THE SOCIOCULTURAL IMPACT OF TECHNOLOGY ON ADULT IMMIGRANT ENGLISH AS A SECOND LANGUAGE LEARNERS

By

Eleni Saltourides

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Eleni Saltourides entitled The Sociocultural Impact of Technology on Adult Immigrant English as a Second Language Learners and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

Date: 08/26/08

Dr. Robert Ariew

Date: 08/26/08

Dr. Muriel Saville-Troike

Date: 08/26/08

Dr. Perry Gilmore

Final approval and acceptance of this dissertation is contingent upon the candidate’s submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

Date: 08/26/08

Dissertation Director: Dr. Robert Ariew
STATEMENT BY AUTHOR

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SIGNED: Eleni Saltourides
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DEDICATION

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ABSTRACT

For immigrant adult learners, learning English is not only for survival and functioning in the target language (TL) culture, but it is also a means of being able to successfully deal with the inequitable power structures in place in the larger society which deny them access to the culture’s social, economic, and political resources (Norton, 2000). In the United States, the computer is a culturally valued resource and tool used by TL speakers, yet this valued resource is not easily accessible to immigrant adults due to their limited language ability, lack of experience with computers, and/or financial reasons; thus, putting them at an immediate socioeconomic disadvantage in this country. Nevertheless, researchers have argued that today’s language learners must know how to read, write and communicate through electronic mediums due to the computer’s prevalence in many aspects of modern life (Warschauer, 2005).

The purpose of this study is to explore the impact of technology on adult immigrant learners as they learn how to use computers formally for the first time within an English as a Second Language curriculum. Specifically, the study seeks to discover which factors contribute to successful computer literacy acquisition, the impact of computer literacy acquisition to their identities, and which pedagogical practices are best suited for this population. The research project took place at a local community college and looked at 25 students, focusing in on five case-profile learners. Using Lave & Wenger’s (1991) Situated Learning Theory and Norton’s (1995) Theory of Investment, Social Identity and Power as a means of examining the above issues, the findings provide evidence that teachers need to consider learners’ identities when designing and
implementing a computer literacy curriculum. This research also calls attention to the necessity of implementing a computer literacy course within an ESL curriculum so that students can learn language and computer literacy in an ESL supportive environment attentive to their specific needs. Moreover, the study points to the need for instructors to be more aware of their own cultural and learning style biases and how they affect learner participation in this population of students.
CHAPTER 1
INTRODUCTION

Objective of the Study:

Numerous studies of how best to utilize technology in classrooms and in what ways technology impacts second language (L2) learning (Fotos & Browne, 2004; Zhao, 2003; Beauvois, 1997; Kern, 1995; Kelm, 1992) have been conducted over the past decade. At the same time, Second Language (SL) researchers have been in heated debates over whether or not to include sociocultural theory within the conceptual framework of a second language theory (Firth & Wagner, 1997; Larsen-Freeman, 2002; Watson-Gegeo & Nielson, 2003). Indeed, SL researchers cannot ignore how SL theory and language teaching are linked to broader sociopolitical forces (Tollefson, 1995). Nevertheless, few studies have dealt with the impact of technology on L2 learners’ lives, identities, and learning through a sociocultural theoretical lens (Kern, 2006; Egbert & Petrie, 2005; Warschauer, 2005).

The present study seeks to bridge the gap by examining the sociocultural and sociopolitical forces that impact computer literacy learning. A sociocultural perspective of learning considers the social and cultural spaces in which learning takes place and through the interactions and relationships that occur between learners and their environment (Nieto, 2002). What is meant by a sociopolitical context is that it “takes into account the larger societal and political forces in a particular society and the impact they may have on student learning” (p. 56). Together, sociocultural and sociopolitical perspectives are based on the “assumption that social relationships and political realities
are at the heart of teaching and learning” (p. 5). Between the above two different veins of research within the Second Language Acquisition (SLA) field, there has been a lack of inquiry about how technology impacts the lives of L2 learners. In order to do this, the sociocultural and political contexts within which L2 learners work, live, and study must be examined as they learn about and how to use computers. Bonny Norton’s (2000) research focused on how the sociocultural and sociopolitical contexts impacted the L2 learning of her former English as a Second Language (ESL) students. This study addresses how sociocultural and sociopolitical contexts affect the identities of Resident Nonnative Speakers of English (RNNS) \(^1\) as they learned to use technology for the first time within an English as a Second Language (ESL) curriculum at Pima Community College, a two-year institution located in Tucson, Arizona. Therefore, this study combines the above veins of research.

Specifically, the study attempts to document both the emic perspectives of the participants as well as the etic perspectives of the researcher as they learned how to use and interact with computers. Moreover, this study documents changes to the participants’ social identities throughout the study period and serves to capture the sociocultural factors that came into play in their (un)successful acquisition of their computer literacy. To ascertain how individual variables such as motivation, aptitude, and student background impact their technology learning, five in-depth case studies have been documented from the class that was observed.

\(^1\) Resident Nonnative speakers of English (RNNS) are defined in this study as adult immigrant students, age 18 and older, learning English as a second language, but who are either residents or citizens of the U.S. The acronym is adapted from Sadler’s (2004) unpublished dissertation.
**Contextualizing the Issues:**

Ever since their entry and utilization in language classes in the 1960s, computers and their role in Second-Language Acquisition (SLA) have been closely scrutinized by researchers trying to find decisive answers to how much more beneficial computers are to language acquisition and exactly how much more language learning is enhanced by their use (Kern, 2006). Warschauer & Kern (2000) and Warschauer, Turbee, & Roberts (1996) stress that computer technology is no longer just a possible tool but an essential new medium of language and literacy practices alongside face-to-face communication and the printed page. Moreover, in addition to learning the grammatical, lexical, spoken, and pragmatic aspects of language, today’s language learners must know how to read, write and communicate through electronic mediums due to the computer’s prevalence in many aspects of modern-day life (Warschauer, 2003b). Computers, video and telecommunication have become important elements of people’s cultural, political and personal lives. Technology is changing the way people can live, and the way they do live in the Western world and this directly impacts the social and economic worlds immigrants participate in. It is no longer a question of should they learn about computers, but a question of how fast can they learn how to use them as their target language (TL) peers.

**Computers for All**

RNNS have been an understudied population in SLA literature (Lee & Sheared, 2002; Alfred, 2000; Bosher & Rowekamp, 1998) and especially in their interaction with
technology. For much of the same reasons RNNS learn English to improve their marginalized status, the participants in this study took the technology course thinking it would improve their perceived marginalized status for not being computer literate.

In the United States and much of the Western world, the computer is a culturally valued resource and tool used by TL speakers. Consequently, computers symbolize a divide between the haves and have nots in terms of distinguishing higher versus lower socioeconomic status in society. Since most adult immigrants come to this country with little or no experience with computers, they are immediately at a disadvantage in the host country. Warschauer (2003b) has lain to rest the simplistic notion of “the digital divide,” i.e., the haves and have nots or those who do or do not have access to computers. Warschauer convincingly argues that the inequality that exists is not digital but social; thus, it is erroneous to think that by learning how to use a computer and to purchase a computer or at least have daily access to a computer will encourage social inclusion in the TL culture. For the adult immigrants in this study, my initial question was why did they feel they needed to learn to use computers? All of the participants’ answers resounded with a similar refrain—“to have a better future and job.”

On the surface such a question appears straightforward but the intent of this study was to delve deeper into this question especially to investigate the relationship of how sociocultural and sociopolitical contexts affect ESL learners, who feel compelled to learn to use the computer and all its capabilities. The assumption cannot be made that by having access to computers and knowing how to use computers will automatically lead “to a better future and job.” Warschauer (2003a) calls for “a consideration of how people
can use computers and the Internet to further the process of social inclusion” and considers it “paramount in any effort to install new technology into an environment lacking it” (p. 44). In other words, providing computers and teaching students to use various programs in order to learn English better may not be enough for what is needed to overcome social exclusion (if that could ever be achieved). This study provides further insight into Warschauer’s contention that the mere presence of digital technology is not enough to overcome the social divide in this country by exploring the evolving and changing social identities of the participants in this study as they gain access to computers and learn how to use them.

Nevertheless, deciding what aspects of computer technology is relevant to help ESL learners feel socially viable in a TL culture that values computer ability is becoming more difficult as it comes up against the rapid evolution of what exactly constitutes Computer-Assisted Language Learning (CALL). Its original definition as “the search for and study of applications of the computer in language teaching and learning” (Levy, 1997, p. 1) has progressed into what Egbert (2005) defines as “learners learning language in any context with, through, and around computer technologies” (p. 4). This means, according to Egbert’s definition, that CALL is not just about using software programs or the Internet to learn English, but that CALL has expanded its scope to include such things as “personal digital assistants (PDAs); cell phones with text messaging and Web searching capabilities; laptops and peripherals, such as digital cameras, scanners, printers, and piano keyboards; and software from word processors to movie makers” (p. 4). This progression reflects what is happening with the TL culture where communicating on line
with different devices and peripherals is part of people’s daily lives as much as having a cup of coffee early in the morning. Clearly, learning how to email and surf the web is kid’s play compared to what today’s TL users use technology for. Computer literacy has taken on an entirely different meaning from that of just a decade ago. There is a lag between how fast RNNS learn to integrate computers/technology with their lives compared to the rapid evolution of what is considered to be computer literate nowadays in the TL culture they are trying so desperately to fit in to.

**Computer-use Trends**

As a testament to how pervasive and second-nature technology has become to Americans, a U.S. Census Bureau press release (2005) reported that 40% of adults used the Internet to obtain news, weather or sports information in 2003, a marked increase from only 7% in 1997. In addition, 55% of adults used email or instant messaging in 2003, an increase from 12% in 1997. Their report also showed how integral the Internet has become to U.S. economy in terms of how many adults used the Internet to find information on products or services (47%) and how many purchased online (32%) according to 2003 statistics. The computer, at least in American society, has become a value-laden cultural artifact that RNNS speakers need to adapt and value if they expect to succeed and be socially included in today’s economy and society.

In his chapter, Zhao (2005) illustrates the current trends occurring with technology as it relates to language learning and its implications for SLA research. Specifically, he points to the major trend of accessibility to technologies. Computers are
getting less expensive to purchase, resulting in more and more people being able to afford a PC. For instance, in 1985, there were about 19 million and 31 million PCs in use in the United States and worldwide respectively. By 2002, these numbers soared to 202 million and 663 million respectively. Correspondingly, there has been an increase in Internet use from an estimated 16 million users in 1995 to 600 million worldwide in 2002. Student access to computers and Internet access in schools has also increased from a 12.1 to 1 ratio in 1998 to a 5.4 to 1 ratio in 2001 in the U.S. In other countries, the student-computer ratio, while not as high as the U.S., is steadily and rapidly increasing. As of 2002, the ratio was 13 to 1. The permeability of the PC is also evinced in higher education settings where freshmen are now required to own a computer. Zhao also points to other forms of technologies that have implications for language learning such as PDAs, multimedia cellular phones, MP3 players, DVD players, and digital dictionaries which are also increasing at a steady pace worldwide.

A second trend in technology that has implications for language learning is the continual sophistication of capacity for content manipulation and multimedia communications found in speech synthesis or text-to-speech technologies, automatic speech recognition programs, CMC, web, and video/audio technologies. A third trend is the increasing availability of readily usable content and tools in computers and on the Internet. There is less and less need to make a software program or build a website offering content for the language one is teaching. As technology is getting more accessible, available, and more sophisticated, there has been an increasing pressure for
Zhao explains that these trends “are expected to significantly alter the landscape of language education” and argues that CALL researchers “may need to reconsider what constitute ‘significant’ issues in technology and language education” (pp. 452-453). One of his suggestions calls for a need to focus more on “effective uses rather than development of technology” (p. 453) and a second suggestion is that “research needs to study the learner and learning process in a technology-supported language learning environment” (p.454). The objectives of the present study have particular bearing on the above two suggestions. This study gives insight on what technologies are best suited for adult immigrants to benefit from and it investigates what learner characteristics are positively or negatively influenced from technology-supported environments. In addition, this study, rather than being concerned with what kinds of technology-based activities best promote learning, does what Zhao suggests, i.e., it is concerned with “human users (teachers and students) and less with technology, especially the interactions between human users and technological innovations” (p. 456).

**Significance of Study:**

It is rare to find a technology-based class within an ESL curriculum and I found this to be a great opportunity for me to investigate what ways a technology-based class impacts this unique population of students. The significance of this study to the Teaching English to Speakers of Other Languages (TESOL) field is that it will give similar ESL
programs insight on the potential value such a course has to empower the powerless; insight on how students learn about computers; and insight on how social identity factors into (un)successful computer literacy and language acquisition. This study also offers pedagogical insights on how best to instruct L2 learners by providing better ways of using scaffolding when teaching them how to use technology. It also gives insight on which programs seem to be best suited and appropriate for this particular group of students.

Traditionally, SLA theories have discounted the significance of socialization processes to L2 learning success. This study attempts to add to the growing number of studies calling to the attention of language socialization and its role in SLA. It is important for ESL teachers to realize how their students learn to be students and in this case, how they learn to learn about computers and becoming proficient with computers. Moreover, recognizing and being more empathetic to the social identities these students bring to the table in L2 classrooms is of paramount importance because it gives practitioners a window through which they can really reach their students and celebrate in their uniqueness rather than trying to force them to embrace a culture that they feel they have no connection to.

**Impetus for the Study:**

I consider myself fortunate and blessed to teach such an extraordinary group of people (adult immigrants) and it is my utmost respect and admiration I have for them that has inspired this present dissertation project. When I first began teaching ESL to RNNS
back in 1997, I could not imagine how much I would come to care for the immigrants taking my courses nor how their life-stories would propel me forward in my higher-education career to the point of this present study. I have taught many kinds of L2 speakers but have come to really enjoy adult immigrants, or RNNS, perhaps because my own parents were immigrants and they still depend upon me to clarify a lot of their linguistic woes despite spending most of their adult lives in this country.

My parents barely finished public school when they immigrated to the U.S. in the early 70s. My father had to drop out at the 7th grade to help his father in the fields, but my mother at least finished high school. They came to this country hoping for a better life for their children. Between the two of them, they took a year’s worth of ESL classes. Both worked very hard in factories and then in diners in order to succeed in this country. Fortunately, my father was able to open his own business and thereafter became a successful entrepreneur. Both he and my mother had no need for developing academic English skills and to this day, they have no need or desire to learn how to use a computer. They are well-respected, at least in the local community where they own their business due largely to the fact that Western culture values wealth and status. These two factors at the minimum provide my parents with some social inclusion in the TL culture.

Unfortunately, my parents’ success story is not indicative of the majority of immigrants coming to this country nowadays. Hard labor and working long hours will not get one what it did 30 or 40 years ago. The economy and society has changed to where higher cognitive and mental skills are the valued assets in today’s technology-driven economy. Consequently, immigrants who do not want to stay in menial positions
and by default, to be marginalized by the TL culture, have no choice but to improve their English skills and learn something about technology. However, learning academic English skills takes as much as seven years to acquire and then only with discipline and many hours of hard work Cummins (1981). Being an immigrant in today’s society is not as carefree as many TL speakers seem to think it is.

Why Adult Immigrants?

Unlike international students, the majority of whom come to this country willingly to study English, most immigrant learners leave their countries out of necessity. Bosher & Rowekamp (1998) argue that this group is “an ‘invisible’ one” (p. 24) because they are not high profile, are difficult to identify, and/or institutions frequently choose not to identify them as L2 learners. Years of educating this population has given me many insights into their overall backgrounds and the distinguishing characteristics they bring into the ESL classroom. Generally, they come to this country with the hope of creating a new and better life for themselves and for their children. Upon arriving to this country, many must learn English for survival and acceptance into the target-language (TL) culture, in this case U.S. culture. They have limited language skills that force them to take menial jobs. And for many, they never did these kinds of jobs in their own countries. They come with varied social backgrounds—in terms of religion, race, color, education, and socioeconomic class (Portes & Rumbaut, 2006).

