly agreed or agreed. As for statement 13, 75% of the students strongly agreed or agreed that they tend to be more relaxed when they write on the computer. The last statement within this classification, which asked the students to state whether they tended to feel more confident about writing in English when they are using computer technologies, also received predominant agreement, for out of the 58 respondents, 78% strongly agreed or agreed (see Table 12).

Students' thoughts on computer technologies' effective use in writing classes were also depicted through their responses to the open-ended questions. More specifically, the majority of their responses were compatible with the statements illustrated above. For instance, 14 students indicated that they find it very useful when they use computer technologies in writing classes for researching about the topic they need. What is more, 15 of them also wrote that what is particularly useful about using computer technologies in writing classes is that it helps them with spelling, grammar, and vocabulary. Nine students demonstrated that using computer technologies in writing classes makes the process of writing in English easy and simple. Additional effectiveness of computer technologies in writing that was perceived by the students in this group includes helping the writing piece look neat and organized, giving students the confidence to write in English, making the writing lessons fun and exciting, attracting students' attentions, thus, helping them focus on the lesson, and encouraging students to write faster.

Table 12: *Secondary-level Students' Perceptions of the Advantages*

No.	Statements	SA	A	U	D	SD
2.	I think that using computer technologies in writing can help me with my grammar.	*14* *24%*	*29* *49%*	*15* *25%*	*1* *2%*	*0* *0%*
3.	I think that using computer technologies in writing can help me with my spelling ***1 response missing**	*17* *29%*	*30* *51%*	*10* *17%*	*1* *2%*	*0* *0%*
4.	I think using computer technologies in writing classes can help me brainstorm the topic I will be writing about.	*15* *25%*	*26* *44%*	*17* *29%*	*1* *2%*	*0* *0%*
5.	I think using computer technologies in writing classes can help me research the topic I will be writing about.	*30* *51%*	*22* *37%*	*6* *10%*	*1* *2%*	*0* *0%*
6.	I think computer technologies can give me the confidence to publish my written work.	*15* *15%*	*24* *41%*	*20* *34%*	*0* *0%*	*0* *0%*
7.	I think that using computer technologies in the writing class can help me become an independent learner	*14* *24%*	*25* *42%*	*19* *32%*	*1* *2%*	*0* *0%*
8.	I think that using computer technologies can help me better edit my written work.	*27* *46%*	*21* *36%*	*7* *12%*	*4* *7%*	*0* *0%*
9.	I think that using word processors can help me better revise my written work.	*31* *53%*	*26* *44%*	*1* *2%*	*1* *2%*	*0* *0%*
10.	I think that using computer technologies can help me better collaborate with my peers in peer reviewing.	*21* *36%*	*20* *34%*	*10* *17%*	*8* *14%*	*0* *0%*
11.	I tend to write faster when I'm writing on the computer.	*29* *49%*	*21* *36%*	*7* *12%*	*2* *3%*	*0* *0%*
12.	I tend to write more when I'm writing on the computer.	*22* *37%*	*21* *36%*	*12* *20%*	*4* *7%*	*0* *0%*
13.	I tend to be more relaxed when I'm writing on the computer ***3 responses missing**	*29* *49%*	*17* *29%*	*8* *14%*	*2* *3%*	*0* *0%*
14.	I feel more confident about writing in English when I'm using computer technologies ***1 response missing**	*27* *46%*	*19* *32%*	*9* *15%*	*3* *5%*	*0* *0%*

Secondary-level Students' Perceptions of the Disadvantages

Similar to university-level students' views, it was found that secondary-level students also seemed to not often agree with the statements that dealt with the drawbacks of incorporating computer technologies in writing classes. When asked whether they thought computer technologies in writing classes could make it easier for students to plagiarize, out of the 59 respondents, 19% strongly agreed or agreed, while 29% indicated that they were not certain, and 53% disagreed or strongly disagreed. However, through the open-ended questions, nine students indicated that

one of the specific ineffective aspects they have found with regards to the use of computer technologies in their writing classes is the fact that it makes it easy for the students to cheat. What is surprising, and maybe even confusing, is the fact that nine students indicated that in the open-ended section of the survey, while only eight students agreed or strongly agreed in the structured statements to the concept that plagiarism can pose a threat to the effective use of CALL in the teaching and learning of ESL writing.

Similar attitudes were projected towards statement 17, which asked the students to affirm whether they thought using computer technologies in the writing class can distract them from staying on task. The majority of the students appeared to disagree, as 56% disagreed or strongly disagreed, while 31% were uncertain, and only 13% strongly agreed or agreed. This, in turn, contradicted what the students stated in the open-ended questions. 15 respondents indicated that one of the ineffective uses of computer technologies that they have perceived in writing classes is its impact on distracting students from staying on task, as many students tend to wander off to irrelevant websites, instead of focusing on their tasks. Having said that, one hypothesis for the incompatibility in students' views might be attributed to the fact that while the statement in the survey was in the first person, students' responses to the open-ended questions were either provided in the third person or in the passive. This, in turn, might explain that while the respondents of the surveys do not get distracted, they have observed some of their peers and classmates who often do (see Table 13).

Additional ineffectiveness that the students in this group thought the use of computer technologies would cause in ESL writing classes included consuming the class's time since it takes the application some time to run, students' over dependence on correcting their grammar and spelling through applications such as Microsoft Word, illegible handwriting caused by students' dependence on using the computer for typing, unreliability of technologies since they can break down easily and thus may cause students' to lose their saved work, and boredom if technologies are always integrated in the same way.

Table 13: *Secondary-level Students' Perceptions of the Disadvantages*

No.	Statements	SA	A	U	D	SD
16.	I think integrating computer technologies in writing classes can make it easier for students to plagiarize.	*3* *5%*	*8* *14%*	17 29%	17 29%	14 24%
17.	I think using computer technologies in the writing class can distract me from staying on task.	*3* *5%*	*5* *8%*	18 31%	17 29%	16 27%

Comparison between Teachers' and Students' Attitudes

University-lever Teachers' and Students' Attitudes

For the most part, results obtained from students' and teachers' surveys showed that those university-level students' and teachers' attitudes were overwhelmingly in line with one another. For instance, with regards to computer technologies, effect in providing students with the confidence to write and publish their written work, 78% of the students and 70% of the teachers strongly agreed or agreed to computer technologies' ability in increasing confidence. In the same way, 68% of the students and 77% of the teachers thought that the incorporation of computer technologies in writing classes fosters autonomy and independent learning. Moreover, just as 74% of the students believed that computer technologies facilitate researching for a writing topic, so did 69% of the teachers. Also, both participants' results were parallel in relation to the statement that asked to verify whether they thought word processors were useful in revising a piece of writing, as 88% of the students and 92% of the teachers in this group tended to strongly agree or agree. What is more, in terms of the participants' agreement with whether computer technologies elevate collaborative learning in writing classes, 68% of the students and 69% of the teachers seemed to think they do. Unexpectedly, students' and teachers' were also in sync with regards to computer technologies' impact on plagiarism. Both parties seemed to think that computer technologies do not foster plagiarism; this was evident as only 35% of students and 31% of teachers strongly agreed or agreed. Furthermore, students' and teachers' views were also compatible with one another with regards to computer technologies' unreliability, as the majority of them disagreed and only 10% of the students and 8% of the teachers agreed or strongly agreed. It was interesting to

61

observe that there did not seem to exist any patent discrepancy in the perceptions of teachers and students in this group toward the integration of computer technologies in ESL writing classes (see Figure 2).

