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Adult ESL student perceptions on computer assisted language learning

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ADULT ESL STUDENT PERCEPTIONS ON COMPUTER
ASSISTED LANGUAGE LEARNING

by

Jillian Burrus

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University of Idaho, Moscow
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A thesis submitted in partial fulfillment
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ABSTRACT

**Adult ESL Student Perceptions on Computer
Assisted Language Learning**

by

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The purpose of this research study was to explore my adult English as a second language (ESL) student's experiences with technology as a method of improving English acquisition. The area of computer assisted language learning (CALL) is increasingly becoming important within the second language learning arena. As the expansion of available technology continues to increase, insight into opinions about the effectiveness of CALL and specifically those opinions of the actual users will be needed.

As an instructor of adult ESL students, my study focused on providing information about my student's use of technology for future personal classroom praxis. This research aimed at obtaining and analyzing actual CALL user's opinions by asking the following questions: (1) Do adult ESL students enjoy using technology as a method of English language acquisition? (2) Are computers and other online technological resources useful or constraining to adult students? and (3) Which programs and software are adult ESL students choosing to use for English language learning and their reasons for this selection?

The most substantial findings of the study were that my adult ESL students enjoy using technology and are comfortable doing so as a method of English acquisition.

TABLE OF CONTENTS

ABSTRACT	iii
CHAPTER 1 INTRODUCTION	1
Purpose of the Study	1
Research Questions	2
Significance of the Study	3
Definition of Terms.....	3
CHAPTER 2 REVIEW OF RELATED LITERATURE.....	5
Technology and CALL: A Background.....	7
Advantages and Disadvantages of CALL.....	12
Summary	19
CHAPTER 3 METHODOLOGY	21
Sample.....	21
Setting	22
Participants.....	24
Instrument	25
Data Analysis	27
CHAPTER 4 FINDINGS	28
Study Questions	28
Question Results	28
CHAPTER 5 DISCUSSION.....	37
Summary	44
CHAPTER 6 CONCLUSIONS	46
Limitations	46
Recommendations for Further Study.....	48
Conclusion	48
APPENDIX A QUESTIONNAIRES	50
APPENDIX B INTERVIEW TRANSCRIPTS	55
APPENDIX C IRB APPROVAL FORM.....	66
BIBLIOGRAPHY	68
VITA.....	71

CHAPTER 1

INTRODUCTION

The option to incorporate technology into second language learning has fostered the development of a debate among educators. The concept that technology may potentially replace language instructors, and therefore humans, within the classroom is a frightening and intriguing idea. This debate can advocate both the many positive and negative aspects of CALL. Kern (1995) best sums up the inexplicit goal of CALL by stating that second language (L2) CALL programs support individualized instruction by “offering the student the freedom to choose topics, to repeat input, to increase or decrease task difficulty, and to get help whenever it is needed (p. 457).

Purpose of the Study

As an instructor of adult ESL, my research provides a basis for personal education and understanding of how adult ESL students are utilizing technology for English acquisition. The knowledge gained from this study is applicable for classroom praxis involving CALL. The goal of this paper is to examine and provide insight into adult ESL students’ perceptions of language learning while using computer and Internet based technologies. These perceptions will help reveal aspects of the impact that technology has on the second language learner. The data collected relies on adult ESL students’ self-reports and one-on-one interviews. Despite the vast amount of data available that discuss CALL and its seeming facilitative function in second language learning, there is little

datum specifically mentioning how learners feel, experience, and think about CALL in language learning contexts (Suh, J.S., 2002). This paper will aim to add to this specific area within the field of CALL.

Research Questions

This study had three major research questions it aimed to address. All three questions focused on obtaining information about the participant's personal opinions and actual real-life usage of CALL.

1. Do adult participants learning in a second language context enjoy using computer and Internet technologies as a method of English language acquisition?
2. Are computers and other online technological resources related to CALL, useful and/or constraining to the participants? What makes these resources useful and/or constraining?
3. What are the computer and Internet technologies adult students are choosing to use for English language learning and their reasons for this selection?

The first question was aimed at exploring and explaining insights into how the adult participants felt about using technology to help them learn English. The questionnaire used questions to ask the participants about their past experience with technology and about their enjoyment levels when using CALL to help them learn a language.

The second question was an extension of information gathered from the first question. Many of the answers provided by the participants related to question number

two, ended up requiring the research for this study to end with a more qualitative focus. Typically these answers regarded open-ended questions which asked the participants to be specific about their likes and dislikes with technology. Due to this need, those participants who answered the questionnaire ambiguously or provided new insight into adult ESL student perceptions on CALL, were individually interviewed to further clarify and express the information they provided on the questionnaire.

The third question solicited information from the participants to see which computer and Internet technologies they use to help them explicitly learn English. Additionally, this question also provided an outlet to express those technologies which serve as more of an inexplicit extension of English learning, by providing contextual based English experiences.

Significance of the Study

This study is significant because of the specific focus on adult students and because of the contributing insights into adult ESL students' perceptions on CALL. Conducting this study was a means for me to personally understand how adult students feel about incorporating technology into education. Ahearn (1991) reports that using technology in the classroom has had positive effects on student attitudes aimed at school and learning, because students can now work at their own pace and do not have to keep up with or wait for other students. The goal of this study was to add to this knowledge base of student attitudes.

Definition of Terms

The following terminologies are important expressions used throughout this research study.

Computer assisted instruction (CAI): Computer assisted instruction is an earlier form of CALL.

Computer assisted language learning (CALL): Computer assisted language learning is the use of computers and other technologies to help guide a person through direct and individualized learning.

English as a second language (ESL): English as a second language is used to describe students who are learning English in hopes of participating in an English speaking society.

English as a foreign language (EFL): English as a foreign language is used to describe students who are learning English for secondary purposes, i.e. travelling, hobby, etc.

L2: This is a commonly used acronym for second language.

Web-based language learning (WBLL): Web based language learning is a way to learn a language which utilizes programs based on the Internet.

CHAPTER 2

REVIEW OF RELATED LITERATURE

The increasing use of both computers and the Internet in adult English language classrooms has widespread repercussions for English language programs (Coryell, J. & Chlup, D., 2007). The ability to offer students the option of self-directed learning and to connect learning to valuable work skills and personal use has led many adult education programs to incorporate computers in their curriculum (Dillon-Marable, E., & Valentine, T., 2006). Nunan (1988) states the opinion that, “no curriculum can claim to be truly learner-centered unless the learner’s subjective needs and perceptions relating to the process of learning are taken into account” (p. 177).

Currently, technology allows computers to capture, analyze, and present data on students’ performances during the learning process. This allows students to receive immediate feedback on their learning progress. In a study conducted by Son (2007) students in a web-based language learning course cited receiving instant feedback on exercise errors as one of the positives of the course. Additionally, feedback is not only important for the student, but also just as essential for the instructor. The information provided can then help instructors facilitate how to best suit the students’ language needs (Lai, C. & Kritsonis, W. A., 2006). In an ideal situation this sounds extremely effective, but often students do not use the computer software correctly. Sometimes students do not make use of all of the software components. Fischer (1997) conducted research that showed that some students skipped whole sections in computer language programs, in order to advance more quickly through the lesson. This evidence indicates that many

students choose to make only marginal use of various software components and therefore the feedback obtained can be inaccurate. Research findings cannot successfully argue that CALL is effective unless this limitation is taken into consideration (Fischer, R., 2007).

The use of computers in language learning can be distinguished into two different categories: tutor and tool. Creating a division in the world of computer applications for language learning became popularized in Levy (1997) (Hubbard, 2005). This division is based upon the specific functioning role of the computer. Using computers as a tutor allows the students to complete language learning exercises. These teaching exercises are typically found in multimedia programs that include grammar, reading, listening, and speaking activities. On the other hand, using computers as a tool means that students are using them for communication in the L2, such as discussion boards or emails. These tool based activities are more closely related to socio-cultural aspects of language learning (Fischer, R., 2007). The latter describes most of the findings for the research conducted for this paper.

The pedagogy associated with CALL has undergone several key phases throughout the years (Warschauer, M., 1996). Most of the changes have a direct correlation to popular educational theories and pedagogical approaches that defined each era. The three phases of CALL are behaviorist, communicative, and integrative.

The first pedagogical phase of CALL was behaviorist. This phase of CALL began in the 1950s, but was primarily incorporated in the 1960s and 1970s. A key feature of CALL during this time was repetitive language drills, which used the computer as a tutor.

The second pedagogical phase of CALL was communicative. In conjunction with advancements in technology and an overall rejection of behaviorist approaches in

education, the 1970s and 1980s began an era of communicative learning. Advocates of this learning approach felt that language drills did not provide an authentic form of language learning. Drills were replaced paced readings, text reconstruction, and language games.

The final pedagogical phase of CALL was integration. Integrative CALL began in the late 1980s and continues through today. A key feature of integrative CALL is the combination of computers and the Internet to assist in language learning. Software programs, websites, email, and chatting are all inclusive of integrative CALL.

Technology and CALL: A Background

The origin of using computers for L2 learning was initially represented by the addition to work done in audiovisual language labs. Researchers Adams, Morrison, and Reedy (1968) stated that CAI, “has the potential in its capability both to supervise student performance and to monitor, record, analyze, and summarize data about that performance” (p.3).