Most adult immigrant learners have demanding lives with limited time; therefore, when they take ESL classes, they expect their class time to be well spent. More often
than not, they let their education take a backseat to other responsibilities, such as jobs and families. They hope their education will help them solve problems in their daily lives and study to improve their performance in other social roles, such as workers and parents. They believe the decision to learn more through formal education is an important one although some may hold negative impressions of their own abilities due to many factors such as previous negative impressions of classrooms and teachers or stressful situations outside the school context (Portes & Rumbaut, 2006).

They each come with a social identity that connects them to the country they sorely miss, but know they could not live there again. They take ESL classes for English language improvement, but I believe they also take it as a way to reconnect with people from their own countries and/or connect with people who have had similar experiences in order to hold on to that piece of their identities that for the most part is being forced from them as they struggle to acculturate and be accepted by the TL society.

Immigrant adult language learners are a unique population of L2 learners in that for them learning a second language is not only for survival and functioning in the TL culture, but it also is a means of being able to successfully deal with the inequitable power structures in place in the larger society which deny them access to a culture’s socio-, economic, and political resources (Norton, 2000; Mitchell & Myles, 1998; Norton Peirce, 1995). In other words, immigrants coming to host countries must deal with institutionalized discrimination due to their perceived lower-class status by the dominant culture (Saville-Troike, 2003) which in turn does not allow them to participate fully in
the host country’s resources. The TL speakers act as gatekeepers barring access to “essential social goods and services” (Mitchell & Myles, 1998, p. 165).

Consequently, adult L2 learners look towards ESL classes to help them “learn English better,” thinking that this is what will make them be accepted by TL society. However, as Saville-Troike (2003) points out, the idea that learning English better would lead to their acceptance by TL speakers and a bettering of their socio-economic status is a folk myth. It is not immigrants’ inability to produce “good” English that is causing the discrimination, but the centuries old language policies in place that essentially force L2 learners to learn the TL at the expense of losing their L1 and their culture. In fact “most linguists are convinced that the variety of English one speaks is not an *intrinsic* barrier to educational and economic success” and that “learning ‘good’ English will [not] automatically erase class boundaries and prejudice” (p. 271). Nevertheless, the myth that if language learners learn English well will improve their socio-economic status in the eyes of TL speakers is still perpetuated and “privileges the language of a particular group and supports the maintenance of their hegemonic status” (p. 271).

RNNS are the marginalized, powerless populations in this society who often face insurmountable challenges the most debilitating is the discrimination they face in the TL culture especially in the workforce because of their limited English ability (Norton, 2000; Roberts, Davies & Jupp, 1992). Indeed, one only has to look at the current immigration-law turmoil in this country to see how pervasive the discrimination and ignorance of those supporting English-only policies (Ricento & Burnaby, 1998) and ridding immigrants who do not have legal status in this country (Murray & Babington, 2006).
Despite these obstacles, RNNS persevere in their hunger to learn as much English as they can. However, today’s adult immigrants face newer challenges—learning how to use the computer. The same myth of becoming accepted in the wider culture is perpetuating itself as RNNS go to classes to become computer literate.

Current Trends and Statistics of the RNNS Population in the U.S.:

Demographics Nationwide

According to the U.S. Census Bureau of 2000 (2003, Foreign-born Population), the United States is experiencing its largest wave of immigrants since the turn of the last century. Between 1990 and 2000, the foreign-born population increased by 57%, from 19.8 million to 31.1 million compared to the native population which only experienced a 9.3% increase due to low-birth rates. Geographically speaking, those coming from Latin American countries comprised almost 52% of the foreign-born population, followed by 26.4% of the Asian population and 15.8% of the European population. High-birth rates among the Latin American and Asian groups coupled with the low-birth rates of native and White groups were the main reasons for the rapid and large influx of the foreign-born population. In fact, according to Mujtaba & Preziosi (2006), “English is expected to be a second language for the majority of Californians as well as those living in Miami, Florida” (p. 191).

According to a 2004 U.S. Census Bureau report, the projected population of non-White racial groups will more than double by 2050 while the White population will decrease from 81% of the total population in 2000 to 52.5% by 2050, thus making up
only a small majority. Given these statistics, it is apparent that more and more foreign-born immigrants will need to integrate with the shrinking, but majority culture. This means, more and more minorities will seek basic and higher-education opportunities as they try to improve their social and economic status in this country.

Demographics of RNNS Attending Post-Secondary Schools

Community colleges serve as gateways to economic opportunities as they offer low-cost tuition and quality education programs for an increasing number of people coming from diverse socioeconomic backgrounds. According to the National Profile of Community Colleges: Trends & Statistics (2005) 33% of all community college students are minorities and that proportion is expected to rise as the American population is becoming increasingly and rapidly more diverse. The three biggest proportion of minorities attending community colleges are Hispanic, Latin, and Native American populations, respectively.

Pima Community College in Tucson, Arizona has five campuses around the Tucson metropolitan area, of which Desert Vista, located on the southside of Tucson and where a majority of minority students live and Downtown Campus have the highest percentages of ethnic minorities attending their campuses (Pima Community College: Campus Service Area Profiles, 2005). Since this study took place at the Downtown Campus, the following statistics are drawn for this campus. In terms of ethnicity, 20% of the ethnic population at Downtown Campus is comprised of Hispanics, followed by 9% of other races, and 3% is comprised of Asians.
The Changing Economy

Along with the rapid and diverse demographic changes occurring in the world and in the United States’ population, today’s global economy is rapidly changing to a technology driven one. This necessitates the need for the world’s immigrants, two thirds of whom come to the United States (Mujtaba & Preziosi, 2006), to have and/or acquire technology skills. The workforce trends, according to Richard & D’Amico’s (1997) study on the demographic, sociological, economic, and political trends in post-World War II America, show that more immigrants are in the workforce and that it will likely continue. The study also showed that service and information jobs are increasing and higher skill levels are required to compete effectively in today’s global world of business. Mujtaba & Preziosi (2006) argue that because the current workforce is so demographically diverse and that the minorities are growing in number, “creating an inclusive environment (and eliminating the exclusive world of bias and stereotypes) is necessary for an effective learning environment with all learners” (p. 191). In other words, in order for the United States to be competitive in the global markets, it must pay attention to the way it educates its growing number of diverse immigrants seeking a higher-education.

Assumptions of the Study

There have been some assumptions made when devising this study that may or may not prove to be erroneous. They are the following:
• Offering a technology-based class to learn about technology and learn English empowers students

• Given a chance to learn about computers and their capabilities will give them an opportunity for social and economic inclusion in the TL culture

• Such a class will lead to increased self-confidence and consequently a stronger sense of identity

Being able to use technology, including knowing how to use word-processing programs, the Internet, message boards, e-mail, and creating PowerPoint presentations, is culturally valued by the majority of the TL culture, in this case the U.S. Offering such a class to marginalized populations such as immigrant adults will give them an opportunity for social and economic inclusion in the society they live, work, and go to school in. Moreover, such a class empowers students who had never had the opportunity to learn how to use the computer in their own countries. In turn, empowerment will lead to the development of self-confidence and building of not only stronger, already existing social identities, but perhaps can also create multiple identities that will facilitate the acculturation of these learners into mainstream society. Furthermore, such a class will give them the competitive edge they need to join a largely technology-based economy in addition to enabling them to have the same technological skills as their native-speaking, college-attending peers.
Research Questions:

The entire study is framed under the overarching theme of how adults are socialized into using and learning about technology and its subsequent impact to their lives. To this end, the following research questions will inform this study:

1. What sociocultural and sociopolitical factors influence the acquisition of computer literacy?

2. What are the consequences to social identity when learning about and using technology?

3. Does learning about technology lead to social inclusion?

With these questions as a guide, this study hopes to contribute some meaningful and practical insights on the ways technology impacts RNNS.

Outline of the Dissertation:

Having presented the background of and rationale for the study, it is now appropriate to outline the remaining chapters of the dissertation. Chapter 2 will provide a theoretical framework for which the present study fits in to including relevant studies that have been conducted under this framework pertaining to technology and/or language socialization. Chapter 3 will discuss the rationale for choosing a qualitative design as well as providing more detailed information about the research site and participants. It will also explain data collection procedures, coding procedures, methods of data analysis, and the types of instruments used in detail. Chapter 4 presents the results of this study as they relate to each research questions detailed in Chapter 3 including the quantitative and qualitative results. Finally, Chapter 5 will discuss the conclusions drawn from the results.
as well as the pedagogical implications this study bears on the field. It will also describe the limitations of the study and suggest directions for further investigation that the present study does not adequately and/or fully address.
CHAPTER 2
REVIEW OF LITERATURE

Introduction:

In order to present a comprehensive picture of the present study’s context, this chapter provides an in-depth discussion of the most pertinent research studies and theoretical frameworks that informed the design of this study. To this end, the following chapter is divided into three sections. The first section will discuss RNNS learners in higher education including relevant and unique issues pertaining to them as they try to gain access to technology and assimilate into American culture. The second section will review studies of computer use among adult immigrants in language learning settings and the questions that still need to be resolved regarding this population’s special needs. The third section of this chapter presents the theoretical framework that this study draws upon highlighting sociocultural learning theories and their relevance in situating the present study.

PART I: The Immigrant Experience in Higher Education

As discussed in the previous chapter, adult immigrants in today’s society are faced with different and more challenging obstacles as they try to make a living for themselves and their families. There has not been any systematic research focusing on RNNS backgrounds and their unique needs. In fact, research on ESL students in higher education has focused almost exclusively on international students (Bosher & Rowenkamp, 1998; Lee & Sheared, 2002). However, the educational background of
international and immigrant students do not always coincide and therefore a more systematic research focus on the latter group is necessary if any sort of progressive and meaningful reform is to take place in higher education. Community colleges are the gateways for RNNS’ initial steps to a better life. Once there, adult immigrants take a series of ESL classes in the hopes of passing the required entrance exams allowing them to start taking certification courses with their mainstream American peers. However, as the following will show, immigrants present particular challenges that as of yet have not been properly dealt with in the higher-education arena.

*The Adult ESL Learner in Higher Education*

Since the 1980s and 1990s, more and more immigrants have been coming from developing countries from Central and South America, Asia, and Africa. The dominant majority of these immigrants are poor and relatively uneducated people. As a result, “prejudices based on race, class, and language become more prominent as our nation’s population becomes more diverse” (Orem, 2000, p. 440). Moreover, many of them are either political and/or economic refugees who came to this country involuntarily. Brilliant, Lvovich, & Markson (1995) argue that the seemingly inconsequential detail of whether or not an immigrant came to this country voluntarily or not plays a significant role in how successful an adult ESL learner is in this country. They argue that the stress of immigration and acculturating to a new culture adversely affects many immigrants particularly their language learning. After collecting hundreds of written and oral testimonials of ESL adult learners, the researchers point to an experience of loss
accompanying the process of immigration. Perceptions of helplessness in the new culture lead to feelings of depression which have been associated with many immigrant groups in many different contexts (Ring & Marquis, 1991; Zima, 1987; Seligman, 1975). These affective barriers add to the following list of social, economic, and educational barriers.

*The Failure of Higher Education*

It has been the hallmark of adult education to promote change in the social order of society and raise social consciousness (Lindeman, 1926). With this admirable but idealistic goal, one of the adult education system’s objectives is to achieve optimal inclusion of ethnic persons in American society. In order to do this, however, they must play a great role in influencing national policy. On a national and state level, immigrant education has still not become a high-priority policy issue. Contreras (2002) explains that immigrant students “are not viewed by federal and state policy makers as a distinct group requiring unique remedies” (p. 145). Thus, RNNS’ post-secondary education largely depends on the local resources of the communities where they live. With the recent onslaught of budgetary cuts in higher education (Orem, 2000; Kasper, 1998), the unique educational needs of RNNS are not and cannot be taken into special consideration because there is simply a lack of human and fiscal capacity to educate the general student body, let alone the former group. Consequently, immigrants, particularly RNNS, still remain at risk of failure as they try to pursue a quality education.

The changing economic landscape of this country, which requires a more technically skilled and educated workforce, forces the majority of immigrant adults to
turn to higher education in order to compete with today’s labor market and to make a
comfortable living wage for themselves (Contreras, 2002). Since the early 90s,
researchers and educators have warned that the increasingly larger and diverse population
in the nation is not receiving the proper education or attaining the educational success
that would ensure their future social and economic well-being (Nieto, 2002; Contreras,
2002; Skilton-Sylvester, 2002; Alfred, 2003; Bosher & Rowekamp, 1998, Brilliant et al.,
1995). According to Contreras (2002), the future prosperity of this country is destined to
decline if certain steps are not taken to reform the education system in the US. Academic
failure of immigrants in higher educational settings has wider implications for the country
as a whole because without a properly educated workforce, the economic competitiveness
and prosperity of the US will be eventually compromised.

RNNS entering into post-secondary institutions, such as community colleges,
differ greatly not only in their ages and ethnic and racial backgrounds but also in their
socioeconomic status, in particular the amount of L1 education they received prior to
arriving in the US. Historically, ESL programs were designed as remedial programs for
limited English-proficient (LEP) speakers who could not enter a degree-awarding
program. It was assumed that these students already had high literacy skills in their L1
and for the most part, those who had an L1 educational background have been faring
pretty well in these programs (Graham & Cookson, 1990). International students fall into
this category of LEP speakers. However, those LEP speakers who lacked L1 educational
backgrounds have not fared as well.
Bosher & Rowekamp (1998) provide compelling research pointing to significant negative correlations between years of schooling in the US and academic success and between length of residency in the US and academic success in post-secondary situations. Their study essentially differentiates the fundamental differences between international and immigrant students. They differentiate immigrant students from international students as having 1) a higher probability of limited or interrupted L1 educational background; 2) a greater probability of having higher listening/speaking ability because of their years living in the US; and 3) a higher probability of limited academic content knowledge (reading and writing skills) at the secondary level. What this translates into is that for many immigrants, their interrupted L1 education puts them at a serious disadvantage to those immigrants/international students who have had secondary schooling overseas.

In response the large influx of immigrants who lacked or had low-level L1 literacy skills, most ESL programs in the secondary and post-secondary level focused on communicative competency at the expense of academic content (Contreras, 2002; Bosher & Rowekamp, 1998; Graham & Cookson, 1990). It generally takes 2-3 years to achieve basic communicative skills in English whereas it takes up to 5-7 years to acquire cognitive academic language proficiency (Cummins, 1981). Thus, when such students take academic content that requires large amounts of reading and writing, they tend not to pass or do well in the class because of their poorly developed reading and writing skills. The trend of unsuccessful performance among RNNS speakers in higher education still continues today (Contreras, 2002). It is hard enough coping with a new language and
culture when one already has a sufficient amount of L1 educational proficiency, but for those who have little or no literacy background, it is virtually close to impossible for them to obtain a higher-education degree. This is particularly troublesome when considering that two-thirds of the world’s immigrants immigrate to the United States and that the majority of those do not have a high level of L1 literacy skills, let alone computer literacy skills.