An additional finding to note is that both the teachers and students in this group were in favor of a moderate integration of computer technologies in their classes. For instance, one female university-level teacher wrote in the open-ended section of the survey, "I don't have reservations but I wouldn't ever want the class to be 100% focused on computer technology." In the same manner, a female university-level student described in an interview that she prefers a balanced use of computer technologies in her classes. She included that "computers shouldn't revolve around the class, and the class shouldn't revolve around the computer—so far I like the balance of using it in our classroom."

However, university-level teachers and students did seem to have opposing views with regards to the impact of the integration of computer technologies in issues of distraction and classrooms management. While 12 out of 40 of the students (30%) indicated through the open-ended statements that one disadvantage of the use of computer technologies in writing classes is mainly that it distracts students from staying on task and encourages them to wander off to irrelevant programs and websites, more than half of the teachers (69%) indicated that they had not experienced such mishaps in classroom management. In addition, while students were mostly concerned about the distractions computer technologies can cause when implemented in writing classes, the majority of the teachers were concerned about issues related to the availability of computers and computer labs when needed.

Another discrepancy found was in the way students and teachers in this group viewed some of the advantages of incorporating computer technologies in writing classes. For instance, whereas the majority of the students indicated through the open-ended statements and interviews that one of the advantages of incorporating CALL when learning writing skills lies in the fact that it helps them with language accuracy and writing mechanics, the majority of the teachers in this group indicated, through the interviews and the surveys' open-ended statements, that such tools are specifically

beneficial in that they tap into students' different needs and learning preferences, thus, motivating and stimulating them to learn.

To a large extent, there appeared to be some unity between the tools teachers in this group make use of in their writing classes, and the tools students want to be used. To illustrate, among the tools that teachers in this group use are, e-mails, MS PowerPoint, MS Word, discussion boards, online dictionaries, internet sources for researching, overhead projectors, and videos from online streaming websites. The tools that were recommended by students, similar to those indicated by the teachers, included e-mails, MS PowerPoint, Microsoft Word, dictionaries, internet websites for researching, and videos. However, unlike the teachers, the students did not mention tools such as discussion boards or overhead projectors; instead, they added tools that help with mastering typing on the computer, such as "Typing Master."

Figure 2: *Comparison of University-level Students' and Teachers' Attitudes*

Secondary-level Teachers' and Students' Attitudes

Largely, teachers and students in this group held similar attitudes towards the integration of computer technologies. Both the teachers and the students thought highly of the integration of CALL in ESL writing. To illustrate, 66% of the students and 70% of the teachers indicated that they agreed with computer technologies' effect in boosting students' confidence to write and publish their English writing pieces. In

addition, just as 88% of the students in this group believed that computer technologies help in researching for a particular writing topic, so did 90% of the teachers. Moreover, 69% of the students, as well as 78% of the teachers, thought that computer technologies, when implemented in writing classes, can foster collaborative writing. Also, as for the statement that asked the respondents to verify whether they thought computer technologies were unreliable, the majority of the participants, from both the teachers' and the students' samples, indicated that they disagreed, as only 10% of the students and 20% of the teachers agreed or strongly agreed.

However, there were some discrepancies found in the way secondary-level students and teachers perceived some of the survey's statements. For example, while 90% of the teachers agreed that the use of CALL in ESL writing classes encourage students to become autonomous learners, only 66% of the students appeared to agree. Another discrepancy was found in the way students and teachers perceived word processors, for whereas 97% of the students agreed or strongly agreed that they helped in revising their writing, only 76% of the teachers were of the same opinion (See Figure 3).

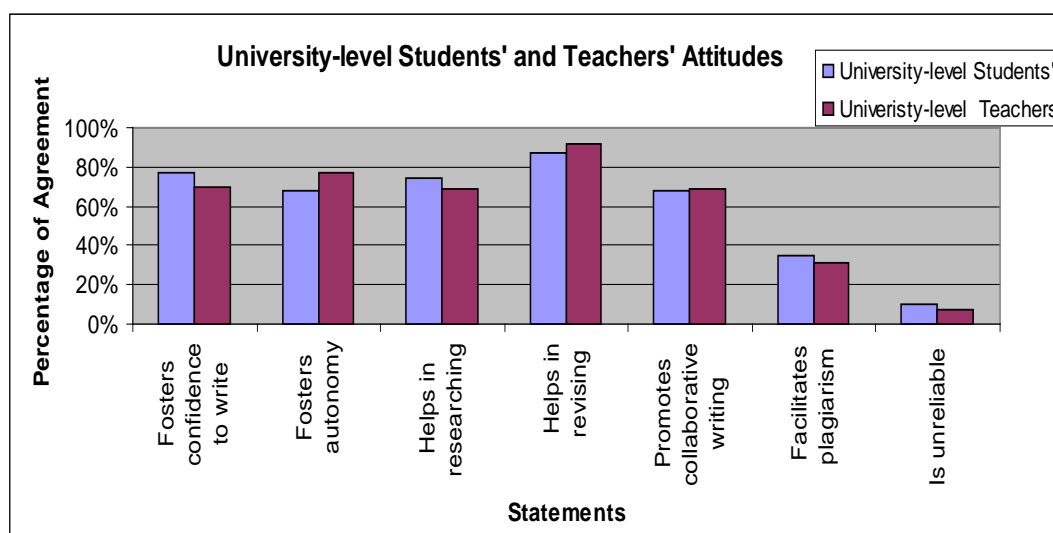Secondary-level teachers and students seemed to have opposing views with regards to the impact of the integration of computer technologies in issues of classroom management. While 15 out of 59 of the student respondents (25%) indicated that one disadvantage of the use of computer technologies in writing classes is in that it distracts students from staying on task and encourages them to wander to irrelevant programs and websites, the majority of the teachers (80%) indicated that such mishaps in classrooms management were not experienced.

Also, while some students indicated through the open-ended section of the surveys, as well as through the interviews, that cheating and plagiarism are among the ineffective aspects of using computer technologies in writing classes, only one female teacher indicated through the open-ended questions that such issues pose threats to using computer technologies in writing classes.

In addition, while some secondary-level teachers showed concern about students' reliance on word processors to auto correct language accuracy-related mistakes, the students, on the other hand, were very much in favor of such

applications, as they indicated through the open-ended statements and the interview questions that such programs helped them in improving their writing mechanics, such as spelling and grammar.

Just as university-level students and teachers called for a balanced use of computer technologies in writing classes, so too did secondary-level students and teachers. To exhibit this, one secondary-level male teacher wrote in an answer to an open-ended question, "Too much of a good thing gives bad results." While at the same time, one interviewed male secondary-level students said, "We shouldn't delve too much into using computers in the classroom." He further explained that "there are some instances where it is better not use computer technologies, like in important discussions."