Early CAI programs were delivered through central computer systems such as PLATO (Programmed Logic for Automatic Teaching Operations). The activities utilized on this program were stereotypical of the time period, for example, the program would provide the students with a question, which the student would answer and the computer would provide feedback or help until the student could correctly answer the question (Curtin, C., Clayton, D., & Finch, C., 1972). CAI and CALL share many of the same negative factors. In research published by Olsen (1980) a series of issues were identified that explicitly noted why some academic departments would be discouraged from

integrating CAI into their curriculum. These issues included: the high cost of technology, the lack of technological support both for students and teachers, and the negative attitude of many teachers toward the use of CAI in the L2 curriculum (Olsen, S., 1980). This dissatisfaction with CAI programs is what created the need for further advancement and research. This led researchers to look for alternatives and hence the development of what is now CALL was created.

One of the greatest needs of CALL was the development of intelligent computer language programs. Intelligent CALL requires the computer to mimic the highly contextualized feedback that can be provided by humans. These CALL programs are different than other CALL programs because they use a Natural Language Processor (Salaberry, R., 2001). This processor has the ability to analyze student responses and compare them to target language aspects and identify areas of need within the student. These programs are very much like what a language teacher would do, but ultimately the computer can only attempt to imitate a human response.

New technologies, such as radio, television, VCR, DVD, and computers have dramatically changed the context of human interactions (Salaberry, R., 2001). People no longer must rely on direct communicational exchanges with other people; rather, they now have the ability to access sound files, movies, blogs, and websites at their convenience. In this new context, communication can be defined as an exchange of information with the assistance of a technological medium. What is not clear about this change is the effectiveness of this form of communication as it pertains to the pedagogical aspects of second language learning, as well as learning itself.

Many researchers advocate using technology within the education system and one such researcher is Lindenau. In 1984, Lindenau was quoted as saying, “A blackboard and textbook system of education in the age of microelectronics will inevitably promote detrimental and far-reaching consequences” (p. 119). This recommendation of taking advantage of new technological tools for pedagogical pursuits is a concept that has been a much discussed educational topic for some time.

Research pertaining to the advantages of audio-related technology for the purpose of language learning began as early as the 1930s. An important early study was conducted by Bolinger (1934). Bolinger studied the delivery of instruction through distance learning, and specifically the use of Spanish on the radio in the Mid-Western United States. His study showed the benefits for students located in rural towns to be assisted in language learning via the radio.

A definite benefit of the radio for second language learning was the ability to provide a classroom with a wealth of knowledge from around the world (Garfinkel, 1972). Broadcasts from different countries’ media were able to be used, which allowed students to report orally or write portions of the newscasts for classroom work (Salaberry, 2001). Wipf (1984) argued for the positives of shortwave broadcasts for pedagogical uses. He provided a list of 13 major benefits of these broadcasts. The benefits included, “access to an extended range of L2 expressions and a variety of dialects, contextualized teaching of grammar, listening to the target language spoken at normal speed, increased motivation by listening to original broadcasts, and development of an international perspective on topics selected for classroom discussion, as well as increased levels of independent learning” (p. 9-11).

Significant research has been conducted in the area of video related technology, the classroom, and second language learning as well. Video allows for an inexpensive and resourceful educational tool. An example of this would be the research conducted by Swaffar and Vlatten (1997). Swaffar and Vlatten suggested the execution of video-based activities in a series of stages. These stages can be summarized by initially allowing the students to silently view the video to not only identify the storyline, but also cultural aspects. After this, the students should be encouraged to verbalize what they saw and heard in comparison with other students to check for differences in meaning. The final stage recommended is to allow the students to role play and provide in-depth conversation about topics identified in the video (Swaffar, J. & Vlatten, A., 1997).

An obvious advantage of video technology was pointed out by Hanley, Herron, and Cole (1995). Turning on a video uses little classroom preparation time, but requiring the instructor to locate accurate pictures in magazines or other similar requirements can require a substantial amount of time. This is time that is taken away from other classroom preoperational needs. Allowing instructors to use video in the classroom introduces the students to authentic materials, as well as provides the instructors with more time to plan additional learning opportunities (Hanley, J., Herron, C., & Cole, S., 1995).

Lee (2000) further mentioned numerous reasons why computer technology should be used in second language instruction. CALL can (a) provide students with experiential learning practice, (b) motivate students to learn, (c) potentially increase student academic achievement, (d) increase available authentic materials, (e) encourage interaction between instructors and students and students and peers, (f) place emphasis on individual

goals, (g) allow students to use multiple sources for information, and (h) create a sense of global understanding (Lee, K. W., 2000).

Traditional higher education language learning has involved the use of lectures, during which language concepts are explained to students by the instructor. Additionally, seminars or study sessions are provided to handle issues and questions from the lecture as well as provide an additional outlet for students to discuss language topics under the guidance of a seminar tutor. A major disadvantage of this style of classes is that it can be considered a passive approach to learning (O'Donnell, C. & MacCainnigh, M., 2006). This approach is regarded as learning which does not actively engage the learner. Lectures and seminars often encourage a passive approach to learning because students can potentially opt out of the course even though they may still be attending. In contrast to this, technology based learning theories often suggest that learning is an active process by which the learner builds new knowledge based on personal judgments and self-organized input (Baumgartner, Lee, Birden, & Flowers, 2003; Walker, 2003).

In separate research conducted by Ellis (1995) and Sternberg (1987) acknowledgment was given in the ability of second language learners to initially learn a few thousand lexical items based on their high rate of incidence in the language and the student's constant interaction with these words. This is a positive statement for those students who are able to interact on a frequent basis with the second language. In contrast, what happens to those second language students who are unable to have this regular interaction? Technology is one way to help bridge the resource gap.

Students of modern Indo-European languages and other popular Asiatic languages have as their advantage the option to choose from readily available materials. These

materials in part consist of private and public classes offered in higher educational settings, as well as textbooks, audio tapes, videos, and computer programs. In O'Donail and MacCoinnigh (2006) the use of CALL in helping students learn Irish was researched. Their research incorporated the use of CALL because of the lack of availability of natural and incidental acquisition of Irish in everyday life. On account of Irish's low frequency in everyday language, incorporating the use of CALL seemed a probable option. According to the study, the results of incorporating CALL into the learning of a less readily available language were that by presenting the information in an audiovisual manner, not only was the initial encounter more memorable but students were also provided with an instant pronunciation guide. This interactive aspect of learning allowed the students to concentrate on early learning of new words and phrases. The blended approach of using traditional vocabulary language learning in the classroom, as well as CALL, has been shown to be not only desirable but also highly effective, as is the case in O'Donail and MacCoinnigh (2006). An explanation of this can be deduced from the concept that students need to engage in the language in a written form in order to help assist in the long term use and retention.

Advantages and Disadvantages of CALL

As with many educational tools, researchers are able to find advantages and disadvantages with CALL. Research findings have shown that the use of CALL has positive effects on the achievement levels of ESL students. At the same time, CALL still has noteworthy limits and disadvantages, such as financial aspects, participant isolation, and technology knowledge requirements (Lai, C., & Kritsonis, W. A., 2006).

A considerable disadvantage of CALL is the initial cost. Computers, various programs, accessories such as microphones, and copy rights can place a financial burden on educational facilities. But, once these initial costs have been incurred, computer technology is considerably lower than traditional classroom instruction. Additionally, when CALL is used a scaffolding technique, students are able to work independently. This creates an opportunity for the students to play interactive learning games, repeat lessons as often as necessary, and potentially relieve the stress and anxiety of learning a second language. The classroom instructor is therefore allowed more time to concentrate on the areas of second languages which are still difficult to learn by the use of a computer. These areas generally include oral aspects such as spoken dialogue or formal presentation practice (Lai, C., & Kritsonis, W. A., 2006).

Occasionally, even the most obvious disadvantages are overlooked in adult education. Things that are as fundamental as basic literacy are often a priority in adult education. A great concern for many adult educators is that in order to use CALL in the classrooms, students must have a literacy level that will allow them to take advantage of the technology. Many public access and other important websites are written at a literacy level that some adult students will be unable to understand. The “Digital Divide” report released by the Children’s Partnership in 2000 estimated that some 44 million American adults lack functional literacy skills (Children’s Partnership, 2000). Additionally, many websites do not offer translations into other languages or any other potential form of assistance to non-English speakers. Both of these can create an unexpected negative downside to using technology to teach a second language. Instructors therefore need to be

aware of the students they are teaching and address issues, such as illiteracy, as needed (Terrill, L., 2000).

A further look into the disadvantages of CALL reveals the distinct need for not only students, but also instructors to have a basic ability with computers. In order for instructors to be able to fully assist their students, they must have a thorough knowledge not only of the programs the students will use, but also how the computer itself will interact with these programs. Instructors need to be able to clarify, assist, and aid in technical problems that can occur. This disadvantage will require schools to provide educational training to their instructors (Terrill, L., 2000). Therefore, according to Roblyer (2003), the benefits of CALL are nonexistent for those students who are not familiar with computers.