**Marginality of ESL Programs and ESL Students**

Another component to the immigrant experience in higher education is the problem of marginality of immigrant education. As Orem (2000) points out, the problem of marginality “is a highly political and emotional one for those who work in the field of adult ESL” as well as those who take classes in ESL (p. 440). Those attending ESL classes are on the “lower rungs of the socioeconomic ladder” (p. 438) and thus are often overlooked, becoming what Bosher & Rowekamp (1998) call an “invisible minority.” In other words, limited English-proficient students are not high profile which is surprising given they are the fastest growing demographic in this country. Many institutions choose not to identify them because they are difficult to identify. Many RNNS, consequently, are not given placement tests when they enter post-secondary institutions. They are most often categorized as permanent residents or citizens and by default should already know English, which is a false assumption to make. They are then put into academic content classes where they proceed to fail.
Even more troubling is that the immigrant students themselves resent being placed in ESL courses because they either view this as an insult and/or see it as yet another hurdle to overcome in the host country (Orem, 2000). ESL students must meet institutional standards of English language proficiency before they can fully matriculate into a mainstream, degree-awarding program. This usually means passing a reading and writing assessment test. To add to the pressure, many institutions are placing a time limit and financial aid limit on the total amount of semesters a student may take reading and writing courses to be deemed native English proficient (Kasper, 1998). The implications of these policies and requirements are detrimental if one considers that it can take up to 10 years to develop academic language proficiency and that is only for immigrants with uninterrupted educational backgrounds in their native language (Collier, 1987, 1989).

As a result of the above mentioned obstacles, RNNS students tend to avoid taking language-intensive classes in favor of more technical classes. This is also another difference between international and immigrant students; the former of whom make up the majority of English-intensive language programs in this country (Alfred, 2003). Immigrant students pick up on their marginal status within the college framework and do everything they can to avoid being labeled as an ESL student by avoiding classes that have large amounts of reading and writing. If that cannot be done, they try to finish ESL classes as fast as they can in order to begin taking courses towards their degree. When LEP students do take classes requiring extensive reading and writing, there has been the tendency of teachers awarding good grades to students for their non-linguistic strategies such as their good attendance, participation, effort and/or homework completion (Alfred,
These actions act as a detriment to their future social and economic success because it leads to poor academic performance in mainstream classes, or even worse, non-matriculation to mainstream, credit-bearing courses.

PART II: The Immigrant Experience with Technology

There has been a heavy reliance of computer technology in almost every aspect of higher education, as well as in the workforce and personal domains of peoples’ lives. Because of the prevalence of computers in virtually every aspect of daily life, including education, the assumption is that everyone, including ESL learners, must learn how to use the computer in order to succeed in and be a productive member of society. Thus, along with ESL classes, today’s adult immigrants realize that they must learn how to use the computer in their immediate academic settings as well as their work and personal lives. Nevertheless, scholars recently have questioned whether or not technology is just another form of cultural imperialism of Western societies.

Technological Imperialism?

Computers along with their corresponding capabilities, such as computer-mediated communication (CMC) seemingly offer universal appeal because of the global interconnectedness that they provide, prompting some to even argue that they are culturally neutral tools (Negroponte, 1995; Rheingold, 1993). However, Ess (2005)
warns of the naïve assumption that CMC technologies would cultivate “greater global understanding and thereby greater peace” by facilitating “free expression, democratic polity, and economic prosperity” (p. 162). Ess explains these are “simply the newest ideological veneer of Western colonialism” (p. 162), i.e., cultural imperialism via technology. There has been much criticism over what can be termed as technological imperialism, i.e., pushing computers on cultures/societies who do not have the same use and/or immediate need for them and presuming that these cultures would value them because Western society does. Warschauer (2003a) recounts his visit to New Delhi, for example, where kids were provided computer access via an outdoor kiosk. What resulted was students playing computer games and neglecting their school studies. He explains that computers are used for different reasons by different socioeconomic classes. As explained above, having access to a computer does not necessarily mean that society will embrace the computer in the ways Western cultures use the computer. In fact, computers are an artifact of culture. Built in to that artifact are all the values inherent in that culture. The computer and Internet grew out of the military and industrial milieu in which scientific positivism, capitalism, and a goal of efficient production were the ideals for Western society (Selfe, 2001). But are these necessarily the goals and values of other cultures?

Reeder, MacFadyen, Roche, and Chase (2004) illustrate in their study how WebCT, a course management system used by many post-secondary institutions, is an artifact of a culture that values speed, availability, openness, quick response, critical inquiry, and informality in communication. These values, while highly indicative of
today’s Western-style efficiency, are not necessarily universal values esteemed by all cultures. In fact, “what may be natural values to those who are well socialized into computer culture, may seem quite foreign to those who are not” (Kern, 2006, p. 190). In another global communications study of Ecuadorian students learning L2 writing and using CMC, Thatcher (2005) reports of one student who complained about being frustrated using e-mail and hypertext because these forms were devoid of face-to-face communication or social contact cues. This lack of human contact via computer communication forced the student to use the telephone so that she “could be more herself” (p. 289). Therefore, the idea of a kind of technological imperialism, much like 18th century colonialism, is a notion that CALL researchers and SL instructors using technology in their classrooms must always keep in mind. The assumption that the computer is a positive influence is all relative. It depends on what cultural values one holds which in turn affects the way one sees the innovations of computer technologies. For a Westerner, the computer is not a neutral tool, but a symbol of social inclusion—a culturally valued artifact. However, as the above studies show, what works for Westerners using technology does not mean that it is appropriate for international groups of learners.

From Digital Divide to Digital Inequality

The presence of computers in two-thirds of American households and more than half of Americans using the Internet transforms the way people work, play, socialize, discover, and disseminate information. As discussed in the previous chapter, providing
access to computers and the Internet is not enough to ameliorate the social inequities in society (Warschauer, 2003b). Proponents of a digital divide in the mid 1990s erroneously perceived that the lack of physical access to computers contributed to social inequity across income, race, ethnicity, gender, age, and geography. However, even with the widespread diffusion of computers in schools and homes due to the lower cost of the personal computer, technology has served to widen the gap between the socioeconomic classes in the United States (Warschauer, 2003b; Dotterweich, 2003). The increased socioeconomic disparity is attributed to a variety of reasons. The most salient reason is that many people, especially from low-income backgrounds, lack the skills they need to take advantage of technology. Mossberger, Tolbert, & Stansbury (2003) point out that “skills development has taken a backseat to the provision of wiring and hardware in most programs, and there is scant research evidence on skills” (pp. 1-2). America’s future economic prosperity depends on the technology skills of its workforce because “widespread technical skills and information literacy are important resources for increasing efficiency and innovation throughout the economy” (Dotterweich, 2003, p. 131). However, individuals lacking in technology skills with a limited education would “constrain the possibilities for economic mobility” which in turn affects America’s future economic prosperity (p. 131).

While more and more people may have access to a computer and/or Internet, there are varying degrees of access to information technology. For example, a stock broker on Wall-Street has access with high-speed connection in his/her office. A Chinese student has only occasional access at a pay-by-the-quarter hour cyber café, whereas a rural
activist in Africa must travel for one or two days to reach a government organization with whom he/she can download and print information that he/she is requesting. Thus, it is not simply a binary division between the haves and have-nots, but a more complex phenomenon. Even more damaging of this digital divide notion is its deterministic nature to categorize ethnic and racial minorities into “civilized tool-users and uncivilized nonusers” (Warschauer, 2003b, p. 7). Moreover, digital divide rhetoric serves to hurt their chances of employment because “the stereotype of disconnected minority groups could even serve to further social stratification by discouraging employers or content providers from reaching out to those groups” (p. 7). Warschauer (2003b) and Dotterweich (2003) both argue that access is not the only issue at stake in order to promote social inclusion. Rather, issues of access, economic opportunity, and skills attainment must be further looked at as well as looking at the social inequality that has been made salient because of the widespread diffusion of computers and information technologies.

Consequently, the digital divide is not binary but much more complex with various gradations of access: “The key issue is not unequal access to computers but rather the unequal ways that computers are used” (Warschauer, 2003a). Some researchers call this inequality of computer use as “digital inequality” (DiMaggio & Hargittai, 2001) among those who do have various amounts of access with computers. Dimaggio & Hargittai identify five variables where digital inequality exists: 1) technical means (inequality of bandwidth); 2) autonomy (whether users log on from home or at work, monitored or unmonitored, during limited times or at will; 3) skill (knowledge of how to
search for or download information); 4) social support (access to advice from more experienced users); and 5) purpose (whether they use the Internet for increase of economic productivity, improvement of social capital, or consumption and entertainment). What this framework takes into account with novice computer users, including many RNNS learners, is that it is not enough just to have access to the computer but the different modes of access, how they are accessing the computer and how many skills they have to use the computer in a meaningful way. This brings up the important issue of literacy and the fact that many of the low-income people that had public and/or private access to computers had very low literacy skills and therefore, could not manipulate and use the technology that was offered to them except only in superficial ways (Dotterweich, 2003).

_Electronic Literacy_

Electronic literacy includes computer literacy, information literacy, multimedia literacy and CMC literacy that go beyond traditional conventions of encoding and decoding print texts (Kern, 2006). Electronic literacy involves more than just being able to operate a computer. The computer and its related technologies have revolutionized human activity by bringing about a different type of symbolic mediation (Warschauer, 2003b). Just like the traditional tools of literacy such as book, pencil, pen, paper or typewriter, electronic literacies which include hypertext and multimedia features, have brought about profound changes in literacy practices. Electronic literacy, as a tool for symbolic mediation, does not “simply facilitate action that could have occurred without
them, but rather, by being included in the process of behavior, alter the flow and structure of mental functions” (Warschauer, 2003b, p. 110). This Vygotskian viewpoint postulates that the symbolic tools we use, i.e., like electronic literacies, fundamentally alter human activity. This is best stated by Ong (1982) who wrote “technologies are not mere exterior aids but also interior transformations of consciousness, and never more than when they affect the word” (p. 82). In other words, technology and the mind are intertwined and interdependent which in turn affect how humans interact and function in society. Just as electricity revolutionized the social spaces where human interaction took place, so do communication and information technologies of the 21st century revolutionize human organization and activity.

The relationship between education and literacy and economic development is mutual and iterative, i.e., one fuels the other and vice versa. Reading, writing, and thinking skills still remain crucial for being able to use the Internet and any other technology based programs. The amount and quality of education people receive and have helps determine “how people use the Internet and what benefit they achieve from it” (Warschauer, 2003b, p. 109). With over 500 million people already connected to the Internet and an estimated 1-2 billion total users by 2010 (Warschauer, 2003b), it is “highly likely that its use will be stratified, with some using it principally as an entertainment device and others using it to seek and create new knowledge” (p. 109-110). For social inclusion to take place, people from diverse cultural, linguistic, ethnic, and class backgrounds need more than just an Internet account. Warschauer (1999) explains that such people “need knowledge of the languages and discourses of power and
opportunities to reflect critically on whether, when, and how to use them as well as opportunities to develop and use their own dialects and languages as they wish” (p. 177).

Any form of literacy is thus not value-free or context-neutral because being literate is deemed to be valuable in particular societies and cultures. Electronic literacy changes what it means to be literate in today’s society by not only changing how people experience and think of literacy, but how it “interacts with the other social, economic, cultural, and political factors” that determine how it is practiced and disseminated to the public through educational practices (Warschauer, 1999). The way people get educated about computers and Internet use plays a crucial role in determining their socioeconomic status. Reich (1991) conducted an in-depth analysis of society and education in the information era. He distinguished three major categories in which the majority of work related jobs fall in to: 1) routine production services (data processors, payroll clerks, factory-workers); 2) in-person services (janitors, hospital attendants, taxi drivers, wait staff); and 3) symbolic analyst services (software engineers, management consultants, strategic planners).

People who fall in any of these categories will use communication and information technology in a basic, functional way. For example, a bank teller will use the computer to enter data, a waiter will use the computer to place an order into the kitchen whereas a mechanical engineer will use technology to create, evaluate, and manipulate things. In the first two categories, those who have those types of jobs had an education that primarily predisposed them to having a functional knowledge of computers and/or knowledge of how to retrieve and accumulate facts. Unfortunately, these types of jobs
are not only lower-paying jobs, but are also diminishing as new technologies often replace human resources. Moreover, most people in these types of jobs usually do not find their lines of work as rewarding, stimulating, or challenging (Reich, 1991).

Whereas those who fall into the third category more often than not have had a solid secondary and tertiary education that, according to Reich, emphasized the judgment and interpretation of information: “Budding symbolic analysts learn to read, write, and do calculations, of course, but such basic skills are developed and focused in particular ways” (p. 229) whereby their minds are “trained to be skeptical, curious, and creative” (p. 230). Those who fall in the third category learn to “negotiate—to explain their own needs, to discern what others need and view things from others’ perspectives, and to discover mutually beneficial solutions” (p. 233).

In terms of education, those who fall in the first category could technically have been educated under a functional literacy paradigm whereby the computer is “a device for delivering instructional drills” and it “supplements the teacher and workbook by offering individualized lessons to help students develop basic competencies in areas such as grammar, spelling and reading comprehension” (Warschauer, 1999, p. 15). Those who fall under the second category have experienced a cultural literacy paradigm in which the computer was used to collect facts or retrieve information. However, in the third category, a collaborative, project-based interactive model of literacy learning was emphasized. This educational training, according to Warschauer (1999) is based on abstract thinking, experimentation, and collaboration. Reich’s large-scale analysis thus shows how education and literacy is closely connected with the technological changes
taking place in terms of how it affects future job prospects. However, Reich’s research does not mention which category educators fall into and by doing so, does not take into consideration that type of education does not always lead to better paying jobs. Most educators in this country, while very intelligent, critical thinkers, are under appreciated and do not receive the salaries that those who fall in the third category receive. Nevertheless, Reich’s research does illustrate the inequity that exists in different educational settings that choose to teach literacy via technology in very different ways that eventually can affect the socioeconomic status of people.

*RNNS and Technology Use*

While there have been many studies attesting to technology’s effectiveness in language learning and the many advantages in using it in language classrooms (see Beauvois, 1997; Bordia, 1997; Chapelle, 1996; Chun, 1994; Kelm, 1992; Kern, 1995; Zhao, 2003, Darhower, 2002), these studies focused on how and whether or not a particular computer function enhanced language learning or at least a particular language skill across various foreign languages including ESL. A quick review of the populations studied in the above mentioned studies regarding L2 learners and computer-assisted language learning (CALL) use shows that not many CALL studies deal with RNNS and/or their lack of computer literacy. Moreover, few researchers have questioned how learning to use technology in order to fit in with the larger society has impacted the social identities of immigrants, i.e., how and if using technology correlates to their sense of
selves or if it is just another aspect of foreign culture that is imposed on them, which is what the current study focuses on.

One of the main reasons for this group’s lack of representation in the technology literature is likely due to adult immigrants’ lack of prior knowledge about computer use (Liu, 1998). Thus far, the majority of studies assumed students were mostly if not totally at ease using and interacting with the computer or it was simply not focused on or discussed. This is not necessarily the case with RNNS who nowadays are mostly coming from developing countries to flee from economic difficulties and/or political persecution. Having a computer in the home was not even imaginable, let alone possible. Coming from this background, their first language education and prior experiences may have offered them little if any access to using computers in their daily personal, occupational, and/or educational lives. Moreover, learning about computers may be counter-intuitive to their cultural values as discussed above by being “a mode of thinking that reflects cognitive constructs and connections that are particularly English” (Dragona & Handa, 2000, p. 53). Nevertheless, the increasing demographics of this group whose enrollment in post-secondary institutions is rising yearly makes it necessary to do more research studies of this group of L2 learners.