Generally speaking, compatibility was found between the tools the teachers incorporate in their writing classes, with the tools students were keen on being incorporated. For instance, among the tools the teachers in this group use are videos from websites such as youtube, prompts and pictures through platforms such as MS PowerPoint, the internet, and search engines for researching, and commercial software targeted at improving students' English skills. The students were similarly keen on using computer technologies such as videos, the internet and search engines, as well as prompts and pictures through MS PowerPoint. However, they added on such as tools online dictionaries, word processors, and social networking tools, such as Facebook. Additionally, the students made no mention of commercial software, such as the ones suggested by teachers.

Figure 3: *Comparison of Secondary-level Students' and Teachers' Attitudes*
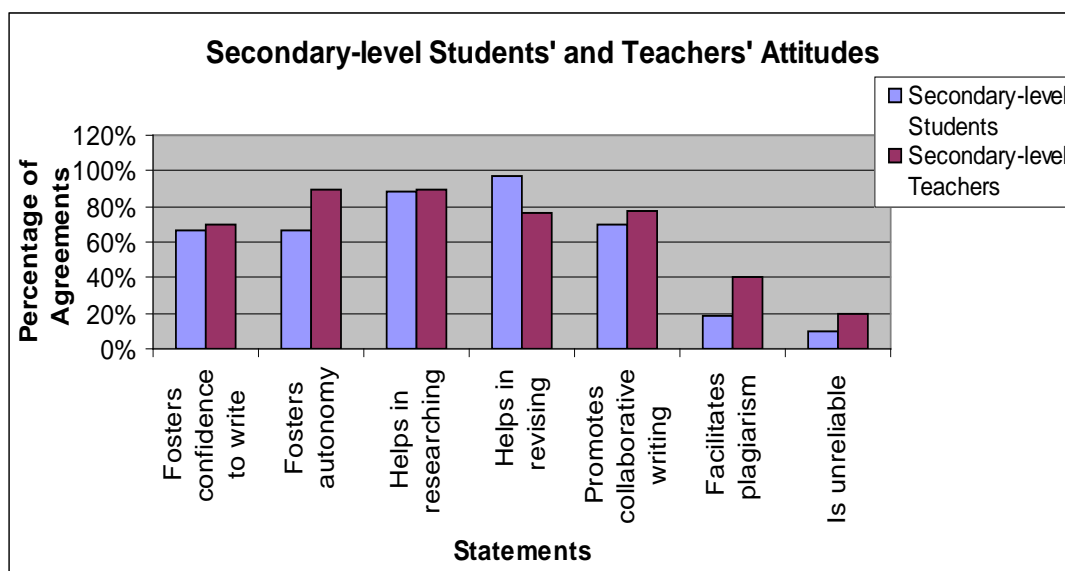
Comparison of University-level and Secondary-level Teachers' Attitudes

The findings revealed that both university- and secondary-level teachers projected similar attitudes towards the integration of CALL in ESL writing classes. As illustrated in Figure 4, the majority of the teachers in both groups displayed favorable attitudes towards the use of CALL in writing classes. Moreover, the only major difference was found in their responses to statements 2, 6, 13, and 17. For example, in statement 2, "I think that exposing students to internet sources is a good way to provide written models," while 90% of the secondary-teacher agreed or strongly agreed, only 61% of the university-level teachers agreed or strongly agreed. Similarly, whereas 90% of the secondary-level teachers believed that inclusion of computer technologies in writing classes can help students in researching their written topics, only 69% of the university-level teachers seemed to be of the same opinion. Additionally, when asked whether they thought students who are not adept with computer technologies would be at a disadvantage in computer integrated classes, 62% of the university-level teachers disclosed that they agreed or strongly agreed, while only 30% of the secondary-level teachers agreed or strongly agreed. Finally, while 31% of the university-level teachers admitted to having some difficulties in

applying computer technologies when teaching ESL writing, only a small percentage
(10%) of the secondary-level teachers agreed (see Figure 4).

Figure 4: *Comparison of Secondary- and University-level Teachers' Attitudes*
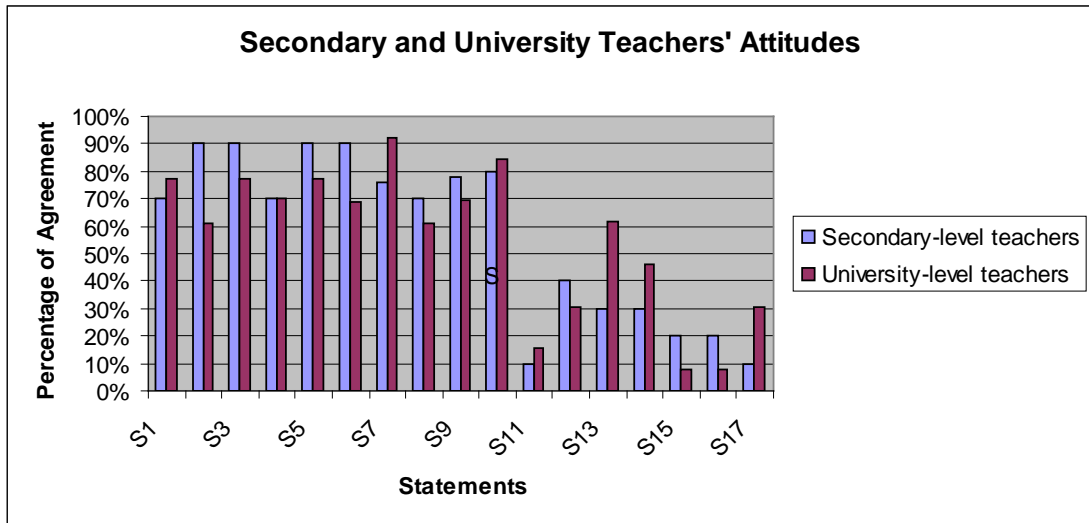
Comparison of University-level and Secondary-level Students' Attitudes

As illustrated in Figure 5, results extracted from university- and secondary-level students' surveys expressed, to a large extent, similar attitudes. However, there were two major discrepancies that were elicited from their responses that were unanticipated. For instance, one drastic difference was found in the respondents' perceptions towards statement 11. While 85% of secondary-level students thought they write faster when they write on the computer, only 53% of the university-level students were of the same mind. In addition, the participating students' responses to statement 14 also exhibited their varying attitudes. For example, whereas 78% of the secondary-level students expressed their confidence about writing in English when using computer technologies, only 58% of the university-level students yielded similar stances (see Figure 5).