An additional disadvantage of CALL is the lack of sufficient language learning software programs. Many of these computer programs are still imperfect; the majority dealing primarily only with reading, listening, and writing. These are welcomed supplementary tools for language learning, but most language learners usually learn a language in hopes of being able to speak the language. Oral aspects of CALL have been increasing in the recent past, but many programs lack the ability to evaluate the appropriateness of a user's spoken input. According to Warschauer (1996) a program should ideally be able to, "diagnose a student's problems with pronunciation, syntax, or usage and then intelligently decide among a range of options."

Not all students enjoy using CALL to learn a language. In a survey by Scholfield and Ypsiladis (1994) students were independently interviewed about their CALL opinions. The survey participants found the CALL programs easy to use, which lead

Scholfield and Ypsiladis to conclude that the negative views of CALL that some students have is not a result of technological inexperience. In fact, the participants cited their main reason as being the feedback that the computer provided. For example, some language learning software programs are unable to recognize correct answers that are simply misspelled and some do not provide a through explanation as to why certain answers are more appropriate than others. Often the software program is only able to recognize one particular answer. If a student misspells or places the accent on the wrong part of the word, the whole answer is then incorrect. In Murday, K *et al* (2008) participants in their study specifically noted how aggravating this aspect of CALL was, especially for those students who had difficulty simply typing in the correct accent marks. Some participants even went as far as to complain about their disappointment over having to spend time resolving these technical issues rather than concentrating on learning the language. This created a sense of frustration and anger among the students. Ultimately, this means that since many students find CALL programs easy to initially use, if they are unhappy with certain CALL programs, the blame cannot be placed on technological difficulties. The blame must be placed rather on design aspects of the program itself that are insufficient and unhelpful.

Imperfect language programs lead to the final major disadvantage of CALL: the lack of ability technology has to deal with unexpected and surprising situations. Anyone who has studied a second language would be able to share the endless variety of situations that can transpire when learning a language. The ability to have a living instructor in the classroom to assist with this is a clear and distinct advantage of traditional instruction. In part because of the limitations of computer's artificial

intelligence, computer technology is unable to cope with various unplanned learning problems and questions that can arise from language learners. Since humans and computers still process information differently, this may continue to be a disadvantage for some time (Lai, C., & Kritsonis, W. A., 2006; Felix, U., 2005). Stepp-Greany (2002) found that most students considered the presence of their instructors to be an important aspect of the learning process. Additionally, these students agreed that the instructors help to facilitate instruction in CALL environments where the cultural knowledge, communication skills, and confidence in learning could be enhanced by having the instructors present.

One of the main advantages of CALL programs is that they create the opportunity for autonomous learning. Students are able to learn when and how they want, as well as control the speed at which they are learning (Lasagabaster, D. & Sierra, J.M., 2003). Online communication allows for the chance at interaction with other human beings to be increased because there are no time or place conflicts, in contrast to the normal face-to-face communication (Salaberry, R., 2001). Some experts claim that students may get easily discouraged when using CALL. Using unfamiliar or inadequate technology can foster situations of impatience. But, according to researcher Griesshaber (1998), not even in the situation of repeated mistakes are students discouraged when using CALL.

In a survey conducted by Lasagabaster and Sierra (2003) students were asked questions concerning their computer usage in regards to four specific CALL programs (Tell Me More, English Express, CD English Tutor, and Interactive course in Acoustic Phonetics). Specifically, the questions related to how often they used computers, which of the programs they used, and why they choose these programs. The students also

expressed their opinions about their level of satisfaction with each of the CALL programs and the activities elicited in each program. A significant finding revealed that most of the students were using CALL programs for listening, grammar, and vocabulary. In contrast to listening, grammar, and vocabulary, which are skills that do not require the learner to be engaged past selecting the correct response or fill-in-the-blank, speaking and pronunciation were used the least amount. Approximately 87% of the respondents listed listening as an activity they did the most while using the software, while only 31% listed speaking (Lasagabaster, D. & Sierra, J.M., 2003). Possible conclusions to be drawn from this data include that either (1) students feel more comfortable using less engaging learning skills when using CALL, (2) CALL programs focus more on certain aspects than others, or (3) that speaking and pronunciation are two areas where CALL programs need to be greatly improved.

Student attitude is another aspect to consider when using CALL in the classroom. Although evidence provided from studies can be limited and not always applicable to every situation, a study conducted by Church (1986) revealed that, “although we have no statistically reliable evidence that computer exercises necessarily result in higher grades, students nevertheless clearly believe that the exercises help improve their work” (p. 251). Many times this evidence is less than creditable due to problems with data collection, scoring, and analysis. As well as lack of control groups, difficulty in long-term studies and the lack of systematic analysis of empirical research questions can create validity issues with studies (Salaberry, R., 2001). But in general, there is substantial data that reveals overall student perceptions of CALL are positive (Felix, U., 2005; Son, J., 2007).

There are many reasons why adult students specifically use CALL. According to research conducted by Rosen (1996) adult students use CALL for a wide range of purposes: “for learning (e.g. to improve reading and writing skills, or take a course); to access a wide variety of information (e.g. information about the weather, health, travel, other cultures, American news, and – in the case of ESL students – news from their native countries); for classes at school; for shopping; to communicate with friends, family members, other students, or key pals; for entertainment; for virtual travel; and for the sense of control and power one can feel when using a computer and the Internet.”

CALL helps to teach students valuable skills other than just language. Using technology can also help facilitate literacy and general employability skills. One advantage of using the Internet in the classroom, is that it “levels the playing field” for non-native English speakers. When students are able to access information online, resources are more equitable than they may find in the real world. Information about education, program assistance, and other needed topics are readily available online. Accessing websites uses language skills such as skimming and scanning for information, narrative reading, and understanding charts/graphs. By understanding technology, students will also have the ability to access specific (ESL, company, etc.) content based websites and use technology based writing skills like emails or memos. In addition, employability skills, such as analyzing and evaluating information, decision making, problem solving, and being able to correctly use technology, are also taught. Finally, using technology can help teach students’ important literacy skills like understanding the importance of questioning, classifying, and analyzing what they read (Silc, K. F., 1998).

While completing a survey of past computer based tracking research in CALL, Fischer (2007) noted that researchers have found that many students use software in unexpected ways. The consequences of these results show the need for learner autonomy within the CALL field. Learner autonomy can be defined in the context of this paper as the participant's need to control when and what they are learning. Yet, past findings have revealed that inexperienced and low ability students often make poor decisions when choosing what to learn (Fischer, R., 2007). Oxford (1995) created a list of five stages of language acquisition that can be used as an indication for when students are ready to obtain the highest level of return from their autonomous learning. These stages are: (a) novice, (b) advanced beginner, (c) competent, (d) proficient, and (e) expert. According to Oxford, only in the third stage (competent) can students make good, individualized decisions about their language learning. But, even at this level students can still benefit from explicit teaching practices. Therefore, according to Oxford's levels, asking lower-level students to successfully engage in autonomous learning may exceed their ability.

In short, the arguments for incorporating technology into ESL learning are significant. Technology allows the user to extend their learning beyond the classroom and provide for autonomous learning. Additionally, CALL allows the user to access new and pertinent information, which can assist in diminishing the division between English and non-English speaking populations.

Summary

While the origins of CALL may date back to the last century, computer assisted language learning has truly become mainstream in recent decades. When comparing

CALL and traditional higher education classes, a clear distinction between the two is the style of learning students are engaged in. Traditional classes often only utilize a passive approach to learning, whereas CALL provides students the opportunity for direct, active learning. CALL has enabled language students to be self-directed in their learning, with the freedom to choose when, how, and what they study. Many of the opportunities provided to students, demonstrate genuine context, language based activities and materials in communicative and academic environments. Overall, while some students may not enjoy using technology to help them learn a language, there is substantial evidence that reveals student perceptions of CALL are positive (Felix, U. 2005; Son, J. 2007).

CHAPTER 3

METHODOLOGY

The Sample

The participants in this study were 14 non-native English speakers attending a pre-university private English school, (henceforth referred to as X English School), where I was their ESL instructor. The participants, almost equally divided between male and female, ranged in ages from 18-mid-thirties. The home countries of the participants were Taiwan, Thailand, China, Switzerland, Turkey, S. Korea, and Egypt. Each participant was given a corresponding number (1-14) as a pseudonym and will be referred to by their number. The X English School is affiliated with a well-known chain of international language schools. These schools use the immersion technique of teaching English, which means that all classes are conducted in English regardless of the student's prior knowledge of the language.

The school divides its students into three groups: beginner, intermediate, and advanced. Within each group, there are three specific levels which correlate to low, middle, and high. Each level at the X English School is given an equivalent number: 101-103 are beginners, 104-106 are intermediate, and 107-109 are advanced. It should be noted that even at level 101, the students are not absolute beginners but rather false beginners. A false beginner is a term used to define students who have studied the language at some point in their lifetime, but who have serious gaps in their language ability. For the purpose of this study, all the participants were in the intermediate and advanced levels. This was based upon the levels predetermined by the X English School.

Specifically, the participants were high intermediate and low/middle advanced students. As a basis of comparison, after successfully completing the advanced high level, the students are eligible to apply and matriculate to community colleges throughout the US. In addition, the X English School and its affiliates attract many international students because of their direct location on community college campuses throughout the US. The majority of students attending the X English School plan on attending the nearby community college, with Hospitality being the overwhelming choice for future major.