Warschauer et al.’s (1996) study is a compilation and analysis of previous CALL studies that specifically look at the potential benefits of computer networking, which includes synchronous and asynchronous forms of communication, to L2 student autonomy, equality, and learning skills. They highlighted in their paper that computer networks offer liberation for those students who are often marginalized by giving them
self-confidence, equality in classroom participation, and a voice they previously did not have in a traditional-based classroom. In other words, Warschauer et al. found that computer networking empowered students who had been traditionally marginalized. However, they do delineate the potential problem of whether or not L2 students could handle such liberation, autonomy, and power once it is presented to them. This is an interesting and important side-effect of computer use that has been little considered against the backdrop of how beneficial technology use is to this population of students. The present study looks at how students effectively deal with the empowerment that comes from learning about and using computers.

The concept of voice and identity has been studied in the area of networked systems. Mitra & Watts (2002) attempt to theorize the concept of voice in cyberspace by arguing that the Internet provides a discursive space where identities are formed and social relationships are negotiated. They further argue that those who have been traditionally marginalized, including women, gays, ethnic minorities, and races can reconstitute their voices on the Internet leading to the “emancipation of the racial, gendered, and ethnic other” (p. 482). Relating this theory to marginalized L2 learners in either mainstream or ESL classrooms, allowing them to have a respected voice in global networks can offer a “place invested with a deep sense of personal interest and attachment” (Lam, 2004, p. 45). It is in human nature to try to belong and fit into social groupings (Amaral & Monteiro, 2002). In places where they feel excluded or they are seen as low-achieving and unsuccessful, global networks like chat rooms can be that place where immigrant learners can express their voice, be heard, and most importantly,
be respected. Moreover, technology can give a renewed sense of self and confidence to immigrant learners which can lower their affective filter when interacting face-to-face with teachers or other native speakers in or out of the classroom.

In their large-scale quantitative study of low-income computer users in this country, Mossberger et al.'s (2003) data found that their large sample of minorities, consisting of mostly African Americans and Latinos had “significantly lower rates of home computer ownership, e-mail use, and Internet access than whites” (p. 117) despite controlling for age, education, and income. They maintain that the access divide still endures despite more and more Americans being on-line. Their data showed statistically significant gaps still remain across income, race, ethnicity, education, and age. However, they also found that “factors such as education, income, and age influence access to an even greater extent than race and ethnicity” (p. 117). In other words, the younger and better-educated individuals were shown to embrace technology throughout their longitudinal study.

Additionally what Mossberger et al.’s study determined is that older, low-income individuals lacked skills in terms of needing more assistance even with the most basic of tasks such as maneuvering the mouse, using the keyboard, or turning on a computer let alone trying to locate information on the Internet. The researchers argued that this lack of computer skills could not only indicate a lack of computer and information technology skills, but also a lack of basic literacy which they proposed needed further research in. The present study looks at how the degree of literacy impacts computer literacy acquisition among L2 adults.
Technophobia

Regarding lack of computer literacy among older, low-literate individuals is yet another component that is often overlooked in technology and language acquisition studies. Computer literacy deals with the acquisition of basic forms of operation, such as mouse maneuvering or turning on or shutting down the computer. Attaining computer literacy is a crucial step towards integrating with a society of avid computer users yet in many cases, there exists an unfamiliarity and discomfort “with the physical and operational manipulation of a computer that profoundly affects people’s productivity with it and that intersects with a range of social dimensions, such as age” (Warschauer, 2003b, p. 111). While it may seem like an inconsequential, and fairly easy literacy to attain, comfort and fluency with hardware, software, and operating systems is one of the major obstacles to overcome for novice computer users.

Many novice computer users fear, distrust, or dislike computers; a condition called “technophobia.” Technophobia has not been alluded to in the aforementioned studies about technology largely because mostly adult immigrants tend to have this fear rather than younger immigrants (Liu, 1998) and since most CALL studies deal with college or high-school age students who already feel somewhat if not totally comfortable using a computer, technophobia is not an issue. Technophobia or computer anxiety was first alluded to by Howard (1986). It is a form of anxiety the latter of which has been connected to affecting language acquisition (Brown, 1994).

Johnston (1999) explains that the common reasons for technophobia range from confusion caused by computer jargon, a fear that it is too difficult to learn about
computers, the dehumanizing effect of computers, and feeling a lack of control.

According to Johnston (1999) this fear while only reported on in passing and not given much attention in most CALL studies, is “a complex, pervasive, and persistent phenomenon” (p. 341) which will not go away any time soon. Moreover, computer anxiety often adds to pre-existing sources of anxiety and stress that learners may be experiencing such as their lack of English proficiency, negative encounters with the target language culture, or any number of variables that would cause low self-esteem.

Howard (1986) refers to computer anxiety as a deep-rooted psychological resistance. He found however that this resistance to computers is most often triggered by operational anxiety, or simply not being able to operate a computer. To remedy this, he found that if learners use computers in an environment where help is available, the anxiety would lessen. He also suggested that instructors ask about their students’ feelings about using the computer and acknowledge those feelings as a means of lessening technophobia. However, Yeaman (1993) put an entirely new and challenging perspective on technophobia by arguing that “computer anxiety is a label that blames the victims” (p. 19) when in fact it is lack of computer access and the design of software that is to blame for the computer anxiety manifested in learners. This is certainly the case for most adult immigrants coming from countries where there may very well have been a limit of access to computers making them simply afraid of the unknown. The present study takes into consideration the participants’ feelings about using computers for the first time throughout the semester in order to see how and if their anxiety changes over the course of the semester and how that affects their socialization with computers.
Total CALL Immersion Language Classes

Language courses that are completely taught through the medium of computers and hypermedia are few and far between. While such courses do exist in foreign language classes, there is no evidence in the literature that there is an ESL course totally structured around computer use. The course offered at Pima Community College is a step in that direction, however, there is more of an emphasis on “how-to-use” a computer more so than using the computer exclusively to teach the language at present. In any case, Stepp-Greany’s (2002) survey study on student perceptions of learning a foreign language exclusively in a technological environment gives some insights on the socialization processes students go through when learning a language exclusively in a technological environment. She studied first and second semester Spanish classes, i.e., English-speaking young college students who all had a high degree of computer literacy to begin with. In addition to looking at the effects of technology on foreign language learning, the study also looks at the role and importance of the instructor in such environments and the accessibility and relevance of the lab and the individual technological components in language learning. Specifically, the course incorporated task-based Internet activities, an interactive, publisher-produced CD-ROM, electronic pen pals, and threaded discussions.

The results of this descriptive study, based on surveys, found that the students still attributed an important role to instructors but that their cultural knowledge, listening and reading skills, and independent learning skills had benefited more. While their passive knowledge and skills appeared to benefit from such an environment, students did not feel
as confident about how much their production skills, i.e., speaking and writing, benefited. Moreover, there was not a high confidence level on the computer-based activities that made up the curriculum, including Internet-task based activities and electronic pen-pals. The above point to the fact that a totally technology-based environment to teach a foreign language is not necessarily the best or better than a mixed technology and traditional classroom setting. Stepp-Greany admits that this study did not take into consideration student ability, prior experience with technology, prior background in Spanish, and personality types of the students and that these results could not be generalized to other technology-based classrooms because they were not statistical results. These many variables that have affected how well the course went over the course of three different semesters including instructor preparedness and ability makes it difficult to ascertain the benefit of such a course. Moreover, it calls to question whether or not adult L2 students should even be exposed to an all-technology environment to learn a language. Stepp-Greany discovered that lower-ability language students preferred the close interaction with the instructor rather than an exclusively technology-based environment. Thus, for the time-being, teaching adult immigrant about technology is a step towards the right direction but that an exclusively technology-based learning environment would not serve their language acquisition needs.

In a similar study, Ayres (2002) gave a series of questionnaires to non-native speaking undergraduates, ranging from 20-29 years of age, enrolled in various certificate and diploma courses at the School of English and Applied Linguistics at UNITEC Institute of Technology and did a statistical analysis on the results. The purpose of the
study was to gage learner attitudes towards the use of CALL in ESL classes. The results were similar to the above study in that there was a statistically significant result indicating L2 learners’ strong preference for teacher instruction over a computer. Despite this, however, 80% of the respondents indicated that CALL was relevant to their needs and 60% agreed that CALL should be used more. Thus, CALL does have a high face validity for L2 learners but they do not see it as a worthy replacement for traditional classroom teaching. Additional results surprisingly showed that even though 60% of the learners perceived that their computer skills were little to non-existent, 68% reported that computers were easy to use. This is important to note in the present study that seeks to understand the reasons why students take a technology class, whether or not it is worthwhile to teach English through this medium exclusively, and how much technophobia or computer anxiety will play as students get socialized in a CALL environment.

PART III: Theoretical Framework

A number of prominent SLA researchers are encouraging computer-assisted language learning (CALL) researchers to examine technology issues with L2 learners from social, historical, and cultural perspectives rather than simply focusing on the forms that language learners acquire or use when using technology (Chapelle, 2000; Kern, 2006; Warschauer, 2005; Egbert, 2005). They argue that a sociocultural perspective can help those in the field visualize the interrelationships between the sociocultural setting of
CALL activities, human activity within that setting, and the learners of CALL. Egbert (2005) explains the need to look at various learners and contexts to get a better understanding of “what students’ learning looks like, the roles peers and teachers have in this learning, what difference different tools make in the learning, and what else students learn while they are learning language” (p. 6). Moreover, Egbert explains that researchers need to examine “how learners develop culturally, personally, socially, and even economically during and as a result of language study with technology” (p. 6).

Using sociocultural theory as a lens to study technological phenomena with L2 learners varies depending on what concepts are being emphasized. For some sociocultural researchers, mediation and activity theory are looked at (see, e.g., Donato, 1994; Lantolf & Pavlenko, 1995). Others emphasize communities of practice (Lave & Wenger, 1991), while others use it to describe literacy phenomena (Gee, 2000). What is at stake, however, is the idea of the computer as a mediational tool that can transform human thinking and activity. Warschauer (2005) argues that “both teachers and researchers need to take into account both how this mediation occurs at the micro level and also how it intersects with, and contributes to, broader social, cultural, historical, and economic trends” (p. 48).

The present research study looks at the sociopolitical issues involved with L2 adult learners formally learning about computers and information technology for the first time within an ESL curriculum. It seeks to discover and describe the process of learning about computers as well as the sociopolitical implications this has on their lives, in particular, their identities in this country. The study bases itself on the view that learning
is not only a cognitive process, but has a social dimension. It involves not only the learner’s prior and alternative knowledge, but also works from the perspective that knowledge is a sociocultural production rooted and tied to a community’s own culture and practices (Bourgeois, 1996). In other words, “the learner’s relationship to knowledge is also essentially a relationship to other people, society and culture” (p. 165). The current study positions itself under the umbrella of various sociocultural theories including language socialization, situated learning theory, acculturation theory, and social identity theory as it relates to power relationships with the wider community.

Theoretical Stance for Analyzing the Study’s Results

Language Socialization Theory

This study seeks to investigate the reasons why learners feel they need such a technology course, the socialization processes that occur when taking such a course, including sociocultural and sociological factors, and the impact it has on their lives. It is assumed that by doing so, their relationship to the larger social world through their use of computers would improve their social and economic status. Therefore, when looking at their process of learning about computers in the classroom, language socialization will serve as a basis. This theory looks at “how language learning is part of a process of socialization through which the learner acquires particular status and relationships in the social environment where the learning takes place” (Lam, 2004). Thus, as Watson-Gegeo & Nielsen (2003) explain, “the learning of language, cultural meanings, and social behavior is experienced by the language learner as a single, continuous (although not
linear) process” which allow learners eventually “to communicate with and live among others in a given cultural setting” (p. 157). Lam & Kramsch (2002) add that socialization becomes an integral part of acquisition when looked at as “the negotiation of power and identity through language” (p. 144). Learning how to use a culturally valued mediation and communication tool like the computer is one way to learn the culture of the TL group as well as its language.

Language socialization processes sometimes do not have a positive impact on those students trying to familiarize and adopt to the accepted norms and expectations of the dominant culture’s way of doing school. In Bell’s (2003) ethnographic descriptive analysis of an adult community-college classroom, she addresses the issue of L2 adults struggling to succeed in a job retraining program and the socialization processes that impacted their experiences in this content-based class. Bell’s analysis revealed that the instructors imposed their dominant cultural, classroom norms on immigrant workers. Namely, the community college they were attending insisted on having all students conform to an academic model of learning whereas these students were in a job training program; therefore, writing papers and taking tests were not suited to the type of program they were in. However, this community college insisted on applying this academic model to all classes because it was felt it would make the college more prestigious in doing so.

To compound the matter, the immigrant students, who had lived in Canada a number of years and were orally competent in English, felt alienated by the prevailing standards imposed by the TL culture instructors because most of them have never been
properly socialized in an academic environment where they needed to produce academic papers and participate in academic discourses. The L2 adult learners in Bell’s study struggled to succeed in the classroom environment because there was a gross imbalance between what the students needed and what the college expected. An academic model of education was imposed upon a class whose content was non-academic, i.e. it was an apprenticeship/trade class. This made it very difficult to succeed in the class. For the present study, the researcher will be looking at the socialization processes of adult immigrants as they learn how to use the computer for the first time, describing their successes and failures throughout the course of the semester.

**Situated Learning Theory**

Integral to analyzing the interaction among peers, teacher, and those outside of the classroom context, Lave & Wenger’s (1991) theory of situated learning will be emphasized in this study. Lave & Wenger are concerned with the relationship between learning and the social situation in which it occurs. They suggest that all learning should be understood as a process of legitimate peripheral participation in communities of practice. Communities of practice refers to any learning or social context that involves the process of learning about the practices of that community through more experienced “old-timers” and gradually moving towards fuller participation in that community one participates in. Thus, people who find themselves in these new communities of practice must develop appropriate language skills in order to be successful participants. By language skills, it is meant how to use language to acquire useful information and gain
access to a range of on-going activities. Until participants acquire the appropriate practices of the new community, they will be considered to be on the periphery of that community be it by the educators and/or school peers or the members of the TL society.

Thus, to put it in the context of this study, learners who enroll in a technology course do so so they could move from the periphery of of a community of computer users, i.e., their American peer group, and gradually move to a position where they assume expert roles and are thus no longer on the periphery, i.e., they have become legitimate users of technology. Situated learning theory explains the process of how learners try to gain access to an environment through negotiation and renegotiation of their status from beginner to proficient computer users as they face “social, economic, political hostility or exclusion” from the TL society (Watson-Gegeo & Nielsen, 2003, p. 160). Lave & Wenger recognize the obstacles learners may face when trying to participate legitimately in a community of practice. Certain social arrangements in any community of practice may constrain or facilitate movement towards being a legitimate practitioner of a skill:

The key to legitimate peripheral participation is access by newcomers to the community of practice and all that membership entails. But though this is essential to the reproduction of the community, it is always problematic at the same time. To become a full member of a community of practice requires access to a wide range of ongoing activity, old-timers, and other members of the community; and to information, resources and opportunities for participation (p. 100).
An additional component to the process of becoming a legitimate practitioner of a skill in a community of practice is the effect on a learner’s identity. Wenger’s (1998) work focusing on participation and non-participation of learners in communities of practice provides insight on how these two constructs affect a learner’s identity. Wenger argues that learner identities are shaped by a combination of both participation and non-participation. He formulates three modes of belonging in such communities relating to participation and non-participation: 1) engagement or active involvement in negotiation of meaning; 2) alignment or the extent to which one tries to connect what one learns in the community of practice to broader contexts; and 3) imagination or “a process of expanding our self by transcending our time and space and creating new images of the world and ourselves” (p. 176).