Figure 5: *Comparison of Secondary- and University-level Students' Attitudes*
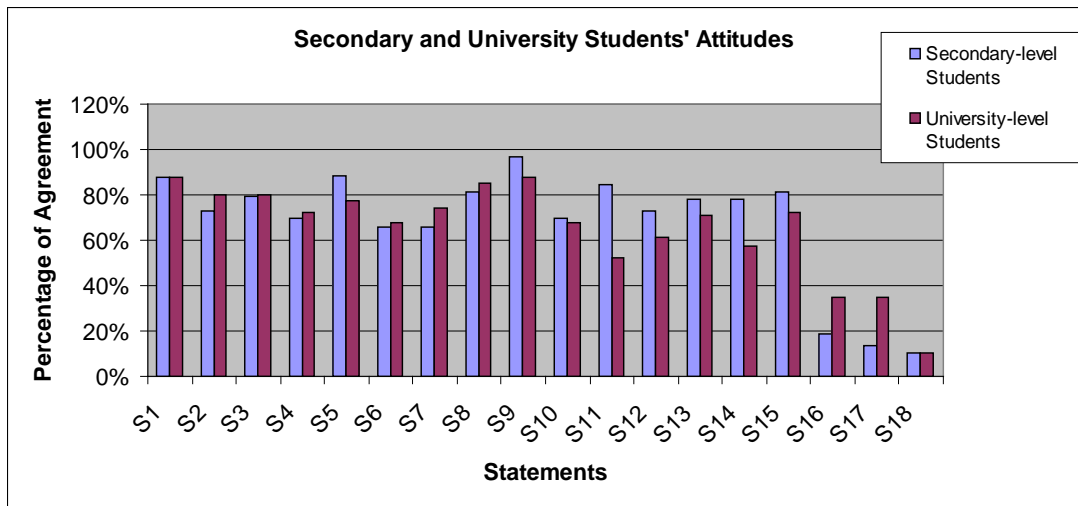
In conclusion, findings of this study revealed that both the teachers and the students had positive attitudes towards the integration of CALL in ESL writing classes. The findings also revealed that teachers' and students' attitudes were more similar than different. Both students and teachers recognized the benefits of integrating CALL in ESL writing. The following chapter summarizes the major findings of this study, lists some of its limitations, makes recommendations for further research, provides some implications for teachers and administrators, and includes my final thoughts on this study.

CHAPTER 5

CONCLUSIONS AND IMPLICATIONS

Summary of Findings

This chapter portrays concluding findings in relations to teachers' and students' attitudes towards the integration of CALL in ESL writing classes. First, a summarized description of the study's major findings is illustrated. Next, some of the study's limitations are called to attention. Then, directions for further research within the field of CALL are recommended. Based on the study's findings, some implications are suggested to teachers and stakeholders. Finally, my final thoughts on this thesis study are projected.

As mentioned previously, this thesis sought to investigate teachers' and students' attitudes towards the integration of CALL in ESL writing classes in UAE secondary schools and universities. The findings revealed that the majority of the participating teachers incorporate computer technologies when teaching writing skills to their students. Also, it was found that these teachers showed preferences in incorporating communicative and integrative types of CALL tools when teaching writing. What is more, results also disclosed that the majority of the participating subjects, both teachers and students, seemed to hold positive attitudes towards the integration of CALL in ESL writing classes. Both the teachers and the students favored a moderate integration of CALL. In addition, both teachers and students showed more similarities than differences in the way they perceive CALL, when integrated in writing classes. It was also interesting to note the compatibility between the types of CALL tools and programs the teachers actually implemented in their writing classes with the types of applications that students thought are desirable to be incorporated in their writing classes. Only one major difference was found with regards to the way teachers and students perceived the integration of CALL in writing classes; a difference was found with regards to students' and teachers' views on issues of classroom management and plagiarism. While some students believed that the incorporation of CALL could introduce problems of classroom management, such as

causing distractions and promoting plagiarism, the majority of the teachers strongly opposed such sentiments.

Limitations of the Study

Although the study did rely on unstructured or semi-structured interviews as a follow up with volunteering respondents to provide qualitative data, the bigger portions of data were extracted from quantitative surveys. As Gass and Selinker (2001) argue, the problem of relying on self-reports in research is that "responses are often colored by what respondents assume is desired by the investigator or by what is socially acceptable" (p. 353). That might be one reason why some of the students' responses with regards to touchy issues, such as plagiarism and distraction, seemed to contradict their responses to the open-ended section of the surveys.

Another limitation lies in the fact that the number of the teachers was relatively small compared to the number of students, as the number of participating teachers was less than half the number of the students. Having a bigger number of teacher respondents would have provided additional insights with regards to their attitudes and practices of CALL in ESL writing classes.

Since students in one of the IEP locations were placed in beginner's classes, the reason why four students did not opt to answer the open-ended section of the survey might have been due to having some difficulties in responding in English. While I don't know how it would have been possible to provide bilingual surveys to all students, as not all of them were Arabs, it would have been better to provide the Arab students with Arabic-English bilingual surveys.

Directions for Further Research

Since CALL is a very broad topic, it opens up opportunities for many studies to be conducted within its domain. Based on the findings reached in this study, further research is suggested to look into the impact of CALL on classroom management, since the participants in this study had discrepant views about this issue in particular. Also, future field studies ought to be conducted in order to observe how students and teachers deal with CALL in ESL writing classes while it is being processed. In

70

addition, since this study was conducted exclusively in model schools, a suggestion for further research is to compare and contrast the use of CALL across various government schools—Model schools, Madares Al Ghad schools, and regular government schools. Such research would provide in-depth insights into how CALL is viewed across schools with different availability and advancement of computer technologies.

Implications of the Study

In accordance with the results of this study, and since some of the teachers showed concern about the negative impact of the integration of CALL on students who are not adept with computer technologies, teachers are recommended not to formulate assumptions about students' familiarity with and attitudes towards CALL. Instead, teachers are advised to investigate their own students' familiarity with CALL prior to its implementation. Erben, Ban, and Castaneda (2008) argue that "one way to gauge students' computer literacy levels is to conduct a needs assessment at the beginning of the year…The results of the needs assessment will enable a teacher to better judge how much technology to infuse into a lesson" (p. 79). At the beginning of the school year, teachers can ask their students to answer short survey questions that ask about their attitude towards technology–what kinds of computer technologies they are familiar with, what types of computer technologies would they like to see incorporated in their language learning classroom, how often they would like their teachers to integrate such tools, etc. If found that students are not entirely familiar with some of the CALL tools planned to be implemented, teachers can dedicate some lessons to explain to the students about the programs that will be incorporated in order to help them become more aware about them. By doing so, teachers would be able to somewhat guarantee the efficiency and effectiveness of the implemented CALL.

Needs analyses should not only be targeted at learners by teachers, but they could also be targeted at teachers by school administrations and Ministries of Education. According to Browne and Garretiy (2004), when stakeholders and decision makers plan to implement CALL system in educational institutions they are recommended to conduct needs analysis and gather necessary data from teachers and

71

other faculty members throughout the implementation process. This "not only helps the CALL administrator to make better hardware and software choices but also leads to teachers' having a greater sense of investment in the facility with the result that it is much more likely to be used" (p. 172).

Some of the teachers in this study indicated that one of their reservations about using CALL in their writing classes is the unavailability of labs when needed. While the availability of computer labs might increase teachers' usage of CALL in their classes, for reasons related to finance and budget it is unrealistic to suppose that all schools have the luxury of this option. This does not confine these schools to simply lessening their incorporation of CALL; however, to compensate for the lack of computer labs such schools should incorporate schedules and timetables to book the labs that would enable equal opportunities for all teachers to make use of them.