While information about the student's socio-economic status (SES) is not collected by the X English School, tuition at the school is higher than at other private English schools. The X English School prides itself on its rigorous academic-based program and its tuition rates reflect this. For example, tuition for the Semi-Intensive Program (20 hours a week; 80 hours a session) is approximately \$1200. For the Intensive Program (30 hours a week; 120 hours a session), the tuition is approximately \$1500.

The Setting

All of the students at X English School attend the school for four hours in the morning (8:30-12:30). The students have a one hour class for reading and writing, a two hour class for speaking and grammar, and a one hour computer lab class. The teachers for the reading/writing and speaking/grammar classes are usually different. The computer lab class is an independent study class where the students are using software programs created specifically for the X English School. These programs included English 1-4 and Understanding and Using English Grammar.

The questionnaire was given a total of two times: once to the intermediate class and once to the advanced class. The questionnaire was given during the same week, but on different days. Both times, the questionnaire was given at the end of the reading and writing classes. I was also the instructor for both classes.

The participants filled out the questionnaire during their class period and time was allowed to fully complete it (an average of 15 minutes). I was present to answer and clarify possible questions during the process. Some of the participants asked for examples or a brief clarification of word meaning. This was provided to them in as general of terms as possible. Additionally, the participants were allowed to use their personal dictionaries for translation purposes, as well as to answer the questionnaire using incomplete or fragmented answers.

A significant portion of the study data came not from the questionnaire statistics, but rather from the one-on-one clarification interviews with the participants themselves (see Appendix for transcripts). Upon analysis of the questionnaire data, I discovered that there were some conflicting answers. Interviews with the participants were needed for further explanation and to validate the results. These interviews were conducted in the 10 minute time period between classes; either before or after. Again, these interviews were all conducted in the same week, approximately one week after the questionnaire was administered. The interviews were recorded with an audio recording device and then transcribed into a Word document (see Appendix for transcripts). Both the questionnaire and interview data will be discussed and presented together in the Findings chapter. For the questionnaire statistics, descriptive statistics were used to correlate the participants'

answers with the number of participants. The interview data was used to help validate the findings of the statistical data.

SS ID	Gender	Level at X	Country	Yrs using computer	Yrs using internet	Yrs learning English
1	Female	108	Japan	9 years	9 years	6 months
2	Female	108	Korea	10 years	10 years	1 year
3	Male	106	Taiwan	6 years	6 years	1 year
4	Male	106	China	9 years	6 years	11 years
5	Male	107	Korea	13 years	10 years	2.5 years
6	Male	108	Egypt	10 years	10 years	1 year
7	Male	108	Taiwan	12 years	12 years	12 years
8	Female	106	Turkey	12 years	10 years	1 year
9	Male	106	China	8 years	8 years	8 years
10	Female	106	Switzerland	9 years	8 years	3 years
11	Male	107	Korea	13 years	10 years	11 years
12	Male	108	Korea	15 years	15 years	13 years
13	Female	108	Taiwan	10 years	10 years	11 years
14	Female	106	Thailand	12 years	7 years	8 years

Table 1: Background Data of the Participants

The Participants

The questionnaire began by asking the participants to give basic demographic information (Table 1). This included name, gender, level at X English School, and nationality. The names of the participants were then given a correlating number, which they were referred to as for the rest of the study. In this study there were six female and eight male participants, for a total of 14 participants. The levels of English study for the participants of this study ranged from 106 to 108. There were six 106 participants, two 107 participants, and six 108 participants. The students at X English School are

predominately from Asia and the sample used for this study is representative of this, with S. Korea and Taiwan being the most common countries of origin.

Also obtained from the initial questions at the beginning of the questionnaire was information regarding the participant's background experience with English, as well as with computers and the Internet. This information was needed in order to establish a base line for comparison among the participants. These questions about experience levels will be discussed in detail in the Findings chapter.

The Instrument

The questionnaire (see Appendix for questionnaire) consisted of 21 questions. Six of them were close questions and the rest were of an open nature. All of the questions will be analyzed in this paper. The close questions contained Likert-type scales or a listing of different choices. The participants of the study were required to fill out the questionnaire in English, because there was not a common majority language among the group. The questionnaire elicited basic information about questions concerning the connection between English usage and computers. These questions included such topics as prior experience using a computer, frequency of computer usage in English and English-only computer usage. The questionnaire additionally asked opinion questions concerning the participant's personal preferences about using a computer to learn a language, as well as obtaining information about specific English websites being used on a frequent basis.

The above questionnaire was developed after previously piloting the study. Again, the pilot study was given only to intermediate and advanced students I was teaching at

the X English School. The participants were similar to the actual study in ethnic backgrounds, with Asia being the most popular county of origin. Just as in the actual questionnaire, the piloted questionnaire was given at the end of class session. Once more, I was present throughout the questionnaire to answer questions and provide examples. After I collected the questionnaires, I examined the data provided to look for information that was related to my research questions. A major concern of mine in regards to the pilot questionnaire was the lack of specific information provided. For example, I was hoping to find out actual websites or software programs the participants were using. Since this was not addressed in a way that prompted the participants to include this information, several of the questions on the pilot study had to be changed.

The pilot study was administered several months before the actual study was planned. This was to assure that none of the participants from the pilot study would still be attending the X English School when the actual study was given. The majority of the students at the X English School spend at least three months at the school, before either passing the 109 level, testing out of the school, or transferring to another school. I had to take this fact into consideration when I started piloting my questionnaire.

The pilot questionnaire asked similar questions about the participant's preferences and past experiences with computer and Internet technologies to assist in learning a second language. A major difference between the pilot and actual questionnaire was the introduction of the Likert scale. A major concern for the participants during the pilot study, was understanding the meaning of some of the questions. In the pilot study, word choices were given as answers to some of the questions. Most of the participants of the pilot study had to ask for detailed explanations about the word choices. Since the pilot

study participants were expected to be of a similar proficiency level to those I administered the actual questionnaire to, a Likert scale was a useful addition. Therefore, in an effort to help explain things more thoroughly to the participants, a Likert scale was introduced with an answer guide.

Several new questions were added to the actual questionnaire. The first new question asked the participants about the years spent learning English. I decided to add this question to see if there was a potential connection between English ability and those participants who enjoy using CALL. Also, two questions were added which solicited the participants to quantify the percentage of time spent on a computer and on the Internet in English only. This question was asked to determine if there may be a significant difference between English usage on computers and on the Internet.

Data Analysis

The underlying technique for analysis of the data was descriptive statistics. This procedure was used because the majority of the data provided on the questionnaire was of a qualitative nature. By using descriptive statistics, I was able to summarize major findings from the study and the implications they might have for CALL. Additionally, the quantitative questions benefited from using descriptive statistics because the information needed from those questions revolved around the mean and range of the answers. The mean and range were then given qualitative meanings to support the research questions and provide insight into further research needed.

CHAPTER 4

FINDINGS

Study Questions

The research questions of this study were aimed at providing insight into adult ESL students' perceptions of language learning while using computer and Internet based technologies. The questions asked were as follows:

1. Do adult participants learning in a second language context enjoy using computer and Internet technologies as a method of English language acquisition?
2. Are computers and other online technological resources related to CALL, useful and/or constraining to the participants? What makes these resources useful and/or constraining?
3. What are the computer and Internet technologies adult students are choosing to use for English language learning and their reasons for this selection?

Question Results

When the participants were asked about their previous experience using a computer, the questionnaire results showed that all of them had multiple years of computer usage. The range of years varied from six to 15 years. The mean for the group was 10.6 years.

With regards to previous experience using the Internet, again analysis of the data revealed that the participants had multiple years of experience with the Internet. The

range of years varied from six to 15 years. The mean for the group was 9.4 years. It was expected that experience with the Internet would be less than computers, due to the Internet becoming more mainstream at a later date. Both of these questions helped to establish a level of familiarity the participants had with technology.

In contrast to the multiple years of experience with computers and the Internet, many of the participants indicated that they did not have this with learning English. The range of years of English varied from six months to 13 years. The mean for the group was six years. As the average level of the participants was level 107 (advanced-beginner), I was surprised that several of the participants mentioned learning English for short periods of one year or less. The concept that these participants could be in the same class as someone who had studied English for 15 years was perplexing. This idea is what first prompted me to interview many of the participants individually.

Questions four and five asked the participants to numerically indicate their comfort level when using a computer and the Internet (Figure 1). For both questions, the majority of the participants agreed that they were comfortable with both computers and the Internet. None of the participants signified that they strongly disagreed with being comfortable with either computers or the Internet, but several students indicated that they were strongly comfortable with both.