The third mode dealing with how imagination plays a role in one’s identity is relevant to this study in that it involves a process where apprentice learners look at a computer but see or imagine themselves using the computer for social and economic mobility. Imagining oneself in a community of practice facilitates the mode of belonging by “producing new images of possibility and new ways of understanding one’s relation to the world that transcend more immediate acts of engagement” (Norton, 2001, p163-164). That is, a learner can see/envision him/herself beyond the four walls of a classroom to the imagined world outside the classroom. In looking at two case studies of adult immigrant women learning ESL, Norton (2001), using Wenger’s (1998) notion of imagined community and non-participation concluded that teachers must take into consideration
learners’ imagined communities, i.e., consider their goals and outcomes of the class and synthesize it with their (teachers’) own curricular goals in order to avoid non-participation in a community of practice.

Recently, CALL researchers have begun using Situated Learning Theory to gain perspectives on “the contexts of practice, participation in social practice, the learner, and the learning content” (Yang, 2005, p. 166) of L2 learners and their interaction with technology in order to better understand the development of language as social practice within a CALL context. Learning content refers to the growth and transformation of a learner’s identities and social practice refers to the broad social, historical, and cultural context where learning takes place. Yang (2005) conducted a case study of Jeff, a low-intermediate ESL student, whose journey of becoming a peripheral, non-participant in his networked classroom to a participating member with his “old-timer” is described. Yang argues that it was important for the L2 learners in the class she observed to develop online computer skills necessary to participate in the various communities of the target language. Yang’s study is just the beginning of using Lave & Wenger’s framework in CALL contexts. The present study hopes to further this type of research in technology settings by looking at how learners carry out CALL activities outside a classroom setting and examining the power and identity relationships among learners within and outside the community of practice setting.

Acculturation Theory

It is an unfortunate reality that many developed countries implicitly and/or explicitly insist on the rapid assimilation and acculturation of its immigrants. The U.S.’s
language policy for English Only has only intensified the pressure on minority groups to learn English as quickly as possible (Cummins, 2000). However, institutionalized discrimination has made it virtually impossible for minority groups to be successful in school systems. Cummins argues that underachievement in school performance that characterizes minority groups is due to the “long-term devaluation of their identities in the broader society” and that the “patterns of discrimination in the wider society [are] reflected in the school context” which contribute to minority group failure in schools (p. 34). The above can be attributed to Schumann’s (1976, 1978) Acculturation Model and to Social Identity Theory (to be discussed in the next section) which offer a sociocultural perspective of language learning success or failure in adult language learners.

Schumann’s (1976, 1978) Acculturation Theory borrows a range of measures taken from social psychology to explain second language acquisition. Acculturation takes place when two different cultural groups come into continuous face-to-face contact with each other (Noels, Pon, & Clement, 1996). Schumann was one of the first researchers who attempted to explain the differential success rates of adults learning an L2 through the socio-cultural construct of acculturation. He argued that second language acquisition was a complexification of pidgins based on how well the learner acculturated to the target language culture. The amount of acculturation was solely determined by the socio-psychological factors of social and psychological distance. Specifically, social distance refers to the individual’s integration or lack of integration with the target language community. It is influenced by the sociological factors of domination versus subordination, assimilation versus preservation, adaptation, attitude, and high/low
enclosure which is the extent to which work, churches, schools etc. are shared or not. Psychological distance refers to various affective factors that concern the learner as an individual. These include resolution of culture and language shock, ego permeability and integrative motivation versus instrumental motivation.

The degree of acculturation influences the degree of success in second language learning. Thus, the degree of social and psychological distance between the learner and the target language culture determines second language acquisition. He claimed that the greater the social and psychological distance of a learner in the target language culture, the less successful an untutored adult will be in his/her second language learning. In other words, the closer the learner felt to the target language community, the better the learners would acculturate, and therefore, the more successful there learning would be.

Social Identity Theory and Power

While Acculturation Theory helps to understand the reasons why or why not adult immigrants feel distanced to the TL culture, it does not take into consideration the importance of immigrants’ social identities and the possibility of cultivating not only one but multiple social identities to acculturate successfully into the TL culture. Social identity has been borrowed from social psychology and pertains to a sense of belonging to a particular social group that can be defined by ethnicity, language, race, and so on (Mitchell & Myles, 1998). Tajfel (1974) first systematically introduced Social Identity Theory where the importance of group membership through common goals and beliefs and identification with the group in order to maintain self-esteem is emphasized. Being a
group member confirms the social identity of the individual through his/her emotional bond and recognized membership in that community. It is often presumed that people have one firm and established social identity in their lifetime, but in fact people go through life with many identities or “faces” according to the various situations they interact within. This applies to immigrants as well. They come with their own identities when immigrating to this country but when they participate in situations that they cannot identify with, they experience failures because they are made to feel that they must abandon their existing identity and create a new identity that would help them acculturate better into the TL culture (Cummins, 2000). However, taking the time to reaffirm and nurture their already thriving identities while at the same time cultivating their new identity(s) has shown to be a much more productive approach in dealing with migrant students (Cummins, 2000).

While she has not specifically looked at power and identity issues of L2 learners learning about technology Norton’s (2000; 2001; 1997; 1995) research on ESL learning as it relates to power and social identity is relevant here. Norton’s (2000) theory of social identity and language learning has been emerging as a promising new direction for SLA. In general, as a sociolinguistic ethnographer, Norton emphasizes the dynamic and variable nature of learners’ identity and commitment to L2 learning. The different learner variables of motivation, self-esteem, affect, etc. are believed to be created and reconstructed during the learner’s interaction with those in power, i.e., TL speakers, at any given time. Moreover, it also takes into consideration the socio-political networks that are in place that can serve to limit the opportunities learners have to interact in the
language. These factors have significant consequences for the rate of learning and ultimate level of success in the L2. Thus Norton’s theory of social identity offers a richer, more complex perspective in understanding the social context of learning and the way the individual interacts with his/her environment through the perspective of social identity. Moreover, it is sensitive to the reality that most immigrants are forced to choose to either maintain their culture and language and thus hindering their L2 development towards TL levels, or to give up their L1 and culture in order to better integrate with the TL culture and learn the language more quickly and effectively. Thus, Norton’s analysis encompasses the ideas of Schumann’s social and psychological distance but goes even further in taking into consideration the access and denial into the dominant culture’s social/economic networks through power dynamics of the “haves” and “have nots” and by considering the importance of recognizing and nurturing multiple identities in immigrant adult learners.

Specifically, Norton (2000) has investigated the relationship between power, identity, and language learning by looking at the extensive diaries, interviews, and questionnaires of five immigrant women who were her former ESL students. They were asked to keep a detailed record of their language-learning experiences and second language use during a period of 12 weeks after their ESL course in which they articulated their histories, experiences and desires for their lives in Canada. Through narrative analysis, Norton illustrates how important it is for learners to get access to social networks of TL speakers in order to develop and improve their second language well enough. She analyzes their situations in terms of power relations and inequity operating
at the macro level of society as well as at the micro level of social encounters in everyday life. Overwhelmingly, in spite of a strong desire to learn the language and become part of Canadian society, the women in her study found it very difficult to meet Canadians outside their work situation. They often felt marginalized and uncomfortable speaking English. Moreover, most of the women could not find work in their professions and had to accept unqualified jobs where the opportunities for speaking English with TL workers were few.

Norton Pierce (1995) argues that L2 adults have complex social identities that “must be understood with reference to larger, and frequently inequitable social structures which are reproduced in day-to-day social interaction” (p. 13). While some researchers point to learner variables such as motivation, language aptitude, or personality that are responsible for L2 acquisition, they have failed to explain “why it is that a learner may sometimes be motivated, extroverted, and confident and sometimes unmotivated, introverted, and anxious...why a learner can sometimes speak and other times remains silent” (p.11). These variations in the above variables are “frequently socially constructed in inequitable relations of power, changing over time and space, and possibly coexisting in contradictory ways in a single individual” (p. 12).

Norton Pierce further argues that the idea of motivation is too simplistic in that it does not consider where that motivation is coming from and accept the fact that that motivation can change from day to day, moment to moment, depending on the social context. She conceptualizes this idea by seeing a learner’s motivation as an investment in his/her social identity and to learning the target culture. Investment rather than
motivation “more accurately signals the socially and historically constructed relationship of the women [she observed] to the target language and their sometimes ambivalent desire to learn and practice it” (p. 17). She defines investment as something that captures “the relationship of the language learner to the changing social world” (p. 17) and that the language learner has a “complex social identity and multiple desires” (p. 18). She further sees investment connected with identity. That same identity is in a constant state of flux depending on the social interactions that language learner has in or out of the classroom. Finally, she argues that if a learner invests in the target culture, he/she is essentially investing in his/her own social identity. Thus, she sees the daily social interactions that a language learner has both in and out of the classroom as intimately connected to their changing, complex social identity which in turn strives to make an investment in the target language: “So they will acquire a wider range of symbolic and material resources” (p. 17) from taking the time to learn that language.

Skilton-Sylvester (2002) bases her case study of four Cambodian women’s participation in adult ESL programs on Norton Pierce’s theory of investment which ultimately drives language learning. She agrees with Norton Pierce’s criticism that the traditional view of motivation is limited and that researchers should look instead at learner’s investment in learning a language: “Understanding the learning of English involves paying attention to the multiple and sometimes conflicting identities of learners and how shifts in identities, within particular contexts, shape the level of investment in learning the language” (p. 11). Her case study aimed to show the complex identities of these four women in their roles at home and work and how they are connected to their
investment of learning English at the various adult ESL programs she looked at. She concludes the need for educators to incorporate and be cognizant of the “actual lived experiences of students” (p. 24) when putting together their language curriculum in order to better serve the students needs or else student will stop coming to class if they see that the curriculum is not giving a “fair return” on their investment.

Finally, another factor that impacts the degree of success L2 adults have in educational contexts is the fact that they come from different socialized backgrounds and many times their cultural backgrounds are incongruent with the TL culture they live, work, and/or go to school in, making it difficult for them to get socialized in an educational setting (Lee & Sheared, 2002). Alfred’s (2003) study of 15 immigrant Caribbean women who were socialized under the British school system demonstrates how difficult it was for these intelligent women to fit into the U.S. system of higher-education due to their different cultural backgrounds and prior schooling socialization. These women preferred learning through writing rather than speaking. They valued silence rather than discussion. Furthermore, their first education socialized them into being independent, competitive learners. However, these participants felt that “language and voice were at the heart of many of the cultural differences that affected their learning experiences and their sense of self in the United States” (p. 254). In order to fit in with the U.S. class culture, they made efforts to reshape their existing socialized school identities, as one participant explains below:
When I first got to America, language was a barrier for me, I had to learn to speak so that people would understand me. I had to learn how to speak softer and clearer. I made a conscious effort to do that. I was the one who had to challenge myself to learn to fit in with the other people around me so I could survive. I learned to speak out. I asked questions because no one would come to me and I know I have a problem unless I tell them I had a problem…I came for better job opportunities, and I could not do it by being quiet or by speaking in a rough Jamaican accent…to get a professional job in this country you need to speak so people can understand you (p. 254).

In the above example, this participant had to renegotiate “[her] language and cultural value of silence to acculturate into the culture of American higher education” (p. 254). In this case, only the student struggled to make an effort to fit and succeed in the school culture while the educator did nothing to make these students feel welcome or be part of the class culture. This is an example where educators disempower students and leave it up to them to “sink or swim” in their classes. Here, coercive power relations are at play and make the immigrant learners struggle to fit in. This is an unfortunate example where the educator did not make an effort to understand his/her students’ non-conforming classroom behavior. Teachers must be aware of the different socialized backgrounds their students are coming from and that they should not be so quick to judge when others do not readily conform to the expected norm of the new culture they are in.
As has been shown there are many crucial factors that come into play when considering the varying degrees of success adult L2 learners have in their school communities. The most significant is the issue of power relations that exist in the wider community and how they have traditionally negatively influenced the interactions occurring in education contexts. Reflective educators must combat the negative coercive relations of power infiltrating from the discriminatory practices and policies of macro-society and seek to foster more collaborative relations of power with our L2 students in order to avoid the experiences faced by women in Alfred (2003) and Skilton-Sylvester’s (2002) studies. Finally, it is important to consider the multiple identities L2 students bring into our classrooms and be able to nurture instead of suppress those identities that are different from our own. In doing so, instructors can empower students by giving them a voice not only in the classroom community but also in their interactions with TL speakers outside the school community.

In the above studies, learning English as second language was their investment in which they hoped to gain access to and attain privileges of the target language group. Norton (2001) argues that investment in the target language is “an investment in a learner’s own identity, an identity which is constantly changing across time and space” (p. 166). Along with learning English, ESL learners must also learn how to use technology at the same time. Taking the initial step to learn about technology is equivalent to taking the step to create and/or recreate their identities that will align them at some level to identify with the majority TL culture who values the computer as a tool. Using Norton’s concept of investment, it is argued here that the L2 learners’ social interactions and
changing identity and status within and outside the classroom setting play a role in their (un)succesful acquisition of electronic and computer literacy.

Another factor that affects L2 adult success in and out of schools is the influence of societal power relations and their translation into the school context. Cummins cites Ogbu’s (1992) example of how Burakumin perform well in American schools because they are assigned a higher social status due to their being ethnically grouped with Japanese. Educators place high academic expectations on Japanese students, thus explaining why Burakumin perform well in schools. However, this same ethnic group has a low social status in Japan and consequently, they historically have performed poorly in Japanese schools. This example clearly shows how detrimental societal power relations are in determining the success of minority populations in schools. The factor of dominant-subordinate group relations in wider society plays a crucial role in determining the degree of success L2 adults have both in and out of their school communities.

In order to explain the discrimination that comes from societal power relations between dominate and subordinate groups and how it gets translated into the educational context, Cummins (2000) distinguishes between coercive and collaborative power relations. Coercive power relations are those forces that act towards the detriment of minority groups forcing them to give up their cultural identity and language in order to assimilate to mainstream society. As a result, minority students are disempowered and not given an incentive to achieve because their identities are being stifled. On the other hand, collaborative power relations involve those forces that give empowerment to minority groups to achieve more in which ‘power’ ‘is not a fixed quantity but is
generated through interaction with others” (p. 44). Cummins argues that those students whose identities are “affirmed and extended in their interactions with their educators” achieve better in school because they know that “their voices will be heard and respected within the classroom” (p. 44).

Summary

The review of literature has expounded upon the current state of immigrant learners in tertiary institutions today and the new obstacles they face in order to integrate in the wider society; namely there is a dire need for them to learn how to use the computer and information technologies. Research on adult immigrants’ use of technology is underrepresented in SLA literature mainly because of this population’s diverse socioeconomic, political, and cultural backgrounds. Sociocultural perspectives investigating the social, historical and political construction of a person’s identity within a situated learning context of classrooms and the TL society and the power relations that help shape learning and identity have contributed to the understanding of SLA. This review of the current body of work on situated learning, power, and social identity sets the framework upon which the subsequent study was conducted as it relates to learning about technology and the special issues faced by L2 learners who are simultaneously in the process of learning English as a second language.

The following chapter will discuss the theoretical foundation of this project’s research design as well as describing in detail the procedures for data collection and how the data were analyzed. Chapter 3 will also describe the specific research context the
data was collected from, the participants involved, and the nature of the class observed including course requirements and class objectives.
CHAPTER 3

METHODODOLOGY

Introduction:

This chapter is divided into three sections. The first section discusses the theoretical framework for the design. The second section describes the procedures of collecting and analyzing the data as well as the different qualitative instruments used to collect it. Finally, the third section of this chapter describes the class and participants, and also gives an overview of the course requirements and the teacher’s vision and goals for the class.