Since some of the students pointed that one of the ineffective aspects of incorporating CALL in their writing classes is that such tools, especially ones related to the internet, easily distract them from staying on task. Teachers are thus recommended to monitor students' engagement with computer technologies. Abdul Razak and Embi (2004) mention, "Educators should be able to plan and integrate computer-assisted instruction into the language curriculum, manage students' data online and monitor students' use of computers for self-access work" (p. 10). If available, teachers can also make use of programs that can control and block students' access to features available on the computer.

What is more, since the majority of the participants in this study seemed to have positive attitudes towards the incorporation of CALL in ESL writing contexts, stakeholders and decision makers should encourage its implementation by providing state-of-the-art facilities and equipment in their schools and institutes of higher education, as well as by providing training and professional development for teachers and faculty members. Also, according to a study by Al Mekhlafi (2004), many teachers believe that their administration would enforce some sorts of limitations in using features of CALL, the internet in particular. It is understandable for school administrations to want to impose certain restrictions on teachers' incorporations of CALL in order to ensure the appropriateness of their materials as well as their

72

compatibility with the school's finances; however, they should give teachers free reign within these constrictions. It is worth stressing that although these implications were deduced from students' and teachers' attitudes towards the integration of CALL in ESL writing, they could still be applicable to any learning environment in which technologies in general are integrated in.

Final Thoughts

Although I do not want to seem to take a stand with regards to the issue of the integration of CALL in ESL writing contexts, as the purpose of this study is not to advocate its integration, but rather to present what teachers and students think of it, I am, nevertheless, inclined to agree with O'Conner and Gatton's (2004) sentiments when they argue that "the great advantage CALL has over conventional classroom-based activities is the sheer quantity of opportunities it offers to students to interact with the target language" (p. 222). I also happen to agree with another sentiment of theirs: "The attitude of teachers and students to personal computers and their use in language learning is central to the success of any CALL course" (p. 200). The findings of this study stresses the importance of taking students' and teachers' attitudes and perception into great consideration before making the decision of integrating any form of CALL in ESL writing classes.

Having said that, I also share the view of many researchers when they argue that the question of whether CALL should or should not be integrated in ESL classrooms is no longer a prevalent question, but rather that teachers and researchers should shift their focus to how such integration would be deemed effective in the various learning contexts they deal with (Blake, 2008; Raimes, 1991; Whithaus, 2004; Zepp, 2005).

Lastly, I believe that effective ESL writing lessons can take place in a learning environment that depends entirely on CALL, but I also believe that effective teaching and learning of ESL writing can happen with just chalk and a blackboard as teaching tools. Asher (2005) writes, "The secret of success is to decide which tool to select at a particular moment in the learning experience" (para. 12). I think, at the end of the day,

it is all a matter of purposeful integration and meeting lesson objectives that makes writing lessons effective experiences.

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Secondary and University-level Teachers' Survey

Survey of Teachers' Attitudes toward the Integration of Computer Technologies in English Language Writing Classes.

The purpose of this survey is to examine teachers' attitudes toward incorporating computer technologies in their writing language classrooms. The information that will be provided will be used for analysis as part of my thesis study. The data provided will remain confidential. This survey consists of (3) sections and (3) pages. Your time and effort are very much appreciated. Completion of this survey signifies consent for these responses to be used in this research.

Within this survey, the term "computer technologies" refers to anything from word processing tools (e.g., Microsoft Word), to computer telecommunication tools (e.g., email, chat, discussion boards, blogs, etc.), to classroom presentations (e.g., Microsoft PowerPoint), to the Internet infrastructure, and to commercial and multimedia authoring software (e.g., Hot Potatoes, MaxAuthor, HyperCard, Daedalus, etc.). When responding to the survey's statements, consider your use of any or all of these computer technologies.

Section One:

- Gender :

    ☐ Male   ☐ Female

- Nationality (Optional): _____

- Teaching Experience:_____

- Number of teaching years in the UAE: _____

- Classes you currently teach (please specify which grade(s)/level(s)):

    _____

- How often do you use a computer/laptop?

    ☐ Never   ☐ Seldom   ☐ Sometimes   ☐ Usually   ☐ Always

- Please describe your skill and knowledge in using computer technologies:

    ☐ Excellent   ☐ Very Good   ☐ Adequate   ☐ Needs Improvement   ☐ Poor

- Are you required by your institution's administration to use computer technologies in the classes you teach?

    ☐ Yes   ☐ No

- Have you had any special training/professional development in incorporating computer technologies?

    ☐ Yes   ☐ No
    If yes, please describe it_____

Please complete the information below. Tick (✓) the appropriate response for the statements 1-17.

SA=Strongly Agree;   A=Agree;   U=Uncertain;   D=Disagree;   SD=Strongly Disagree

	Statements	SA	A	U	D	SD
1.	I use computer technologies when teaching writing to motivate my students.					
2.	I think that exposing students to internet sources is a good way to provide written models.					
3.	I believe that using computer technologies can promote writing for authentic purposes.					
4.	I think using computer technologies can provide low-achieving students the confidence to publish their written work					
5.	I think that computer technologies can help students become autonomous learners.					
6.	I think incorporating computer technologies can help students in researching their written topics.					
7.	I think that the incorporation of word processors (e.g Microsoft Word) can help students to better revise their writing.					
8.	My attempts to integrate computer technologies when teaching writing have been successful.					
9.	I think that the use of computer technologies can promote collaborative writing.					
10.	I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings.					
11.	I think that the incorporation of computer technologies when teaching writing can lead to difficulty in classroom management.					
12.	I think integrating computer technologies when teaching writing can make it easier for my students to plagiarize.					
13.	I think that students who are not adept with computer technologies will be at a disadvantage in computer integrated classes.					
14.	I prefer to foster pen-and-paper writing activities than to incorporate computer technologies in the classroom.					
15.	I believe that computer technologies cannot be relied on.					
16.	I think the incorporation of computer technologies in the classroom can waste class time.					
17.	I have some difficulties in applying computer technologies when teaching writing.					

18. Please write any additional comments you would like to make regarding the uses of computer technologies in English language writing classes.

_____

_____

_____

19. Please specify uses of computer technologies in your writing classrooms that you have found effective.

_____

_____

_____

20. Please specify uses of computer technologies in your writing classes that you have found to be ineffective.

_____

_____

_____

21. Please explain the reservations, if any, you have toward the use of computer technologies in your language writing classes.

_____

_____

_____

Please supply the information below if you would like to be interviewed. The interview should take about *15-30 minutes* and will revolve around issues of incorporating computer technologies in language writing classes.

    ☐ Yes, I would like to be interviewed.

    If yes, Name:_____ Mobile:_____

    ☐ No, I would prefer not to be interviewed.

Secondary and University-level Students' Survey

Survey of Students' Attitudes toward the Integration of Computer Technologies in
English Language Writing Classes.

The purpose of this survey is to examine students' attitudes toward incorporating computer technologies in their writing language classrooms. The information that will be provided will be used for analysis as part of my thesis study. The data provided will remain confidential.