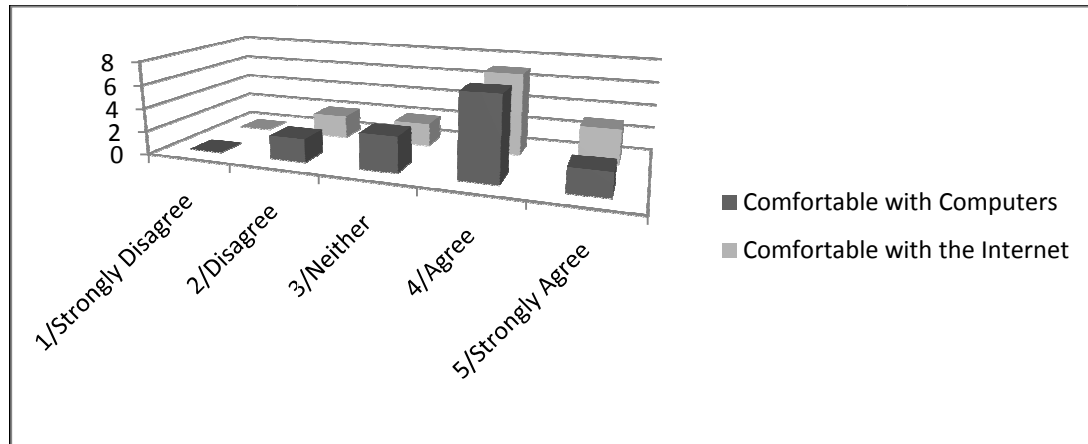


Figure 1. Comfort levels with computers and the Internet.

In order to ascertain the total amount of time spent using a computer and using the Internet in English only, questions six and seven were necessary. These questions asked the participants to give a percentage for the overall time spent using a computer or the Internet in English only. There were four percentile ranges: 0-25%, 26-50%, 51-75%, and 76%-100%. There were slight variances in the results. For computer usage in English only, the most common answer (nine out of 14) was the 0-25% range. But, for Internet usage in English only the most common answer (seven out of 14) was 26-50%.

Questions eight, nine, ten, and eleven were background questions on the participants' past experiences with using a computer to learn a language. Thirteen out of the 14 participants indicated that "yes", that they had used a computer to learn a language. Upon review of the data (and a hint of confusion based on later questionnaire answers), the participant who indicated "no" on using a computer to learn a language was then interviewed about his answer. In the interview with participant 5, his conflicting answers were explained to him (see Appendix for transcript). He then clarified his answer by stating that he previously only used a computer to listen and not for grammar,

dictionary, and translation help (which were given as examples of using a computer to learn English). Therefore, participant 5 felt that because he had not used specific software or Internet based programs, that he had not used a computer to learn English. For the purposes of this study, when participant 5 used a computer to listen to English being spoken, he has used a computer to help him learn English.

When asked which computer and Internet programs the participants used to help them learn a language, the most popular answers were Google.com and dictionary type websites. Many of the participants put random answers such as reading or TOEFL, which aren't specific computer or Internet programs.

Since all the participants used in this study were taking part in an ESL class, the most common answer for question 10 (what language the participants had studied on the computer) was English. Additional answers included French and Japanese.

Question 11 asked the participants their personal opinion on whether they liked using a computer to learn a language. Twelve out of the 14 participants indicated "yes", with two participants indicating "no". After reviewing the data, I went back to the two participants who wrote "no" to find out why they felt this way. Participant 2 stated she didn't like using a computer to learn a language because she was unable to concentrate:

Participant 2: "I can't concentrate."

Interviewer: "You can't concentrate?"

P 2: "Yeah."

I: Why can't you concentrate...because people are there (pointing to the classroom)?"

P 2: "No. If I on computer I want to do other things."

I: “Oh, you want to do other things? Email, Facebook?”

P 2: (Laughs)

I: “Ahh, ok so it’s a distraction. So you prefer (clarify the meaning of prefer) to learn a language like here at (the school)? In a class?”

P 2: “Yeah.”

Participant 7 also did not enjoy using a computer to learn, but for a very different reason than participant 2.

Participant 7: “Because I think if you use a computer you relax yourself and vocabulary and English you no really understand. It will be stressful for you to use the computer.”

Interviewer: “Ok, so it creates stress?”

P 7: “Yeah.”

I: “So when you normally use a computer you’re not stressed, but when you have to use it to learn a language then it’s stressful?”

P 7: “Yeah”

I: “Ok, so you would prefer to learn a language in a classroom?”

P 7: “Yes, of course!”

Question 11 depicts the differences the participants had for language learning preferences; while some participants enjoyed using a computer to learn a language, others did not.

For questions 12 and 13, the participants were provided with an opportunity for open-ended answers. Question 12 asked what they liked the most about using a computer to learn a language and question 13 asked what they liked the least about using a

computer to learn a language. The response for what the participants liked the most when using a computer to learn a language was overwhelmingly related to watching TV/music videos/movies.

In regards to what the participants did not like about using a computer to learn a language, there were two equal responses: no answer and grammar. It can be assumed that if the participants did not answer the question that they either did not understand or that they do not dislike using a computer to learn a language. When reviewing the questionnaire data, one participant confused questions 12 and 13. Participant 6 was interviewed about their answers for a further explanation.

Interviewer: “So then what do you like least about using a computer to learn a language?”

Participant 6: “Ah least? Something like not good?”

I: “Yes, something that’s not good.” (Providing examples).

P 6: “I didn’t try grammar in computer. I just use my computer in language. I always use my computer in English-not Arabic. Sometimes if new thing I don’t know and they have Arabic language I try to see after and again Arabic and then English.”

I: “So maybe you like everything?”

P 6: “Maybe.”

I: “Maybe you just like using a computer?”

P 6: “Not much. Now I start, because now I stay home long time. After three months, nothing to do. I try to go to computer. But before that, in my

country I have my free time outside, here and there, my friends. I can go out more then.”

For participant 6, it wasn't so much that he enjoyed using computers, but his newly found situation as a full-time ESL student rather than a full-time employee, allowed him to have time to spend working on a computer. Since he had more free time, he was able to take the time to change the home language on his computer from Arabic to English and because he was spending more time on his computer, this was an opportunity for him to learn.

Questions 14 and 15 provided a basis for which questions 16 through 21 was to rely on. Question 14 specifically asked the participants to choose from six different activities that they do on the Internet not in English. Question 15 was similar in asking them to choose from the same six activities, but only choosing those that they do in English. The six choices were: socializing, language help, watching TV/movies, reading the news, shopping, and other activities. Brief explanations were given to the participants for each of the six choices. Socializing was defined as anything that is used for talking or communicating with other people. Language help referred to websites that the participants used to help them with questions concerning language aspects. Watching TV/movies was used for anything that was recorded online, including commercials, interviews, etc. Reading the news involved any reading of information, including gossip, weather, and other news-related information. For shopping, the participants were allowed to write down any websites they used to buy things online. And finally, the other activities category was the catch all for any potential websites that may have been overlooked with the other choices.

For question 15, the participants were asked specifically English help websites used in English. The results indicated that when not using English, the participants usually use the Internet for reading the news, shopping, and watching TV/movies. In English, the participants primarily use the Internet for English help and watching TV/movies. In questions 16 through 21, the participants were asked to specifically mention the websites they used for each category (Figure 2).

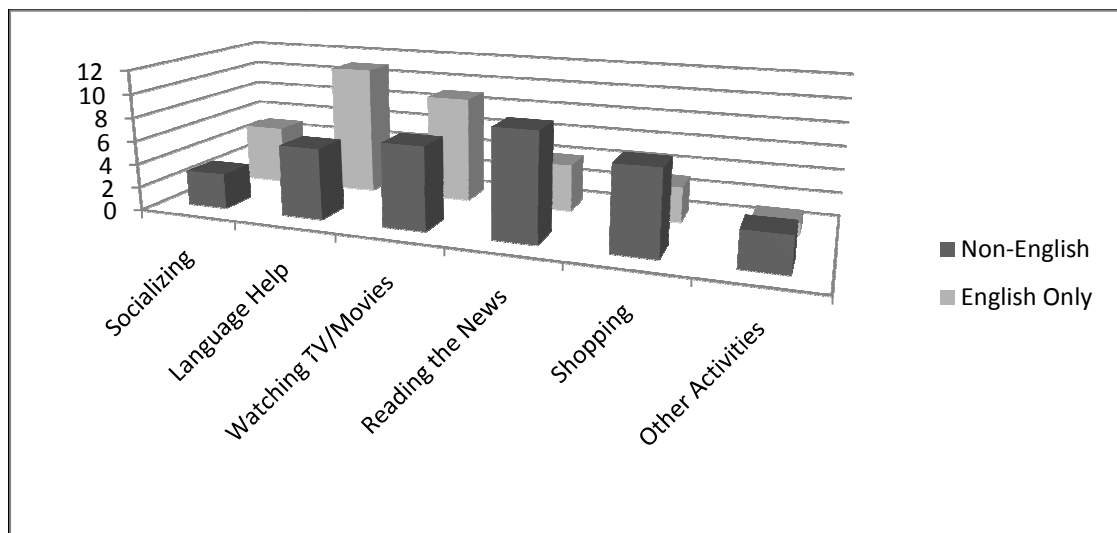


Figure 2. Non-English vs. English only activities.

For socializing in English, the most popular websites were Facebook.com and MSN.com. Three participants mentioned Facebook.com and four mentioned MSN.com. One of the participants mentioned the X English School software as a place for socializing. This was an unanticipated response and in an interview with participant four, I asked him to clarify what he meant.

Interviewer: “I just want to ask you, on number 16...says what programs or websites do you use for socializing in English? You put X English School software?”

Participant 4: “Yeah”

I: (Explains what socializing means.)

P 4: “No, in the computer you have maybe software and yeah...”

I: “So...but how do you talk to people?”

P 4: “You have...yeah, talk to computer and play and listen.”