The design of this project is a case study ethnography centering on a one-semester, low-intermediate level ESL class entitled “Computer Technology to Develop English Skills.” Case-profiles of five selected students were also created to document their personal experiences and perceptions of learning about technology and using that technology to better their English skills. These five case-profile students were also contacted for a period of 4 months after their class ended in order to track their progress with using technology, if any, and how their lives have changed, if at all, as a result of learning to use computers. The qualitative data for this study was collected through weekly participant observation of the students interacting with the computers with extensive researcher fieldnotes, open-ended questions on pre- and post- surveys, pre-, mid-, and exit-interviews with case-profile students as well as monthly interviews after the class ended, and collection of artifacts such as written assignments, student e-journals, tests, and weekly reflective electronic logs of the entire class. The quantitative data for
this study was collected from itemized pre- and post-surveys asking them about their prior knowledge with computers, what they can do with computers, and what they would still like to know how to do with computers.

The entire study is framed under the overarching theme of how adult immigrants are impacted by learning about technology formally for the first time. This study looks at social identity, literacy, sociocultural and sociopolitical factors as issues that play a role in adult immigrants’ experiences with technology. Examples of sociocultural factors are culture-based expectations of behaviors, values, and sociolinguistic competencies in various social situations in the target culture. Sociopolitical factors are those factors that take into account the macro societal and political policies that can affect student learning. Examples of sociopolitical factors include things such as educational policies at the local, state, and even national level that have detrimental impact on how immigrant students learn, why they learn, and what they learn. The research questions that inform this study are:

**RQ 1:** What sociocultural and sociopolitical factors influence the acquisition of computer literacy?

**RQ 2:** What are the consequences to social identity when learning about and using technology?

**RQ 3:** Does learning about technology lead to social inclusion?
PART I: A Qualitative Research Approach

Theoretical Stance of Research Design

Choosing a qualitative design for this study not only is appropriate for the types of research questions posed, but also coincides with the researcher’s philosophical beliefs of how human behavior should be investigated in the social sciences. A quantitative design could not capture the “complexities and conundrums of the immensely complicated social world we inhabit” (Richards, 2003, p. 8). Trying to capture and analyze human behavior is a difficult undertaking because of so many confounding and unforeseen variables that not even the most well-thought-out and planned quantitative study could ever hope to control or operationalize. Thus, a qualitative approach with its emphasis on depth rather than breadth, is needed; “one that will seek to understand the patterns and purpose in our behavior and provide insights that will enrich our understanding” (p. 9) of the phenomenon under investigation.

In particular, an ethnographic case study approach allows for a thick description (Geertz, 1973) of an ESL class’s use of and interaction with technology whereby creating an account that is narrowly focused, but rich in detail and different perspectives. Thick description requires “interpreting the meaning that particular social actions and events have for the actors” (Johnson, 1992, p. 149). Finally, thick descriptions of the data that is collected and observed allows “readers to determine for themselves to what extent the conclusions reached in a particular study can be transferred to other similar contexts” (McKay, 2006, p. 83). In addition, case profiles were created on a select group of students in order to get a more in depth picture of how technology affects their identities.
and their English language learning. Case studies are best suited for researchers interested in “insight, discovery, and interpretation rather than hypothesis testing” (Merriam, 2001, p. 192). They involve in-depth data collection from which multiple sources from rich contexts can be gathered. In addition, case study design is undertaken when “it is impossible to separate the phenomenon’s variables from their context” (p. 192) and “offers a means of investigating complex social units consisting of multiple variables of potential importance in understanding the phenomenon” (p. 199).

This study uses a sociological disciplinary framework in which “the constructs of society and socialization” (p. 197) are attended to while studying the educational phenomenon of adult ESL students learning about and using technology formally for the first time. Specifically, ethnographic studies are ideal in showing “relationships between the cultural adjustment of adults and language learning” and lead to developing “richer theories of second language acquisition and for improving learning” (Johnson, 1992, p. 138). According to Johnson, there are still many insights to be gained by using ethnographic approaches to look at adult language learners in varied adult educational settings. This ethnographic case study serves to inform “the ways that students’ cultural experiences in home and community compare with the culture of the schools, universities, and communities where they study, and the implications of these differences for second language and culture learning” (p. 135).

The qualitative research paradigm used to design the present study falls under critical theory which takes the ontological perspective that “virtual reality is shaped by social, political, cultural, economic, ethnic, and gender values crystallized over time”
This post-modernist theoretical stance stipulates that one cannot know the possibility that something is true through the use of scientific reasoning and puts emphasis that the researcher is the interpreter of texts and writing that come from participants (Bogden & Biklen, 2003). Critical theory is “critical of social organization that privileges some at the expense of others” and views research as an ethical and political act that should benefit those who have been traditionally marginalized stemming from the belief that “the current way society is organized is unjust” (p. 21). In addition, when analyzing the participants’ data for this study, and viewing it from a critical theoretical perspective, one must be cognizant of the fact that “social relations are influenced by power that must be accounted for in analyzing informants’ interpretations of their own situations” (Bogden & Biklen, 2003, p. 30). In so doing, the researcher engaged in a dialogic relationship with the participants in which her own theoretical and ideological views “can be informed and transformed by the lived experiences of the group” (Roman & Apple, 1990, p. 62, cited in Bogden & Biklen, 2003, p. 31) being studied.

A critical theoretical stance corresponds well in this study because the study acknowledges the marginalized status of immigrant ESL students in US society and the powerlessness they feel when interacting with the majority culture because of their limited English language and in specific contexts, their limited computer skills. As mentioned earlier, US language policies have historically created and still create an unjust organization of society in which immigrants get further marginalized because
these language policies do not look out for the best interests of these populations, but instead, for the majority TL culture, thus perpetuating the vicious cycle of discrimination.

Taking the step to learn about and use technology is an action that gives power to this population of learners because they are not only being taught how to use a culturally valued tool (the computer) but at the same time are using it to better their English language ability. Such a technology course provides the possibility of equalizing the unequal power relations that exist between majority and marginalized groups in a variety of contexts but primarily in school and work contexts. The current study can inform those in the TESOL field the potential and value such a course has to “empower the powerless and transform existing social inequalities and injustices” (McLaren, 1994, p. 168, cited in Bogden & Biklen, 2003, p. 21).

PART II: Procedures

This second section describes the research setting where the study took place, the researcher’s role in collecting the data, along with the data collection instruments used, the procedure for collecting data for this study, and how the data were analyzed. I have also summarized the primary data sources that were utilized for each research question later in this section.
Research Setting

Data were collected at Pima Community College, Downtown Campus during the spring and fall semesters of 2006. Pima Community College, Downtown Campus is located in Tucson, Arizona in the southeastern part of the state. The Downtown branch of the college has more than 10,000 students attending that particular campus. The community college serves a widely diverse demographic of people seeking university transfer, occupational education, direct employment and non-traditional education. The city-wide community college offers a wide array of associate degrees and each campus offers ESL classes.

The Downtown campus has the largest and most successful ESL program with three full-time teachers and several adjuncts. Its core curriculum includes beginner, high-beginner, intermediate, high-intermediate integrated skills classes (ESL 50, 60, 70, and 80 respectively). In addition, there are corresponding conversation courses students must take at most levels (ESL 61, 71, and 81). The final core courses are academic English courses running sequentially for a year (ESL 85 and ESL 88) that emphasize reading and writing skills with a final optional Test of English as a Foreign Language (TOEFL) preparation course for those who want to enter a four-year institution or for those paraprofessionals who are required to take the TOEFL test to meet a job requirement. Along with the core requirements listed above, ESL students at Pima’s Downtown campus may choose from a number of electives at each proficiency level. For example, at the high-beginning level, students may choose ESL 63 “English on the Job I,” or ESL 64 “Intro to American Culture.” At the intermediate level, they can choose ESL 72
“Pronunciation II,” ESL 73 “English on the Job II,” ESL 74, “American English and Culture through Film,” or ESL 75 “Computer Technology to Develop English Skills” (the course that this study’s data is based on). Finally, at the high-intermediate level, students may choose from ESL 82 “Pronunciation III,” ESL 83 “Idioms in American English,” or ESL 84 “Exploring American Film.” In reality, however, a majority of the electives listed above usually are cancelled due to low enrollment. Most students focus on taking the core ESL courses which take up most of their time.

The first step involved giving all students a consent form (See Appendix A) at the very beginning of the semester asking them permission for me to observe and videotape their class sessions and collect their assignments and tests. In the same consent form, I also prefaced that some of them may be chosen for more focused study for the case profiles in which multiple interviews would be required. I gave them the option to opt out of being chosen for in-depth interviews. I did not need to provide an interpreter to explain my presence in the class because their language proficiency was adequate.

**Researcher’s Role**

I took the role of a participant observer in which I served as a teacher’s aid, especially in the first half of the semester where I helped students get comfortable with using the computer and its applications. Participant observation allows for the researcher to achieve insider status by helping him/her “see reality from the participants’ point of view” (Johnson, 1992, p. 143). I used all four strategies of observation prescribed by Richards (2003) at various points throughout the research phase. These strategies include
1) to observe and record everything, giving the researcher a broad look at the environment; 2) to observe and look for nothing in particular, which may lead the researcher to notice unusual occurrences; 3) to observe paradoxes or shifts in participant behavior that were not there before; and 4) to observe and notice a particular problem that seems to be occurring and that students are dealing with.

I went to the language lab early before class began to observe and/or hold informal conversations with the students who came early. Over the course of the semester, I had built a comfortable rapport with all the students who were able to confide in me their feelings about the class without feeling intimidated. Thus I was able to establish a more personal connection with the students who viewed me not only as a resource, but also as someone to confide in when they felt confident and/or overwhelmed during the course of the semester. I was able to establish an even closer connection to the five case-profiles with whom I held numerous casual conversations over the course of four months after the class had ended.

Data Collection

The primary data gathering methods in this study included 1) surveys; 2) interviews; 3) researcher fieldnotes and reflection log; 4) student Nicenet reflection posts/blogs; and 5) transcribed impromptu conversations. A summary of all the data and a description of the data is offered below in Table 3.1.

<table>
<thead>
<tr>
<th>Type of Data</th>
<th>Description of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre- and post-surveys</td>
<td>The pre-survey gathered background information on students including personal</td>
</tr>
</tbody>
</table>
The post-survey gathered their reflections about the class, what they felt they got out of the class, how often they would use the computer; basically a debriefing of their overall experiences in the course.

2. Transcribed interviews

These were gathered from the five case-profile students throughout the Spring and following Fall semesters. Their purpose was to gather deeper insight into students’ perceptions of their computer use, their identities as immigrants and students, and their overall experiences in and out of class in regards to computers and the target-language culture.

3. Research fieldnotes and reflection log

This was a collection of written thoughts from the researcher based on her observations from class. They served to capture an outsider’s perspective of what was going on and served to gather other participants’ thoughts and/or comments.

4. Nicenet reflection posts/blogs

These electronic, weekly posts from students served as reflections on how the class was going for them on that particular week. Their purpose was to capture students’ thoughts after a new concept or skill was taught to them in order to gauge how well they were assimilating computer literacy.

5. Transcribed impromptu conversations during class

As I was walking around in the classroom, I had a digital recorder on my person at all times that I used to catch conversations with various students during the class period.

<table>
<thead>
<tr>
<th>Table 3.1: Summary and Description of Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre- and post-surveys (See Appendix B and C respectively) were administered to those members who agreed on the consent form to participate in my study during class time. The pre-survey consisted of short answers and closed- and open-ended questions</td>
</tr>
</tbody>
</table>
that were paper and pencil based considering the low-level of computer skills students had at the beginning of the semester. However, the post-survey which was administered on the last day of class was only available electronically. This is in keeping with the spirit of the course since by that time, students had already learned how to manipulate electronic documents. The pre-survey was designed to gather background information about the students, any prior experiences they had with computers, their current feelings/attitudes about computers, their feelings towards English language learning, their perceptions about their English language skills, and the reasons why they are taking such a class. The post-surveys were designed to elicit what computer skills, vocabulary, and applications they felt they have acquired and are proficient in as well as a larger section of open-ended questions.

From the initial surveys, I selected five case-profile students who had all indicated on their consent forms that they would be willing to be interviewed at length. Interviews were collected in early February, end of March and at the end of the semester in mid-May. Each interview (see Appendix D, E, and F) was semi-structured to allow participants to freely express themselves so they can direct the conversation as much as possible; trying not to heavily burden the interviewees with my own research agenda. These interviews were between 45 minutes to an hour each with a focus on their personal experience of learning about technology and learning English through technology. All interviews were tape-recorded and transcribed. Approximately 20 hours of recorded interviews were transcribed. These transcriptions were used to inform all of the research questions in the study. They were integral to the study in that they gave further depth and insight on the
selected case-profile participants’ feelings and thought processes whereas comments captured by other participants were short and sporadic and not nearly as detailed as the transcribed interviews. Examples of these transcript excerpts are below following each case-profile participant’s name.

In order to provide a longitudinal perspective of their progress with computers, I conducted monthly check-up interviews with each of the case-profiles for a period of four months following the end of the class, from mid-August to mid-December 2006. These interviews were not structured, but instead were more conversational and left open-ended for the case-profiled students to expand upon whatever they wanted to talk to me about. These encounters were also taped and transcribed. The check-up interviews varied in length from 30 to 90 minutes, depending on the participant. Where possible, I was able to talk to their Fall 2006 semester instructors in order to gain more insights on how they were using technology in their ESL classes and how successful they were and how often they used it, depending on the setup of the class. These case profiles gave insights into how taking such a course influences the students’ perception of themselves now that they acquired some computer skills. They also allowed me to track their perceptions of their growing computer knowledge and keep record of any triumphs or feelings of frustration in trying to become computer literate. Approximately 8 hours of recorded interviews were transcribed.

To give the reader a sense of what prompted me to choose the five case-profiles and to give an example of the transcribed interviews, which have been a major source of answers to my research questions, I have included the following three unedited excerpts
from three of the five case profiles from their initial interviews. For anonymity’s sake, their names have been changed:

**Mario:** And and I was say, well I think I need, I mean, I don’t like this planet, I don’t like everything what we do here, but somehow I need to, I need to follow the other monkies [chuckles], you know…You know, like a monkey do, monkey do. I need to follow cuz I mean it’s nice you being…it’s nice having experience to not being attached to any material stuff, but if I still living in this planet, I need to know. Because everything is gonna be by computer now, so I need to know, I need to learn everything about it. I need to like, “how to use it, cuz it’s more faster finding information and everything. Also if I have any idea to working in the mechanic aircraft, probably I’m gonna need one day a computer so I can find out things, so I always become more interested in the computers.

**Lana:** About the language, also I want to tell you. Lots of people who comes here like Russians, they try to hang out only with Russians. Mexicans they only hang out with Mexicans and stuff like you know, that’s why they can’t learn very well language because they don’t speak English at home they speak Russian or Spanish or whatever. We have in this class, Lev, he don’t speak with me English, he speaks with me Russian, so you know, I don’t like that. That’s why I don’t like, I don’t have Russian friends…I don’t care about Moldova honestly because this country didn’t give me anything—no education, nothing. It’s just like mother country, or whatever, it doesn’t work with me. I don’t know, if I had everything in my country, probably you know is different. But I need to work really hard. I was working from 17 years. And working very hard everyday with no day off. So, to buy me pair of jeans or stuff like that, so I don’t care about that country.