This survey consists of (3) sections and (3) pages. Your time and effort are very much appreciated. Completion of this survey signifies consent for these responses to be used in this research.

Within this survey, the term "computer technologies" refers to anything from word processing tools (e.g., Microsoft Word), to computer telecommunication tools (e.g., email, chat, discussion boards, blogs, etc.), to classroom presentations (e.g., Microsoft PowerPoint), to the Internet infrastructure, and to commercial and multimedia authoring software (e.g., Hot Potatoes, MaxAuthor, HyperCard, Daedalus, etc.). When responding to the survey's statements, consider your use of any or all of these computer technologies.

Section One:

- Gender:

  ☐ Male   ☐ Female   Nationality (Optional): _____

- Age: _____

- How many years did you study English in school: _____

- Your year in university/ school level: _____

- Your native language: _____

- How often do you use a computer/laptop

  ☐ Never   ☐ Seldom   ☐ Sometimes   ☐ Usually   ☐ Always

- Please describe your skill and knowledge in using computer technologies:

  ☐ Excellent   ☐ Very Good   ☐ Adequate   ☐ Needs Improvement   ☐ Poor

Please complete the information below. Tick (✓) the appropriate response for statements 1-18.

SA=Strongly Agree; A=Agree; U=Uncertain; D=Disagree; SD=Strongly Disagree

	Statements	SA	A	U	D	SD
1.	I enjoy using computer technologies in writing classes.					
2.	I think that using computer technologies in writing can help me with my grammar.					
3.	I think that using computer technologies in writing can help me with my spelling.					
4.	I think using computer technologies in writing classes can help me brainstorm the topic I will be writing about.					
5.	I think using computer technologies in writing classes can help me research the topic I will be writing about.					
6.	I think computer technologies can give me the confidence to publish my written work.					
7.	I think that using computer technologies in the writing class can help me become an independent learner.					
8.	I think that using computer technologies can help me better edit my written work.					
9.	I think that using word processors can help me better revise my written work.					
10.	I think that using computer technologies can help me better collaborate with my peers in peer reviewing.					
11.	I tend to write faster when I'm writing on the computer.					
12.	I tend to write more when I'm writing on the computer.					
13	I tend to be more relaxed when I'm writing on the computer.					
14.	I feel more confident about writing in English when I'm using computer technologies.					
15.	I would like my professor to use computer technologies more often in our writing classes.					
16.	I think integrating computer technologies in writing classes can make it easier for students to plagiarize.					
17.	I think using computer technologies in the writing class can distract me from staying on task.					
18.	I think computer technologies cannot be relied on.					

19. Please write any additional comments you would like to make regarding the uses of computer technologies in English language writing classes.

_____

_____

_____

20. Please specify uses of computer technologies in your writing classes that you have found effective.

_____

_____

_____

21. Please specify uses of computer technologies in your writing classes that you have found to be ineffective.

_____

_____

_____

Please supply the information below if you would like to be interviewed. The interview should take about *15-30 minutes* and will revolve around issues of incorporating computer technologies in language writing classes.

☐ Yes, I would like to be interviewed.

If yes, Name:_____ Mobile:_____

☐ No, I would prefer not to be interviewed.

Survey of Students' Attitudes toward the Integration of Computer Technologies in English Language Writing Classes.

تهدف هذه الاستبانة إلى دراسة موقف الطلاب إزاء إدخال تقنيات الحاسوب في حصص اللغة الانجليزية المخصصة للكتابة و من ثم سأقوم بتحليل المعلومات المستقاة من هذه الاستبانة كجزء من مشروع التخرج، وستبقى البيانات والمعلومات المقدمة سرية. تتضمن هذه الاستبانة من ثلاثة أجزاء في ثلاث صفحات، و نشكركم مسبقا على الجهد و الوقت اللذين ستبذلونهما في استكمال الاستبانة، كما أن استكمال هذه الاستبانة يدل على موافقتكم على استخدام إجاباتكم في هذا البحث.

إن مصطلح "تقنيات الحاسوب" في هذه الاستبانة ينسب إلى مختلف التقنيات سواء أكانت برامج معالجة الكلمات (مثل برنامج ميكروسوفت وورد) أو برامج و أدوات الاتصال عن بعد (مثل البريد الالكتروني، غرف الدردشة، منتديات النقاش، المدونات و غيرها)، أو العروض الصفية (مثل برنامج ميكروسوفت بوربوينت)، أو تركيبة الانترنت الأساسية، أو برامج تجارية و برامج متعددة الوسائط للتأليف (مثل Hot Potatoes, MaxAuthor, HyperCard, Daedalus). يرجى منكم أخذ مختلف هذه المفاهيم بعين الاعتبار عند إجابتكم الاستبانة.

الجزء الأول:

- الجنس   :

☐ذكر   ☐أنثى

- الجنسية (اختياري):_____

- العمر:_____

- كم سنة درست اللغة الإنجليزية في المدرسة :_____

- السنة الجامعية/المستوى التعليمي في المدرسة:_____

- اللغة الأم:_____

- ما مدى استخدامك للحاسوب أوالحاسوب المحمول

☐أبدا   ☐نادرا ☐ أحيانا ☐ عادة ☐ دائما

- ما مستوى مهاراتك و معرفتك في استخدام تقنيات الحاسوب:

☐ممتاز ☐ جيد جدا ☐ متوسط ☐ يحتاج إلى تحسن ☐ ضعيف

يرجى استكمال المعلومات التالية بوضع علامة صح في العمود الأكثر توافقاً مع البيانات 1-18.

البيانات		أوافق بشدة	أوافق	غير متأكد	لا أوافق	لا أوافق بشدة
1.	استمتع باستخدام تقنيات الحاسوب في حصص الكتابة. I enjoy using computer technologies in writing classes.					
2.	استخدام تقنيات الحاسوب في عملية الكتابة سيساعدني في فهم قواعد اللغة. I think that using computer technologies in writing can help me with my grammar.					
3.	استخدام تقنيات الحاسوب في عملية الكتابة سيساعدني في الإملاء. I think that using computer technologies in writing can help me with my spelling.					
4.	استخدام تقنيات الحاسوب في حصص الكتابة سيساعدني في التفكير والتخطيط للموضوع الذي سأكتب عنه . I think using computer technologies in writing classes can help me brainstorm the topic I will be writing about.					
5.	استخدام تقنيات الحاسوب في حصص الكتابة سيساعدني في عملية البحث عن الموضوع الذي سأكتب عنه. I think using computer technologies in writing classes can help me research the topic I will be writing about.					
6.	استخدام تقنيات الحاسوب سيمنحني الثقة في نشر كتاباتي. I think computer technologies can give me the confidence to publish my written work.					
7.	استخدام تقنيات الحاسوب في حصص الكتابة سيساعدني في أن أكون طالب علم مستقل. I think that using computer technologies in the writing class can help me become an independent learner					
8.	استخدام تقنيات الحاسوب سيساعدني في تصحيح كتاباتي بشكل أفضل. I think that using computer technologies can help me better edit my written work.					
9.	استخدام برنامج معالج النصوص (e.g. Microsoft Word) سيساعدني في عملية مراجعة كتاباتي بشكل أفضل. I think that using word processors can help me better revise my written work.					
10.	استخدام تقنيات الحاسوب سيساعدني في التعاون مع زملائي بشكل أفضل. I think that using computer technologies can help me better collaborate with my peers in peer reviewing.					
11.	أكتب بسرعة أكبر عند استخدام الحاسوب. I tend to write faster when I'm writing on the computer.					
12.	أكتب أكثر عند استخدام الحاسوب. I tend to write more when I'm writing on the computer.					
13.	أشعر براحة أكبر عند الكتابة على الحاسوب. I tend to be more relaxed when I'm writing on the computer.					
14.	أشعر بثقة أكبر في الكتابة باللغة الإنجليزية عند استخدام تقنيات الحاسوب. I feel more confident about writing in English when I'm using computer technologies.					
15.	أود أن يقوم أستاذي باستخدام تقنيات الحاسوب بشكل أكبر في حصص الكتابة. I would like my professor to use computer technologies more often in our writing classes.					
16.	استخدام تقنيات الحاسوب في حصص الكتابة يسهل عملية الغش على الطلبة I think integrating computer technologies in writing classes can make it easier for students to plagiarize.					
17.	استخدام تقنيات الحاسوب في حصص الكتابة يسبب لي عدم التركيز أو الانتباه. I think using computer technologies in the writing class can distract me from staying on task.					
18.	لا يمكن الاعتماد على تقنيات الحاسوب. I think computer technologies cannot be relied on.					