For English language help, four of the participants used Google.com, which offers a translation/dictionary feature, as well as links to various ESL websites. When watching TV/movies, Youtube.com was the most popular website, with six participants mentioning this site. Yahoo.com was the most popular website for reading the news in English, with four participants using the site. There were no specific websites mentioned for shopping, but two of the participants mentioned Yahoo.com. Finally, for other websites used in English the participants mentioned gaming programs, Youtube.com, and Google.com.

CHAPTER 5

DISCUSSION

When I began this study, my goal was to increase my knowledge base and improve as an educator. For me, the results of this study show great insight into practical classroom application. For example, having evidentiary proof that adult ESL students enjoy using technology to learn English, I can fully commit to incorporating technological aspects into my instruction. But the best aspect that I will take from this study is that adult ESL students are voluntarily choosing to access Internet websites and use those as tools to help them learn English. In returning to Nunan (1988), in order to provide a learning environment that is learner-centered, the student's individual needs and ideas need to be taken into account. These adult ESL students are choosing to access and utilize English language websites. While this English learning may at times be considered implicit and informal, it is still learning.

Questions one and two of the questionnaire indicated that all the participants had substantial experience using computers and the Internet. For this study, these questions signify that a lack of basic ability with technology was not an issue. In referring back to Roblyer (2003), who stated that the benefits of CALL are nonexistent for those students not familiar with computers, it can be assumed that this disadvantage was not the situation in this study. In fact, none of the participants even mentioned having difficulties using computers or the Internet to help them learn English.

In comparison to the multiple years of computer and Internet usage, the participants of this study had a great deal of variance when it came to studying English.

The participants were all at a similar level of English proficiency (as established by the X English School), yet some participants mentioned that they had only studied English for six months and others up to 13 years. Upon closer examination of the questionnaire data and the interview data, an interesting theme appeared: what studying a language really means and specifically, English. In interviews with five different participants, the question of duration of English studying was asked (see Appendix for transcripts). Participant 2 mentioned her past English experience was from elementary school, but that it was only part-time. This was the same type of comment given by participant 1, who said she had studied since junior high school but that it “is so little, right?” Participant 8 did not feel her past English experience counted because “people who speak good English aren’t (English) teachers...” and therefore she was not taught very well. In interviews with participants 3 and 6, both of whom are male, they mentioned that they did not honestly participate in their English classes.

Interviewer: “You didn’t learn English in high school?”

Participant 6: “In high school it doesn’t count. It does nothing.”

I: “It doesn’t count?”

P 6: “Always I skip. Always I don’t go. Bad student.”

This situation was also similar to participant 3.

Interviewer: “You never learned English in school?”

Participant 3: “Never. I sleeping in class.”

I: “You slept in class. You had the class, but you didn’t really participate in the class?”

P 3: “I don’t care. Only Chinese.”

From these five interviews, it is obvious to see the personal discrepancy of what counts as studying English. Not only does the data require clarification, but also the questionnaire question as well. This question would have yielded better results if the questionnaire would have provided a direct explanation of what constitutes studying English. By adding a definition, the participants would have had a guide to direct them to indicating the correct amount of years of study. Since the concept of what it means to study English was not the focus of this study, this topic was not developed any further past the emergence of this theme and recommendations for how to handle this question in the future.

Questions four and five required the participants to indicate their comfort levels when using a computer and the Internet. The numerical answers correlated with equivalent terms and for both questions, the majority of the participants indicated a four (agree). Just as in questions one and two, these questions provided additional indication of the familiarity and commonplace usage of computers and the Internet with the participants. One possible explanation could be the participants' higher SES. While I have no concrete numbers about the SES of the participants, the cost of tuition at the X English School is higher than at other similar language schools. My participants would have had greater opportunities to come in contact with technology and to use it on a more intimate basis than students with a lower SES.

Another possible explanation of this would be the age ranges of the participants. While 18 to 30-something are considered adults, this age range falls into some of the first generations to have grown-up using computers. In comparison to other adults, who might not have started using computers or the Internet until they were already into adulthood,

these participants had access to learning about technology at a younger age. This could have potentially created a sense of being comfortable with computers and the Internet. The association of being raised with computers and the Internet and the level of comfort with these technologies isn't a relationship I had previously considered to be important in the field of CALL.

In questions six and seven of the questionnaire, the participants were asked to quantify the amount of time spent on computers and the Internet in English. Guessing that the answers were going to be in the lowest percentile range group, I was surprised that the majority of the participants spent between 26-50% of their time on the Internet in English. A possible explanation of this could be that English is the dominate language of the Internet, though additionally this result helps to indicate the importance the Internet has in English learning for these students. This finding is also related to question 15, which asked the participants which activities they did on the Internet in English. The most common answers were English language help and watching TV/Movies. These are assumed to be the activities that comprise the 26-50% of time on the Internet spent using English.

Questions eight, nine, ten, and eleven were exposure-based questions regarding the participants' past with using a computer to learn a language. Upon review of the data and a clarification interview, evidence was established that all 14 participants had used a computer to learn a language. Some of the participants were confused by this question, because they had never used a specific software program to help them learn English. For the purpose of this study, CALL is considered any way that technology helps students learn a language. This can be software programs, websites, tutorials, etc. When I

explained to the participants that for this study, things such as using an online dictionary or an English help website were considered CALL, all of the participants indicated they had used CALL before. For second language instructors, these questions (eight, nine, ten, and eleven) show the importance CALL can have on learning a language. Many times these students were engaging in CALL-related activities without even knowing it.

Question 11 went deeper into the participants experience with CALL and asked about whether or not they enjoyed using a computer to learn a language. Twelve out of the 14 participants indicated “yes”, that they enjoyed using a computer to learn a language. An initial disadvantage of CALL was cited as not all students enjoy using CALL to learn a language. Question 11 confirms this disadvantage, but for different reasons than mentioned in Scholfield and Ypsiladis (1994) and Murday, *et al* (2008). Both Scholfield and Ypsiladis (1994) and Murday, *et al* (2008) cited frustration with software programs as the main cause of lack of student enjoyment using CALL. After interviewing the two participants who indicated they did not enjoy using CALL to use a language, their results can be surmised as personal. For example, one participant felt she couldn't concentrate when using a computer to learn a language and the other participant felt that CALL created too much stress. More research into the effects of personal choices in relation to CALL needs to be conducted before the implication of individual selection can be considered an important disadvantage.

The opportunity for the participants to voice their opinions came with questions 12 and 13. These questions were open-ended and asked the participants to indicate what they liked and disliked about using a computer to learn a language. The most popular like-answers were listening and watching TV/music videos/movies. These results are

consistent with those found in Lasagabaster and Sierra (2003). As a classroom praxis study, this result was of particular interest to me. If the participants were actively volunteering to utilize language skills like listening and watching to learn English, this is something I need to consider when involving CALL in the classroom. On the other hand, grammar was noted by the participants as their least favorite aspect of CALL. The dislike of grammar could be a result of difficulties with the software programs or websites, but since none of the participants directly mentioned this it is more likely that the participants simply did not like studying grammar.

A list of activities was given for questions 14 and 15. The activities were identical, but question 14 focused on which ones the participants were doing not in English and question 15 wanted to know which ones were in English only. The results showed that when not using English, the participants used the Internet for reading the news, shopping, and watching TV/movies. In English, the participants used the Internet for English language help and watching TV/movies. The implications of these results show that when not using English, the participants used the Internet as most people do, for personal enrichment. When using the Internet in English though, it was for the specific reason of learning a language. This means that the participants were again actively engaged in the use of CALL to help them learn English.

Finally, questions 16 through 21 asked the participants to specifically mention websites they used for the activities listed in question 15. This question was asked with the intention of potentially being able to incorporate the websites into practical classroom practices. Specific websites mentioned were more commonly associated with search

engines (google.com and yahoo.com), but both of these websites offer a translation/dictionary feature that the participants used on a frequent basis.

To go back to the beginning of this research study, the original questions posed were:

1. Do the participants enjoy using technology as a method of English language acquisition?
2. Are computers and other online technological resources useful or constraining to the participants? What makes these resources useful or constraining?
3. Which programs and software are the participants using for English language learning?

The results for this study signified that yes, the adult ESL participants in this study did enjoy using technology to help them learn English. Twelve out of 14 participants indicted “yes” to this question. For the purpose of this research study, this positively answers the first research question.

In response to the usefulness and constrains of technology, most of the participants replied that they were comfortable with technology and that they enjoyed using it to watch English speaking programs such as TV or movies. Many of the participants also mentioned using Internet websites to help them improve their English. In interviews with the two participants who found technology to be less than useful, they cited distraction (in terms of wanting to use the Internet for personal use) and stress (in terms of being too relaxed to truly learn English and therefore causing stress) as reasons for their dislike.

Specific programs and websites the participants used to help them learn English yielded some interesting results. Top websites included Google.com, Youtube.com, and Yahoo.com. While these websites are not specifically designed to help teach users English, they do provide an authentic contextual atmosphere for ESL students to learn.

Summary

As with most studies which incorporate qualitative aspects, the results can differ from those originally anticipated. Prior to the beginning of the study, the questions sought after were one dimensional and straightforward. Through the process of reviewing the data and incorporating individual interviews with participants, several interesting themes emerged. These themes included: what it means to study English, comfort levels with technology, and computers as a source of communication.