**Erica:** Last year I came for school and I would like he [her husband] support to me for go to school. And last semester he come to school and so is very difficult when the both us go to school. We have 3 kids and I say “You finished your school, give me too the opportunity to go to school” but he say “no.”…So I say “I support to you when you go to the U of A, for I give you time for go to school and study. I working and now you need to give to chance for go to school. “No, you have your job. You’re good in your job” but I like to work and get a better job. But that’s why just I kept two class. Maybe sometime... I like because the life is more easy. We have more opportunities like we as a women we have more opportunities, more chance more support for everything and that life I think is easy. But, we came from the other country I feel like we stop, just my case. I stop for 6 years because I stay home. So the life continue but we stop. But when I start go to school, I love it, I like, like more. Because I know more people and the life is change and is different and I like it.
The five case-profiles were selected using Creswell’s (1998) maximum variation sampling procedure in which the researcher identified participants from diverse backgrounds, and who have had different experiences socially, economically, and educationally. The five-case profiles were from a diverse group, representing both sexes, both single and married, different ethnicities, and ages. Mario is a single 38-year old man from Mexico who is very spiritual, reflective, and helpful. He works two jobs, one full-time and the other part-time. His goal is to become an airplane mechanic. Lana is a young mother of two who is married to an American psychiatrist. She received her GED and would like to become a registered nurse. Erica is a 40-year-old mother of three who works full-time as a teacher’s aid at her child’s elementary school. She’s been in this country nearly twenty years and would like to change her career despite her husband’s lack of support. The fourth case-profile, Anna, is a Rwandan refugee with three children. She is a full-time caregiver who, despite not having a computer, is persistent in her desire to learn everything there is to know about computers. Finally, Bob, a 34 year-old Sudanese refugee, would like to get into politics. He is an avid reader of the news both in his native country and this country. He and his wife work full-time jobs as hospital attendees. On his days off, he takes care of his three children while trying to complete his ESL homework. All of the case-profiles have fascinating things to say about life, their experiences, and computers.

The third source of data collection came from researcher fieldnotes, including a running reflection log, of each class session (16 class sessions in all; each 2 hours and 40 minutes long, for a total of approximately 45 hours of observation throughout the
semester. I kept my fieldnotes in a loose-leaf binder with vertically folded paper where I recorded my observations on the right side of the paper and then kept a running reflection log related to my observations on the left side of the paper. While I was able to take down some observations during the class section, more often than not, I expanded on my fieldnotes immediately after the class ended because during class, I was usually busy helping students. To assist me in getting any questions or comments they made while helping them, I used a clip-on digital recorder to capture their utterances and conversations. I reviewed my digitally recordings of the class weekly, but only transcribed those utterances that informed my research questions and/or illustrated my points.

My fieldnotes began by broadly describing the class and what activities were occurring. I focused on answering the who, what, where, when, how and whys of what I was observing. As the semester went on, I made more concentrated or selected observations that focused on creating a portrait of that individual, most likely a case-profile student, while still providing general descriptive observations of the class. When I had free time during the class session, I took descriptive fieldnotes of what occurred in class, paying particular attention to students and their behavior and reaction to instruction while class was in session. When I jotting down something was inconvenient, I would spontaneously record my reflections and observations of anything significant on the digital recorder I had permanently attached on my person. My fieldnotes and reflection log was further supplemented by the video-recordings of each class session. However, the video-recordings were of poor quality and proved to be unusable for this project. The
fieldnotes and reflection log helped in terms of getting to how the participants’ social identities were affected and developed throughout the semester by learning about computers.

The fourth primary data collection method involved student reflective postings on Nicenet. All of their interactions and postings were easily accessed and on permanent display in the class profile the instructor created on-line. The reflective weekly postings were comprised of three questions, the first two were the researcher’s questions while the third one varied, depending on what the teacher wanted to assess from her students that given week. This data was collected in order to capture all of the participants’ thoughts and feelings about how they felt the course was going for them and how comfortable they were about using the computer on a week-to-week basis. This data was used to answer many of the research questions and used where possible, for triangulation with other data sources. The first two questions were: 1) What did you learn today? 2) How do you feel about what you learned today and why? The weekly reflections provided a snapshot of where they are in the process of their acculturation with computers. By the end of the semester, there was a total of 12 weekly reflective posts collected over the semester. Below, is an example of a student’s reflective post on Nicenet:

- **FROM:** XXXXX (01/28/06)
  **SUBJECT:** RE: Journal Entry 2

1. What did you learn today?

   I learn today how to insert a picture from the internet and from Clip Art in my Microsoft Word Document.

2. How do you feel about what you learned today and why?
It is very interesting and fun to learn something new.

3. What would you like to learn in this class?

I would like to learn in this class how to write better in English and how to use computer.

The fifth primary data I used was transcribed impromptu classroom conversations. With the help of a digital recorder that I had constantly attached to my person, I was able to record various informal conversations with random students before, during, or after class that had occurred. I listened to the recording and transcribed any conversations I felt were relevant to answering my research questions in addition to further adding details to my reflection fieldnotes log. Finally, I also collected lesson handouts and assignments from the teacher in order to keep me informed on what the students were working on on any given week.

Equipment

In order to properly collect all the data, I purchased a high-quality digital-recorder for interviews and used my laptop for additional recording in the middle of the room using AUDACITY, a digital recording program. I transcribed all the interviews from the five profile students. I only transcribed parts of classroom lessons and/or interactions that were relevant to answering the research questions.
Data Analysis

Most of the data gathered in this study (with the exception of the close-ended questions and items on the pre- and post-surveys) were coded and analyzed using Creswell’s (1998) “Data Analysis Spiral,” an analytic inductive approach commonly used in qualitative data analysis. The Data Analysis Spiral technique involves first digitizing and transcribing all the collected data. The second step involves reading the data thoroughly and then deriving initial categories from the data while probing for disconfirming evidence. The third step involves multiple searches of the data, which is an iterative and reductionist process that leads to a point of data saturation, meaning, the researcher exhausted all possibilities of finding new thematic categories and cannot possibly derive new thematic categories from the existing data set. Data is coded according to thematic topics. Finally, the themes and categories are organized showing the major, reoccurring themes that were derived from the research.

For the current study, I entered every raw data source into the computer in text form so I would have searchable electronic versions of every data element. I also printed out hardcopies of all the data. I penciled keywords and key phrases in the margins of every portion of data, including typed survey results, transcribed interviews, and typed fieldnotes. Pencil allowed me to revise my initial themes as new evidence emerged and/or morphed into other categories. After numerous runs through the data, many of the original/initial themes were blended, renamed, and reorganized into more permanent categories. Specifically, I applied this method to all 4 parts of my data collection (i.e., open-ended pre- and post-survey questions, interviews, fieldnotes and reflection log.
Below, I have provided two examples of the Data Analysis Spiral Approach I used to organize and analyze the data concerning reasons for taking a technology class (Table 3.2) and sociocultural factors that influence the acquisition of computer literacy (Table 3.3).

<table>
<thead>
<tr>
<th>INITIAL THEMES</th>
<th>FINAL CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Better jobs</td>
<td><strong>Upward Mobility</strong></td>
</tr>
<tr>
<td>Present and future job opportunities</td>
<td></td>
</tr>
<tr>
<td>Improve/learn typing</td>
<td><strong>Skills improvement and development</strong></td>
</tr>
<tr>
<td>Improve reading and writing skills</td>
<td></td>
</tr>
<tr>
<td>Use computer by themselves</td>
<td><strong>Independence</strong></td>
</tr>
<tr>
<td>Life made easier with computers</td>
<td></td>
</tr>
<tr>
<td>Learn everything about computers</td>
<td><strong>Knowledge</strong></td>
</tr>
<tr>
<td>Improve English proficiency</td>
<td></td>
</tr>
<tr>
<td>Learn new things</td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td><strong>Communication</strong></td>
</tr>
<tr>
<td>Chat</td>
<td></td>
</tr>
<tr>
<td>Talk to people</td>
<td></td>
</tr>
<tr>
<td>Keep up with current technology</td>
<td>Necessity</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Help children</td>
<td></td>
</tr>
<tr>
<td>Computers are the future</td>
<td></td>
</tr>
<tr>
<td>Schoolwork</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Everyone has a computer</th>
<th>Assimilation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers are used everywhere and everyday by Americans</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Good source of information</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Download things</td>
<td></td>
</tr>
<tr>
<td><strong>Upload pictures</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Table 3.2: Data Analysis: Reasons for taking a technology class**

<table>
<thead>
<tr>
<th>INITIAL THEMES</th>
<th>FINAL CATEGORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too busy</td>
<td>Little time</td>
</tr>
<tr>
<td>Family responsibilities</td>
<td></td>
</tr>
<tr>
<td>Working overtime</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Working-class</th>
<th>Socioeconomic Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle-class</td>
<td></td>
</tr>
<tr>
<td>Upper-middle class</td>
<td>Unequal Access to the Internet</td>
</tr>
<tr>
<td>--------------------</td>
<td>-------------------------------</td>
</tr>
<tr>
<td>Dial-up</td>
<td>Various amounts of Social Support</td>
</tr>
<tr>
<td>High-speed</td>
<td>Various levels of Autonomy</td>
</tr>
<tr>
<td>Help from various members of family, co-workers, teachers, others</td>
<td>Varying Proficiency Levels</td>
</tr>
<tr>
<td>Log-in from home</td>
<td></td>
</tr>
<tr>
<td>Log-in at work</td>
<td></td>
</tr>
<tr>
<td>Log-in at school lab/library</td>
<td></td>
</tr>
<tr>
<td>Range of English language skills</td>
<td></td>
</tr>
<tr>
<td>Time spent in country</td>
<td></td>
</tr>
<tr>
<td>Different literacy levels</td>
<td></td>
</tr>
<tr>
<td>Spirituality</td>
<td>Identity</td>
</tr>
<tr>
<td>Love of American culture</td>
<td></td>
</tr>
<tr>
<td>Distancing from native culture</td>
<td></td>
</tr>
<tr>
<td>Pay bills</td>
<td>Purpose</td>
</tr>
</tbody>
</table>
Table 3.3: Data Analysis: Sociocultural Factors that influence the Acquisition of Computer Literacy

For the close-ended items on the pre- and post-surveys, I quantified the participants’ yes/no responses through frequency data. For example, for any given closed-ended item, using frequency data analysis, I disclosed the results in this manner: “Based on survey question #1, 80% of students agreed that they need to use computers.”

To add validity to my analysis, I used member-checking with the participants and the instructor to validate my initial analyses of the data. The results of the quantitative data will be discussed in Chapter 4 under “Participant Profiles.”

Finally, triangulation was assured through the large and varied volume of data sources. Triangulation is an intrinsic component to ethnographic studies because each data collection tool used in this study was key to the data analysis and interpretation process. For example, the fieldnotes provided interpretation from the researcher’s observations but are counterbalanced by student interviews and artifacts that serve to either support or contradict the other data sources. Thus, triangulation serves as a check and balance system in validating, confirming and/or disconfirming data that come from different sources.
Table 3.4 illustrates the relationship between my research questions and the data sources used to answer them:

<table>
<thead>
<tr>
<th>Research Question</th>
<th>Data Source(s)</th>
</tr>
</thead>
</table>
| 1. What sociocultural and sociopolitical factors influence the acquisition of computer literacy? | - pre- and post-classroom surveys  
- pre-, mid-, and exit-interviews with 5 focal students  
- post-interviews with 5 focal students  
- classroom observation fieldnotes and reflection log  
- weekly student reflection blogs  
- transcribed impromptu conversations |
| 2. What are the consequences to social identity when learning about and using technology? | - pre- and post-classroom surveys  
- pre-, mid-, and exit-interviews with 5 focal students  
- post-interviews with 5 focal students  
- classroom observation fieldnotes and reflection log  
- weekly student reflection blogs  
- transcribed impromptu conversations |
| 3. Does learning about technology lead to social inclusion? | - pre- and post-classroom surveys  
- pre-, mid- and exit-interviews with 5 focal students  
- post-interviews with 5 focal students  
- classroom observation fieldnotes and reflection log  
- weekly student reflection blogs  
- transcribed impromptu conversations |

Table 3.4: Primary Data Sources

In presenting and explaining focal points and or cultural patterns occurring in the multiple data sources, transcriptions of selected segments from interviews, class-digital recordings, and/or videos will be used. A narrative approach will also be used when it is more effective to show the significance of an occurrence with the information being presented in a block paragraph format. Finally, student accounts from interviews or
informal classroom conversations may be directly quoted, paraphrased, and/or summarized depending on what is deemed necessary to illustrate a point more clearly or accurately.

PART III: Description of the Study

The Classroom

The classroom was held at the Downtown campus’s language lab which houses 35 networked computers, an instructor’s console with master computer, and a full-time lab/instructor assistant with part-time assistants during the week, but not on weekends (when the class was held). In addition, the classroom was equipped with a television and DVD/VCR player, projector, and a SmartBoard. The SmartBoard is a user-friendly “magic” board that allows instructors to project what is on their computer screen to the class, to draw on the board with different colored felt markers, and erase information. It also is responsive to touch, thus an instructor’s finger acts as a mouse that can click and highlight with just a touch. Thus, the SmartBoard facilitates in allowing instructors to show students how to click and scroll on a computer screen, for example, or to highlight information shown on a particular website.

The language lab is used by foreign language instructors although typically ESL classes other than ESL 75 and the TOEFL preparation class are the only ones assigned to the language lab. The computers are loaded with a variety of ESL language software programs including the “Focus on Grammar” software series from Basic to Advanced
levels and the ELLIS software program including the Basic, Middle, and Senior levels as well as ELLIS’ Master Pronunciation software. There is also a CD program called “I Hear, I See, I Say” which students can check out and use on the computers that includes 15 consecutive lessons from beginning to advanced level that are based on the Natural Approach. None of these programs were used, however, for the ESL 75 class. The software programs that were taught were Microsoft Word, PowerPoint, and Excel. They also used Nicenet as their classroom management system. For a common email, they created yahoo accounts and used the yahoo search engine for web quests.

The Course

The ESL class which I observed, ESL 75, was called “Computer Technology to Develop English Skills.” This class was held once a week for three hours on Saturdays for a 16-week semester in a networked language lab at Pima’s Downtown Campus in Spring 2006. It was a three-credit course elective. This course has been part of the ESL curriculum for a couple of years and only at the Downtown Campus site although recently, other campuses have been trying to offer it as well. The course description is given below and can be found on the on-line course registration site for the Pima Community College district (see https://bannerweb.pima.edu/pls/pccp/az_tw_subcrse_catalog.p_subjcrse_list?p_subject_code=ESL):

Instruction and practice using computer technology to enhance English skill development. Includes computer operation and applications, oral and
written English communication skills, and application of technological skills to enhance personal English development. Also includes utilizing ESL software, ESL websites and the World Wide Web. Prerequisite(s): Placement by ESL assessment test, completion of ESL 60 or higher with a grade of C or better; or consent of instructor.

The class offers an opportunity for ESL students to learn about computers and their many uses at the same time using it as a means to develop their language skills. Originally, it was designed as a way to help students use the computer to learn English, including using ESL software to help supplement materials used in class. The course had used a book called *Internet English* (Gitsaki & Taylor, 2000) the previous semester which provided Internet activities and pre-Internet warm-up activities along with English language structure exercises. For example, there are exercises that ask students to make questions with “who, what, when, how, etc.” as a warm-up activity for putting queries into a search engine such as Yahoo. However, the instructor for this particular semester sought to teach ESL students how to use the computer as a life-skills component and did away with the course book, opting instead to use teacher-generated materials. In other words, the computer was seen as a tool that would help them use it as computer proficient people would in the wider society with English language learning being a derived benefit.