19. الرجاء قم بذكر أية تعليقات إضافية على استخدام تقنيات الحاسوب في حصص اللغة الإنجليزية للكتابة.

_____ _____

_____

_____ _____

20. الرجاء قم بتحديد بعض الاستخدامات الايجابية و الفعالة لتقنيات الحاسوب في حصص الكتابة.

_____

_____

_____

21. الرجاء قم بتحديد بعض الاستخدامات السلبية لتقنيات الحاسوب في حصص الكتابة.

_____

_____ _____

_____

في حال رغبتك بأن تجرى لك مقابلة، يرجى تعبئة البيانات التالية. ستستغرق المقابلة 15-30 دقيقة وستتناول مواضيع تتعلق بإدخال تقنيات الحاسوب في حصص الكتابة.

☐ نعم، أرغب بأن تجرى لي مقابلة.

الاسم ،إن كان الجواب بنعم _____ رقم الجوال _____

☐ لا، لا أرغب بأن تجرى لي مقابلة

Appendix D
Secondary and University-level Teachers' Interview Questions

No.	Questions
1	How often do you use computer technologies when teaching writing skills?
2	How often do you think computer technologies should be used when teaching writing? Why?
3	What do you think are some of the merits of incorporating computer technologies when teaching writing?
4	What do you think are some of the drawbacks of incorporating computer technologies when teaching writing?
5	How do you think computer technologies should be implemented in these classes?
6	What types of computer technologies, if any, do you incorporate when teaching writing?
7	Do you think you would have used computer technologies in your writing classes, if you weren't required by your school's administration to do so?
8	What skills and sub-skills of writing do you think are most suited to be taught using computer technologies?
9	What would say your overall impression of computer technologies in writing classes is?

Secondary and University-level Students' Interview Questions

No.	Questions
1	How often do you want your teachers to incorporate computer technologies in the writing classroom? Why? Why not?
2	What types of computer technologies, if any, would you like your teacher to incorporate?
3	What do you think are some of the merits of incorporating computer technologies in the writing classroom?
4	What kind of positive impact could the integration of computer technologies have on your writing skills?
5	What kind of negative impact could the integration of computer technologies have on your writing skills?
6	When would be the ideal time for your teacher to incorporate computer technologies when teaching writing? Why, Why not?
7	What would you say your overall impression/attitudes towards the use of computer technologies in writing classes is?

Appendix F
University-level Teachers' Survey Results

No	Statements	SA	A	U	D	SD
1	I use computer technologies when teaching writing to motivate my students.	4 31%	6 46%	2 15%	1 8%	0 0%
2	I think that exposing students to internet sources is a good way to provide written models.	3 23%	5 38%	3 23%	1 8%	1 8%
3	I believe that using computer technologies can promote writing for authentic purposes	4 31%	6 46%	3 23%	0 0%	0 0%
4	I think using computer technologies can provide low-achieving students the confidence to publish their written work	1 8%	8 62%	2 15%	2 15%	0 0%
5	I think that computer technologies can help students become autonomous learners.	1 8%	9 69%	2 15%	1 8%	0 0%
6	I think incorporating computer technologies can help students in researching their written topics.	4 31%	5 38%	4 31%	0 0%	0 0%
7	I think that the incorporation of word processors (e.g Microsoft Word) can help students to better revise their writing.	3 23%	9 69%	1 8%	0 0%	0 0%
8	My attempts to integrate computer technologies when teaching writing have been successful.	2 15%	6 46%	4 31%	0 0%	1 8%
9	I think that the use of computer technologies can promote collaborative writing.	3 23%	6 46%	4 31%	0 0%	0 0%
10	I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings.	4 31%	7 54%	2 15%	0 0%	0 0%
11	I think that the incorporation of computer technologies when teaching writing can lead to difficulty in classroom management.	0 0%	2 15%	2 15%	4 31%	5 38%
12	I think integrating computer technologies when teaching writing can make it easier for my students to plagiarize.	2 15%	2 15%	5 38%	3 23%	1 8%
13	I think that students who are not adept with computer technologies will be at a disadvantage in computer integrated classes.	4 31%	4 31%	1 8%	4 31%	0 0%
14	I prefer to foster pen-and-paper writing activities than to incorporate computer technologies in the classroom.	0 0%	6 46%	1 8%	5 38%	1 8%
15	I believe that computer technologies cannot be relied on.	1 8%	0 0%	2 15%	3 23%	7 54%
16	I think the incorporation of computer technologies in the classroom can waste class time.	0 0%	1 8%	1 8%	5 38%	6 46%
17	I have some difficulties in applying computer technologies when teaching writing.	1 8%	3 23%	1 8%	5 38%	3 23%