In this study, studying English was discovered to be a personal event. Some participants considered every class involving English, whereas others considered only those taken with the serious intent of using the language to count as learning English. This is a question that requires an in-depth explanation and evaluation to have all the participants report accurate answers.

Another important result was comfort levels with technology. The vast majority of CALL literature will cite unfamiliarity with technology as an important hindrance. The participants in this study never mentioned this lack of ability as a concern. In fact, the only concerns the participants did have with technology were of a personal nature.

Finally, one participant mentioned using his computer in an unusual form of communication. He communicated with his computer directly. This means that he was

recording his voice by using the computer and then playing it back. This is one way that CALL can help students with their pronunciation and in this participant's case, communication.

Overall, the results of this study were accurate in terms of answering the research questions I sought. I think the most interesting aspect of this study was the results also answered questions I had not even asked. This is one of the benefits of a qualitative study. Since the focus of this study was to gain personal knowledge about adult ESL students' use of CALL for future classroom praxis, all results from this study were invaluable.

CHAPTER 6

CONCLUSIONS

Limitations

The greatest limitation to this research is the use of self-reported data. As previously noted, on more than one occasion the conflicting results among the questionnaire answers given by the participants created a sense of confusion. In an effort to understand this limitation, incorporating qualitative aspects into the study became a necessity. Rather than placing importance on what the participants' say they are thinking or doing, it is important to investigate what the participants are actually doing (Fischer, R., 2007). Fischer (2000b, 2000c, 2004a, 2004b, 2004c) additionally found significant evidence that there were consistent discrepancies between participants' actual use of program components and their self-reported use of those components. Being aware of the inconsistency between these statements is crucial and this discrepancy is specifically why the use of interviews became a part of this study.

The limitation of self-reported data could also have been decreased by piloting the actual questionnaire. The data collected on the pilot questionnaire did not yield the specific results that I was hoping to achieve. As a result, I made significant revisions to the pilot questionnaire. The opportunity to pilot the questionnaire I used in the study, would have allowed me to correct minor changes that might have corrected the inconsistencies in the participants' results.

Another limitation to this study was the use of convenience sampling. Glesne (2006) explains that convenience sampling is sampling of participants based on

convenience and that it has low credibility. The participants used in this study were, at the time of the study, students in my ESL classroom. Although I explained and assured the participants that this would have no effect on their grades at X English School, I unfortunately cannot be 100% positive that they understood or interpreted my comments correctly. Using participants from other classes or another school would have corrected this problem.

An additional limitation to this study was access to the participants themselves. All of the one-on-one interviews with the participants had to be conducted during the 10 minute break between classes. This limited the depth of the questions I could ask. The X English School has strict guidelines about teacher-student fraternization. For example, teachers are not allowed to have students in their cars, attend functions where there is a combination of teachers, students, and alcohol, or invite only specific students to events. The latter means that teachers must have an open invitation policy that includes all the students at the X English School. Since I am an employee of the X English School, all of these contributed to limited access to the participants.

When asked which computer and Internet programs the participants used to help them learn a language, many of the participants put random answers such as reading or Google.com, which aren't specific computer or Internet programs. In the creation of my questionnaire, I had hoped that the participants would list specific programs or websites. While yes, reading is something that the participants may be doing on the computer or Internet, but what are they reading? Additionally, Google.com is a search engine- a website that links users to other websites. Therefore, another limitation is the design of

the questionnaire. Examples should have been provided to prompt the participants to providing precise programs and websites.

Recommendations for Further Study

The focus of this study was CALL and specifically, CALL usage among my adult ESL students. Within the field of CALL there are many areas of research, but this study choose to focus on how adult ESL students perceive the use of CALL in learning English. This evaluation must be noted as an action research based study and the results may not be applicable to all CALL related situations. The success of CALL in other situations may yield different results and this is why I believe the concept of this study to merit further investigation. For example, would the results be the same if the study was replicated with a different participant SES? Specifically, I feel further investigation should be undertaken into exploring precisely what ESL students are doing on computers and the Internet. Incorporating technological tracking devices into participant's computers would provide a daily log of English usage. This would aid in providing more direct answers to questions, asked not only in this study but also in future studies.

Conclusion

Computer assisted language learning is an area of much discussion in the second language learning world. The concept of providing students additional outlets to learn languages not only as supplementary tools to traditional classroom environments, but also independently is motivating. CALL has provided students and teachers unlimited learning boundaries, which were not available in the past. The primary goal of this study

was to find out whether or not the adult ESL students in my classes enjoyed using technology to learn English, as well as to find out what they were actually doing with the help of technology to learn English. A secondary goal of this study was to increase my personal knowledge as an ESL instructor about using CALL with adult ESL students.

While this is only a small study and would require further investigation to make larger claims, the results from this study indicate that adult ESL students do enjoy using technology to learn a language. Additionally, they are also utilizing websites like Google.com, Youtube.com, and Yahoo.com to help them engage in learning English. Overall, this study will contribute to my understanding and implementation of CALL within the ESL field.

APPENDIX A

QUESTIONNAIRES

Actual Questionnaire

Name: _____ Home Country: _____ Level: _____

Gender: Male/Female

Please fill in the blank or circle the appropriate answer

How many years have you been using a computer? _____

How many years have you been using the Internet? _____

How many years have you been learning English? _____

Answer Guide

1= Strongly Disagree

2= Disagree

3= Neither Disagree or Agree

4= Agree

5= Strongly Agree

I am comfortable (relaxed, stress free) using a computer.

1 2 3 4 5

I am comfortable (relaxed, stress free) using the Internet.

1 2 3 4 5

What percentage of time (home and school) spent on a computer is **English only**?

0-25% 26-50% 51-75% 76-100%

What percentage of time (home and school) spent on the Internet is **English only**?

0-25% 26-50% 51-75% 76-100%

Have you ever used a computer to learn a language (this includes grammar, dictionary, and translation help)? Yes No

If yes, then which computer/Internet programs did you use?

If yes, then what language(s) did you study?

Did you like using a computer to learn a language?

Yes No

What did you like most about using a computer to learn a language?

What did you like least about using a computer to learn a language?

When using the Internet, what **Non-English** activities do you do? Circle all that apply.

Socializing Language Help Watching TV/Movies
Reading the News Shopping Other Activities

When using the Internet, what **English only** activities do you do? Circle all that apply.

Socializing English Help Watching TV/Movies
Reading the News Shopping Other Activities

****Only answer the following questions IF you circled one of the above activities****

What programs/websites do you use for socializing **in English**? Be specific.

What programs/websites do you use for shopping **in English**? Be specific.

What programs/websites do you use for English help **in English**? Be specific.

What programs/websites do you use for watching TV/movies **in English**? Be specific.

What programs/websites do you use for reading news **in English**? Be specific.

What programs/websites do you use for other activities **in English**? Be specific.

Pilot Questionnaire

Name: _____

Nationality: _____

Please fill in the blank or circle with an appropriate answer.

How many years have you used a computer? _____

How many years have you used the Internet? _____

How comfortable are you using a computer? Very Good Average Not at all

How comfortable are you using the Internet? Very Good Average Not at all

Do you like using a computer? Yes Sometimes No

Do you like using the Internet? Yes Sometimes No

Do you think using computers/Internet in the classroom is good? Yes Sometimes No

Have you ever used a computer to learn a language? Yes No

If yes, which computer/Internet programs did you use?

If yes, what language(s) did you study? _____

Did you like using a computer to learn a language? Yes Sometimes No

What did you like most about using a computer to learn a language?

What did you like least about using a computer to learn a language?

How do you spend most of your time when using computers/Internet for non-English activities?

What English only activities do you complete when using the Internet? Circle all that apply.

Email Chatting Shopping English Grammar Help Watching TV/Movies
Reading the News Other Activities

Only fill out the following questions IF they apply to you. If you did NOT circle one of the above coordinating answers, then do NOT fill out the following questions.

What programs/websites do you use for email? Be specific. _____

What programs/websites do you use for chatting? Be specific. _____

What programs/websites do you use for Shopping? Be specific. _____

What programs/websites do you use for English help? Be specific. _____

What programs/websites do you use for watching TV/movies? Be specific. _____

What programs/websites do you use for reading the news? Be specific. _____

What programs/websites do you use for other activities? Be specific. _____

APPENDIX B

TRANSCRIPTS

Interview Transcripts

Interview #1

Me: Alright, so the first question is that you said that you only learned English for six months?

Student #1: Yes

Me: That's here at X English School, right?

S #1: Yes, yes, yes

M: What about in Japan? Did you learn English in Japan in school?

S #1: No, just junior high school. And then finish because...

M: Only two years in junior high school?

S #1: Three years

M: Three years?

S #1: Junior high school, is so little right?

M: Right

S #1: I don't remember everything.

M: Oh, Ok.

S #1: Of course, right.

M: So three years in Japan and then six months here?

S #1: Yes

M: Ok, my other question was #4. I'm comfortable using the computer and the internet.

You put "disagree".

S #1: Yes

M: That means you're not comfortable using a computer or the internet? Right?

S #1: Yes

M: But, you put on question #11 that you like using a computer to learn a language?

S #1: Mmm

M: So, the question is if you like using the computer, that you like using it even though you aren't comfortable?

S #1: Yes, because it convenient.

M: Oh. Because it's convenient?