Appendix G

Secondary-level Teachers' Results

No.	Statements	SA	A	U	D	SD
1	I use computer technologies when teaching writing to motivate my students.	*3* 30%	*4* 40%	*3* 30%	0 0%	0 0%
2	I think that exposing students to internet sources is a good way to provide written models.	*4* 40%	*5* 50%	*1* 10%	0 0%	0 0%
3	I believe that using computer technologies can promote writing for authentic purposes	*3* 30%	*6* 60%	*0* 0%	*1* 10%	*0* 0%
4	I think using computer technologies can provide low-achieving students the confidence to publish their written work	*3* 30%	*4* 40%	*1* 10%	*2* 20%	*0* 0%
5	I think that computer technologies can help students become autonomous learners.	*3* 30%	*6* 60%	*0* 0%	*1* 10%	*0* 0%
6	I think incorporating computer technologies can help students in researching their written topics.	*2* 20%	*7* 70%	*1* 10%	*0* 0%	*0* 0%
7	I think that the incorporation of word processors (e.g Microsoft Word) can help students to better revise their writing *2 responses missing	*3* 38%	*3* 38%	*2* 25%	*0* 0%	*0* 0%
8	My attempts to integrate computer technologies when teaching writing have been successful.	*1* 10%	*6* 60%	*3* 30%	*0* 0%	*0* 0%
9	I think that the use of computer technologies can promote collaborative writing *1 response missing	*1* 11%	*6* 67%	*1* 11%	*1* 11%	*0* 0%
10	I think using computer technologies when teaching writing can help me provide thorough feedback on my students' writings.	*3* 30%	*5* 50%	*1* 10%	*1* 10%	*0* 0%
11	I think that the incorporation of computer technologies when teaching writing can lead to difficulty in classroom management.	*0* 0%	*1* 10%	*1* 10%	*6* 60%	*2* 20%
12	I think integrating computer technologies when teaching writing can make it easier for my students to plagiarize.	*1* 10%	*3* 30%	*2* 20%	*3* 30%	*1* 10%
13	I think that students who are not adept with computer technologies will be at a disadvantage in computer integrated classes.	*3* 30%	*0* 0%	*2* 20%	*5* 50%	*0* 0%
14	I prefer to foster pen-and-paper writing activities than to incorporate computer technologies in the classroom.	0 0%	3 30%	1 10%	5 50%	1 10%
15	I believe that computer technologies cannot be relied on.	*0* 0%	*2* 20%	*2* 20%	*2* 20%	*4* 40%
16	I think the incorporation of computer technologies in the classroom can waste class time.	*0* 0%	*2* 20%	*2* 20%	*5* 50%	*1* 10%
17	I have some difficulties in applying computer technologies when teaching writing.	*0* 0%	*1* 10%	*3* 30%	*5* 50%	*1* 10%

University-level Students' Survey Results

No	Statements	SA	A	U	D	SD
1	I enjoy using computer technologies in writing classes.	10 25%	25 63%	5 13%	0 0%	0 0%
2	I think that using computer technologies in writing can help me with my grammar.	9 23%	23 58%	7 18%	1 3%	0 0%
3	I think that using computer technologies in writing can help me with my spelling.	10 25%	22 55%	7 18%	1 3%	0 0%
4	I think using computer technologies in writing classes can help me brainstorm the topic I will be writing about.	6 15%	23 58%	10 25%	1 3%	0 0%
5	I think using computer technologies in writing classes can help me research the topic I will be writing about.	13 33%	18 45%	9 23%	0 0%	0 0%
6	I think computer technologies can give me the confidence to publish my written work.	7 18%	20 50%	11 28%	2 5%	0 0%
7	I think that using computer technologies in the writing class can help me become an independent learner *1 response	12 31%	17 44%	9 23%	0 0%	1 3%
8	I think that using computer technologies can help me better edit my written work.	13 33%	21 53%	5 13%	1 3%	0 0%
9	I think that using word processors can help me better revise my written work.	10 25%	25 63%	4 10%	1 3%	0 0%
10	I think that using computer technologies can help me better collaborate with my peers in peer reviewing.	13 33%	14 35%	13 33%	0 0%	0 0%
11	I tend to write faster when I'm writing on the computer.	7 18%	14 35%	14 35%	4 10%	1 3%
12	I tend to write more when I'm writing on the computer. *1 response missing	6 15%	18 46%	9 23%	3 8%	3 8%
13	I tend to be more relaxed when I'm writing on the computer. *2 responses missing	8 21%	19 50%	7 18%	2 5%	2 5%
14	I feel more confident about writing in English when I'm using computer technologies	7 18%	16 40%	13 33%	3 8%	1 3%
15	I would like my professor to use computer technologies more often in our writing classes.	10 25%	19 48%	10 25%	0 0%	1 3%
16	I think integrating computer technologies in writing classes can make it easier for students to plagiarize.	3 8%	11 28%	11 28%	9 23%	6 15%
17	I think using computer technologies in the writing class can distract me from staying on task.	3 8%	11 28%	12 30%	8 20%	6 15%
18	I think computer technologies cannot be relied on. *1 response missing	1 3%	3 8%	15 38%	13 33%	7 18%

Secondary-level Students' Survey Results

No.	Statements	SA	A	U	D	SD
1	I enjoy using computer technologies in writing classes.	20	32	6	1	0
		34%	54%	10%	2%	0%
2	I think that using computer technologies in writing can help me with my grammar.	14	29	15	1	0
		24%	49%	25%	2%	0%
3	I think that using computer technologies in writing can help me with my spelling *1 response missing	17	30	10	1	0
		29%	51%	17%	2%	0%
4	I think using computer technologies in writing classes can help me brainstorm the topic I will be writing about.	15	26	17	1	0
		25%	44%	29%	2%	0%
5	I think using computer technologies in writing classes can help me research the topic I will be writing about.	30	22	6	1	0
		51%	37%	10%	2%	0%
6	I think computer technologies can give me the confidence to publish my written work.	15	24	20	0	0
		25%	41%	34%	0%	0%
7	I think that using computer technologies in the writing class can help me become an independent learner	14	25	19	1	0
		24%	42%	32%	2%	0%
8	I think that using computer technologies can help me better edit my written work.	27	21	7	4	0
		46%	36%	12%	7%	0%
9	I think that using word processors can help me better revise my written work.	31	26	1	1	0
		53%	44%	2%	2%	0%
10	I think that using computer technologies can help me better collaborate with my peers in peer reviewing.	21	20	10	8	0
		36%	34%	17%	14%	0%
11	I tend to write faster when I'm writing on the computer.	29	21	7	2	0
		49%	36%	12%	3%	0%
12	I tend to write more when I'm writing on the computer.	22	21	12	4	0
		37%	36%	20%	7%	0%
13	I tend to be more relaxed when I'm writing on the computer * 3 responses missing	29	17	8	2	0
		49%	29%	14%	3%	0%
14	I feel more confident about writing in English when I'm using computer technologies *1 response missing	27	19	9	3	0
		46%	32%	15%	5%	0%
15	I would like my professor to use computer technologies more often in our writing classes *1 response missing	32	16	8	1	1
		54%	27%	14%	2%	2%
16	I think integrating computer technologies in writing classes can make it easier for students to plagiarize.	3	8	17	17	14
		5%	14%	29%	29%	24%
17	I think using computer technologies in the writing class can distract me from staying on task.	3	5	18	17	16
		5%	8%	31%	29%	27%
18	I think computer technologies cannot be relied on.	3	3	15	14	24
		5%	5%	25%	24%	41%

VITA

Mona Humaid Al Janahi was born in the United States of America, on September 1, 1986. She graduated from Zayed University, United Arab Emirates, in June 2008. She graduated from the college of Education with Honors with a BA in English Studies for Upper Elementary and Preparatory. Shortly after graduating, Mona decided to join the MA TESOL program at the American University of Sharjah in the United Arab Emirates, to prepare herself for a career in teaching English at institutes of higher education.

Mona is a member of TESOL Arabia. Her interests include teaching literacy, English literature, teaching with technology, and educational psychology.