S #1: Yeah. And then I can know what meaning...

M: Oh. So it's convenient.

Interview #2

M: Ok, so you put on here that you have been learning English for 6 months?

S #2: Yes

M: Here at X English School?

S #2: Yes, just

M: Did you learn English in Korea at all?

S #2: No, I studied English but...

M: Like in school?

S #2: Yeah, just school.

M: How many years in school?

S #2: From elementary school.

M: Oh? So a long time, but that's only like part-time?

S #2: Yeah

M: Ok. Alright. And this one, you put that you really like using computers

S #2: Yeah

M: But you don't like using them to learn a language?

S #2: (Laughs)

M: Why?

S #2: It's....

M: Your answer says because you can't ask questions?

S #2: Yeah

M: Is that why you don't like it? So it's not that it's too hard?

S #2: I can't concentrate.

M: You can't concentrate?

S #2: Yeah

M: Why can't you concentrate? ...Because people are there?

S #2: No, if I on computer I want to do other things.

M: Oh, you want to do other things? Email, Facebook?

S #2: (Laughs)

M: Ahh, ok so it's a distraction. So you prefer to learn a language like here at X English School. In a class? (Clarify the meaning of prefer)

S #2: Yeah

Interview #3

M: Ok, so on your survey you said you have only been learning English for 10 months?

Did you learn English in Taiwan?

S #3: I never learn English in Taiwan. Never.

M: S #3, this is serious!

S #3: Never really!

M: You never learned English in school?

S #3: I serious!

M: You learned English in school!

S #3: Never. I sleeping in class.

M: You slept in the class? You had the class, but you didn't really participate in the class?

S #3: I don't care. Only Chinese.

M: Ok. And this question number 10. I wanted to ask you what language you learned, but you said "I don't like to study, but in school I study to school."

S #3: (Laughing)

M: So what language would this be? English that you studied?

S #3: Yeah, English. Here (at X English School).

M: Only here? But in Taiwan you didn't? And question #18, what programs and websites do you use in English for English help? And you said, "I forgot". You usually just watch a movie? Do you remember any of those websites now? Like do you go to anything directly, like Google translation or Dictionary.com?

S #3: No, I go youtube.com

M: That's it? You don't do any English help?

S #3: Yeah, I do English help.

M: How do you do English help?

S #3: I do it...in computer lab.

M: How do you do it in the computer lab? If you are watching youtube.com and you don't know what a word means, how do you find out?

S #3: Ahh, I find I use my dictionary to find.

M: Can you use the dictionary online?

S #3: Yes

M: What is the website?

S #3: Yahoo

M: Yahoo? They have a translator?

S #3: Yes

M: And that's what you use?

S #3: Yeah

M: Do you ever, if you like don't understand the grammar do you Google the grammar?

(Give example)

S #3: Never

M: No, never?

Interview #4

M: I just want to ask you, on number 16...says on what programs or websites do you use for socializing in English? You put X English School software.

S #4: Yeah

M: (Explaining what socializing means)

S #4: No, in the computer room you have maybe software and yeah

M: So but how do you use that to talk to people?

S #4: You have...

M: Oh, you talk to the computer lab?

S #4: Yeah, talk to computer and play and listen.

M: Ok, good. And also what programs do you use for reading news in English. And you put TV websites. What kind of websites do you use to read?

S #4: Youtube.com

M: But like only reading, not watching/seeing

S #4: Oh, X English School sometime has newspaper and I read.

M: Ok, but usually you just go to youtube.com?

S #4: No.

M: What do you normally do? X English School Software, youtube.com, and....

S #4: Enjoy my time. My free time.

M: So do you read the news in Chinese?

S #4: At my house

M: At home, but not at X English School. Because X English School is English only, in the computer lab, English only.

S #4: Sometime no. Maybe you need the translator, Chinese to English, so sometime you need to go to Chinese...to find out the word

Interview #5

M: Ok, my specific question is on # 8 and #11, it says, "Have you ever used a computer to learn a language this includes grammar, dictionary, and translation help." You said "no".

S #5: Yeah

M: And #11 says did you like using a computer to learn a language and you said, "Yes"

S #5: Yeah

M: So those are conflicting sentences. (Explaining why)

S #5: Yeah, because I just listening

M: Oh, so that's the only way that you have used a computer is to listen

S #5: Yeah

M: How do you listen? Is it like on the internet? Or when you are doing a program?

S #5: On internet, youtube.com, Letterman, Oprah

M: You watch Oprah?

S #5: Yeah, don't you like it?

M: Yeah. But I like Ellen better.

S #5: I saw Ellen. Sometimes

Interview #6

M: The first question says, "How many years have you been learning English?" Not just at X English School. Like did you learn English in school?

S #6: One year

M: You didn't learn English in high school?

S #6: In high school it doesn't count. It does nothing.

M: It doesn't count?

S #6: Always I skip. Always I don't go. Bad student.

M: You didn't learn in college?

S #6: No, in college French because we don't use English. In law in Egypt, we don't English. Only close to French. But for this operation...

M: But shouldn't you be learning British English because Britain and Egypt are...

S #6: Yeah

M: Close

S #6: Exactly. I come maybe five or six months in British consulate in Egypt. Not in America. We have American University but I applied and during this time I went and studied at British console. Then six months after that I traveled I leave Egypt, I didn't complete my degree program at British console.

M: But you did take some courses there?

S #6: Yeah, I took some courses. About six months

M: And then this one, #12/13 (Explaining)

S #6: Oh, so I get it wrong.

M: So then what do you like least about using a computer to learn a language?

S #6: Ah least? Something like not good?

M: Yes, something that's not good. Some people they don't like studying grammar on the computer or...

S #6: I didn't try grammar in computer. I just use my computer in language. I always use my computer in English-not Arabic. Sometimes if new thing I don't know and they have Arabic language I try to see after and again Arabic and then English.

M: So maybe you like everything?

S #6: Maybe

M: Maybe you just like using a computer?

S #6: Not much. Now I start, because now I stay home long time. After three nothing to do, I try to go to computer. But before that, in my country I have my free time outside, here and there, my friends, I can go out more then.

Interview #7

M: Alright, so on your survey you are really comfortable using the internet and computers. No problems. But down here it says do you like using a computer to learn a language and you said no. And the only reason is vocabulary? Like why else wouldn't you like using a computer? (Explaining)

S #7: Because I think if you use computer you relax yourself and vocabulary and English you not really understand. It will be stressful for you to use the computer.

M: Ok, so it creates stress?

S #7: Yeah

M: So when you normally use a computer you're not stressed, but when you have to use it to learn a language then it's stressful.

S #7: Yeah

M: Ok, so you would prefer to learn a language in a classroom?

S #7: Yes, of course

Interview #8

M: So the question I had was how many years have you been learning English and you put six months. Did you learn English before, like in Turkey?

S #8: Yes, school but my country teachers don't have...

M: Not very good?

S #8: Because people who speak good English aren't (English) teachers, because the company have big money and teachers have a small salary and in company working not teaching, for example Turkish language teacher same as English language one teacher English and Turkish language class.

M: Ok so how many years did you learn English in Turkey? Did you have to start when you were little?

S #8: College-no. Government school maybe 11.

M: When you were 11 years old?

S #8: Yes, start English but special school...seven...

M: So you learned for about seven years?

S #8: Yes

APPENDIX C

IRB APPROVAL FORM



Social/Behavioral IRB – Expedited Review Approval Notice

NOTICE TO ALL RESEARCHERS:

Please be aware that a protocol violation (e.g., failure to submit a modification for any change) of an IRB approved protocol may result in mandatory remedial education, additional audits, re-consenting subjects, researcher probation suspension of any research protocol at issue, suspension of additional existing research protocols, invalidation of all research conducted under the research protocol at issue, and further appropriate consequences as determined by the IRB and the Institutional Officer.

DATE: March 5, 2009

TO: **Dr. Steven McCafferty**, Curriculum and Instruction

FROM: Office for the Protection of Research Subjects

RE: Notification of IRB Action by Dr. Paul Jones, Co-Chair *PTJ*
 Protocol Title: **Adult ESL Student's use of Technology as a Method of Language Learning**
 Protocol #: 0901-2996

This memorandum is notification that the project referenced above has been reviewed by the UNLV Social/Behavioral Institutional Review Board (IRB) as indicated in Federal regulatory statutes 45 CFR 46. The protocol has been reviewed and approved.

The protocol is approved for a period of one year from the date of IRB approval. The expiration date of this protocol is February 25, 2010. Work on the project may begin as soon as you receive written notification from the Office for the Protection of Research Subjects (OPRS).

PLEASE NOTE:

Attached to this approval notice is the **official Informed Consent/Assent (IC/IA) Form** for this study. The IC/IA contains an official approval stamp. Only copies of this official IC/IA form may be used when obtaining consent. Please keep the original for your records.

Should there be *any* change to the protocol, it will be necessary to submit a **Modification Form** through OPRS. No changes may be made to the existing protocol until modifications have been approved by the IRB.

Should the use of human subjects described in this protocol continue beyond February 25, 2010, it would be necessary to submit a **Continuing Review Request Form** *60 days* before the expiration date.

If you have questions or require any assistance, please contact the Office for the Protection of Research Subjects at OPRSHumanSubjects@unlv.edu or call 895-2794.

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VITA

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