The syllabus for the Spring 2006 semester course (see Appendix G) included various requirements. It included weekly reflective electronic journals posted on the class management system, Nicenet. A total of 15 journal entries were required totaling 100 words in length. They were also required to respond to three other classmates for
this assignment. They were evaluated based on content and task completion which was 20% of their final grade. There were three prompts they had to respond to. Two of the prompts were given every week as a way to keep record of students’ learning and attitudes towards what they were learning. These prompts were: 1) What did you learn today?; and 2) How do you feel about what you learned today and why? The third prompt usually dealt with a theme of that week’s topic in class and served to let the instructor be aware of questions and problems faced that were not brought up during class time and to get comprehension checks on the material covered in a class session. Because students were generally falling behind responding to these prompts, only 12 journal entries were posted in the end. These 3rd-question prompts are listed below: 1) What is your prior experience with computers and what have you used them for before?; 2) What would you like to learn in this class?; 3) Do you think peer editing (exchanging papers with a classmate) is a good idea? Why or why not?; 4) Is the track changes function in Word helpful or confusing? Why?; 5) What challenges did you experience in using Microsoft PowerPoint after using Microsoft Word? What was easier no that you already know one Microsoft program?; 6) Did you find the Notes Page helpful for your presentation?; 7) In your own daily life, what do you use tables for? Can you imagine using tables in an electronic format?; 8) What do you think you could use Excel for in your daily life? Was is difficult?; 9) What kinds of things do you have to calculate in your daily life? How could Excel help you?; 10) How did you feel presenting in front of the class today?; 11) When, why, and how should you use print outs of Word and
PowerPoint documents?; 12) In preparation for your presentation, what skills do you still need to learn or review?

A second requirement involved weekly homework assignments consisting of a variety of computer tasks worth another 20% of their grade. These weekly assignments consisted of sending emails to classmates, web quests requiring them to find information on Pima College’s and University of Arizona’s websites, web quests about planning a vacation in Tucson and searching for summer/fall classes at Pima, mini-PowerPoint presentations, and conducting class surveys using Excel.

A big portion of their grade required them to work on a semester-long project about their home countries that they had to present via a PowerPoint presentation at the end of the semester. This project integrated their Microsoft Word skills in which the instructor assigned weekly mini-assignments on Microsoft Word with different Word features taught in class that particular week. For example, format assignments included inserting a picture from clip art or the Internet, using track changes, changing margins, manipulating pictures and texts (text wrapping, for example), highlighting, using colored and different fonts, and bolding. For each weekly assignment on Microsoft Word, they had to type a ¾ to 1 page summary of thematic topics about their respective countries. These topics included the following: 1) Country’s geography and climate; 2) People in your country; 3) Religion and ethnicities; 4) Political system; 5) Economy; 6) Famous people; 7) Typical foods; 8) Major historical events; 9) Current problems; 10) Current relations with the U.S.; 11) Country’s reputation abroad; 12) Similarities to the U.S.; 13) Differences to the U.S.; and 14) What you miss about your country.
Along with compiling this information and forming a PowerPoint presentation, students had to create a handout of their presentation to pass out and create a brochure created on Word compiled of all their weekly mini-writing assignments, with pictures and appropriate page breaks and titles for each topic. The instructor required that the students attach these weekly assignments via email and send them to her where she proceeded to correct the assignments using track changes and resending the electronically edited assignment back to the student. The above assignments were designed to teach students real-life skills using the computer while practicing their written and oral skills, and teaching them how to use the computer.

**The Participants**

For this ethnographic case study, classroom data were collected from the intermediate-level elective course ESL 75 “Computer Technology to Develop English Skills.” Convenience sampling was employed for this circumstance because the students happened to enroll in this class for Spring 2006 and were thus readily available. At the beginning of the semester, there was a total of 28 students enrolled. The prerequisite to enroll for this class was that students must have passed ESL 60 with a “C” grade or higher and/or have taken CELSA, the English as a Second Language exam Pima Community College administers to incoming and continuing ESL students, and passed it with a score of 34 or higher (75 is the highest score). More detailed demographic information about the participants will be discussed in Chapter 4.
The Instructor

The instructor, who will be anonymously named “Sally,” for this class was not specifically focused on for this study since the focus was on student behavior and learning; however, during the course of the project, it became evident that the instructor’s vision, goals and pedagogical beliefs for the class seemed to affect the way students viewed and interacted with computers. At the time, she was a doctoral student completing her dissertation in Second Language Acquisition and Teaching with a research interest in L2 learning and CALL. She had more than 10 years experience teaching German as a foreign language as well as a few years experience teaching ESL. Thus, she was a very experienced and knowledgeable teacher.

Sally’s goals for this class were that students demonstrate basic computer operation and applications, apply oral and written English communication skills to all their assignments and projects, both in and out-of-class, and apply technological skills to enhance their English development. This was her second semester teaching this course in which she had allowed me to observe her class the previous semester in order for me to get a feel for the class, the types of students taking this class, and to ultimately help me draw my preliminary research questions. During the classes, Sally usually described and explained a particular computer skill on the SmartBoard while students took notes and paid attention to what she was saying and demonstrating. After her demonstrations, she sometimes asked students to try doing the skill she has just shown them. Sally also allowed time in class for students to start working on their various projects and homework assignments. She conducted her class this way for a number of reasons: 1) So
students would not be totally dependent on help from more proficient users in their homes; 2) So she could help them if questions should arise while they were doing their assignments in her presence; and 3) To allow students who did not have computers at home, a chance to complete some of their assignments in class.

Many of her course assignments could be easily accessed and collected since she had posted them all on Nicenet. She was very cooperative, flexible, and accommodating in allowing me to administer my surveys, videotaping and recording the sessions, and for sharing her insights about the class which all made it quite effortless and comfortable for me to collect data and have easy access to this research site.

There was also a volunteer teaching assistant, whose pseudonym will be “Alex,” who was a tremendous help with the class and who was very knowledgeable about computers. He was getting his Bachelor’s degree in Education and was interested in teaching ESL. He helped with the class for about two months but because of another paying job opportunity left in the last third of the semester. By that time, however, the students who remained in the course had become accustomed to the routines of the class and familiar with most of the programs so that Sally and I were able to field any questions they had.

Summary

The purpose of this chapter was threefold: 1) to give a theoretical explanation of the research design used for this particular study; 2) to describe the methodology used including the specific procedures and the types of data collected in support of the
research questions stated at the beginning of this chapter; and 3) to provide a description of the specific context the research took place in, including the description of the class, its course requirements, the participants, instructor, and the researcher’s role. The following chapter will set out to answer the research questions posed in Chapter 3 based on the collected data. Before doing so, detailed demographic information of the participants collected from their pre-surveys at the beginning of the class will also be provided. This will serve as a backdrop to the specific group of students observed for this research project.
CHAPTER 4
RESULTS AND ANALYSES

Introduction:

The results of the current study will be shown in relation to the three major research foci presented in the Chapter 1 which were then further discussed in Chapter 3 of this dissertation. My goal is to share the participants’ and my understanding of what it is like to be an adult immigrant learner formally learning about technology for the first time, to contextualize the meanings these students ascribe to learning about computers and their effect on their lives.

The chapter consists of three parts that are informed by a variety of data sources and literature that will illustrate, support, and interpret the findings for each of the three research foci, i.e.: describing the sociocultural and sociopolitical factors that influence computer acquisition; effects of computer learning on immigrants’ social identities; and technology’s role in immigrant inclusion in society. The research questions are informed by pre- and post-surveys, transcribed interviews of the five case-profiles, transcribed conversations with various participants, student reflection blogs, and researcher’s fieldnotes/reflection log. While all classes were videotaped, the inability to listen in on student-to-student and/or student-to-teacher conversations resulted in not being able to draw from this data source. The class will be described as a whole with the experiences of all five focal students interspersed throughout the dialogue.

Some of the themes that have emerged from the analysis of data were the implications of cultural and economic backgrounds to learning about computer literacy
and being or not being part of a larger community of computer users; classroom
manifestation of difficulties adjusting in a computer teaching environment; students’
varied definitions and perceptions of computer literacy success; and cultural implications
of pedagogical practices best suited for this group of students. These along with other
themes that will be discussed at length later in this chapter, have emerged as prominent
patterns upon examination and triangulation of the multiple data sources mentioned
above.

PART I: Sociocultural and Sociopolitical Factors

The students in the ESL technology class represent a variety of different
ethnicities and backgrounds from the adult immigrant learner community. Even so, the
themes and patterns that emerge and reoccur from the data collected on them does not
immediately translate into generalizations for the entire segment of this population. Thus,
it is important to emphasize that what has emerged from this data set can only serve to
further enlighten the field on what to expect from this population of students in this kind
of setting, but not make broad generalizations. In the first section of Part I, I will begin
reporting on the demographics of all the students attending the class as they relate to
sociocultural background and present the biographies of the five case-profile students. In
the second half, a description and discussion of the themes and patterns that have
emerged concerning sociocultural and sociopolitical factors for the entire class will be
presented, using the five case profiles, where appropriate, to illustrate certain patterns and themes.

Participant Profiles

The following data were all collected from the pre-survey (See Appendix B) conducted at the beginning of the semester. Twenty-five of the twenty-eight students agreed to fill out this survey. The first part asked for demographic information such as their country of origin, age, number of years in the United States, language study background, and English courses taken thus far in the U.S. The latter two demographic items will be presented and discussed in a subsequent section relating to the role literacy plays in computer literacy acquisition. The second part of the pre-survey elicited their prior knowledge of computers and their attitudes towards them prior to this class. This part of the survey is also relevant to the sociocultural factors involved in computer literacy attainment and while introduced in this section, will further be expounded upon when talking about native-like use of computers.

For this particular semester, the class size was unusually large mostly because it was offered for the first time on a Saturday morning rather than on a weekday. The class consisted of a variety of language proficiency and cultural backgrounds, as was to be expected in an elective course. Regarding gender, there were more than twice as many females as males in this class; 17 females compared to only 8 males. The students came from a wide range of countries, the majority being from Mexico—13 out of 25 students, followed by five students coming from African countries including Liberia, Rwanda,
Sudan, and Somalia, four students from the Middle East including Syria, Iran, and Afghanistan, two students from Russia (actually one came from Moldova which used to be part of the USSR), and one student from Poland. There were two students from Vietnam and another female from Iran, but they did not participate in the pre-survey (see Figure 4.1).

**Figure 4.1 Countries of Origin**

Regarding age of students, the youngest student was 18 and the oldest was 55. The majority of students (12 out of 25 students) were between the ages of 30-39. Four students were between the ages of 21-29 and four were between 40-49. Three students were between 18-20 years old and only two students were between 50-59 years old (see Figure 4.2).
Since in the following chapter I will be frequently referring to various participants who were not the five case profile students, I have listed in Table 4.1 their names, ages, and countries of origin for a quick reference point. All names have been changed for anonymity’s sake.

<table>
<thead>
<tr>
<th>Name</th>
<th>Country of Origin</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria</td>
<td>Mexico</td>
<td>37</td>
</tr>
<tr>
<td>Norma</td>
<td>Mexico</td>
<td>36</td>
</tr>
<tr>
<td>Cindy</td>
<td>Mexico</td>
<td>19</td>
</tr>
<tr>
<td>Laura</td>
<td>Mexico</td>
<td>23</td>
</tr>
<tr>
<td>Karen</td>
<td>Mexico</td>
<td>18</td>
</tr>
<tr>
<td>Lucy</td>
<td>Mexico</td>
<td>45</td>
</tr>
<tr>
<td>Kathy</td>
<td>Mexico</td>
<td>40</td>
</tr>
<tr>
<td>Name</td>
<td>Country</td>
<td>Age</td>
</tr>
<tr>
<td>---------</td>
<td>-----------------</td>
<td>-----</td>
</tr>
<tr>
<td>Gaby</td>
<td>Mexico</td>
<td>50</td>
</tr>
<tr>
<td>Jacky</td>
<td>Mexico</td>
<td>35</td>
</tr>
<tr>
<td>Mario</td>
<td>Mexico</td>
<td>36</td>
</tr>
<tr>
<td>Erica</td>
<td>Mexico</td>
<td>39</td>
</tr>
<tr>
<td>Jorge</td>
<td>Mexico</td>
<td>32</td>
</tr>
<tr>
<td>Jim</td>
<td>Mexico</td>
<td>35</td>
</tr>
<tr>
<td>Peter</td>
<td>Iran</td>
<td>19</td>
</tr>
<tr>
<td>Olivia</td>
<td>Syria</td>
<td>30</td>
</tr>
<tr>
<td>Zora</td>
<td>Afghanistan</td>
<td>41</td>
</tr>
<tr>
<td>Sara</td>
<td>Afghanistan</td>
<td>30</td>
</tr>
<tr>
<td>Anna</td>
<td>Rwanda</td>
<td>28</td>
</tr>
<tr>
<td>Bob</td>
<td>Sudan</td>
<td>33</td>
</tr>
<tr>
<td>Mike</td>
<td>Sudan</td>
<td>32</td>
</tr>
<tr>
<td>John</td>
<td>Liberia</td>
<td>38</td>
</tr>
<tr>
<td>Denise</td>
<td>Somalia</td>
<td>29</td>
</tr>
<tr>
<td>Danielle</td>
<td>Poland</td>
<td>55</td>
</tr>
<tr>
<td>Alan</td>
<td>Russia</td>
<td>42</td>
</tr>
<tr>
<td>Lana</td>
<td>Moldova</td>
<td>25</td>
</tr>
</tbody>
</table>

Table 4.1: List of Class Participants
Most students in this class have lived in the U.S. between less than a year to 4 years while two students have lived here for over 15 years, one for 12 years, one for 10 years, and one for 8 years. Two of the youngest students have been in the U.S. for only 5 months at the time of the study (see Figure 4.3).

**Figure 4.3 Number of Years Students have Resided in the U.S.**

The second half of the pre-survey had also asked students about their previous computer literacy experience including their attitudes towards computers. These items were in a Yes/No response format. However, there were some students who failed to respond to the item and there was one student who penciled in a response of “Sometimes.” Therefore, these categories were also included in Table 4.4. Technophobia, which many researchers attributed to unsuccessful computer literacy acquisition (Liu, 1998; Howard, 1986; Brown, 1994; Johnston, 1999; Yeaman, 1993) did not seem to be a factor for this group of students since all 25 respondents indicated that they liked using
computers. In fact, a large majority, 18 students, indicated that they use the computer at home, thus affirming the trend in the literature (Zhao, 2005) attesting that more and more minority groups do have access to computers, many at their homes. For item #3, 6 students indicated that they did not need help with the computer which was interesting to discover. It was also interesting to see that many knew what a chat room was although not many indicated that they used it in the “Things you have done with computers” section of the survey (see Table 4.3). Finally, it was noteworthy that one student had said that computers can be useful at times both at work and school rather than agreeing with the majority of “yes” (see Table 4.2).

<table>
<thead>
<tr>
<th>Computer Literacy</th>
<th>Yes</th>
<th>No</th>
<th>No Response</th>
<th>Sometimes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I like to use computers.</td>
<td>25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I use a computer at home.</td>
<td>18</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3. I need help to use the computer.</td>
<td>19</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I know what a mouse is.</td>
<td>21</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I know what a web page is.</td>
<td>13</td>
<td>11</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>6. I know what the Internet is.</td>
<td>24</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. I know what a chat room is.</td>
<td>14</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I know what surfing the Internet is.</td>
<td>9</td>
<td>9</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>9. I think computers are useful in</td>
<td>24</td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>
Table 4.2: Prior Knowledge with Computers

| 10. I think computers are useful for work. | 24 | 1 |

Biographies of Five Case-Profile Students

From this pool of respondents, seven students were chosen and subsequently agreed to be interviewed at length. All of their names have been changed to keep their anonymity. Out of these seven, however, two of the women, Zora from Afghanistan and Olivia from Syria, dropped out of the class by mid-semester, leaving the following five students: Anna from Rwanda, Bob from Sudan, Mario and Erica from Mexico, and Lana from Moldova. I used the maximum variation sampling procedure suggested by Creswell (1998) in which the chosen participants represented diverse backgrounds in both their L2 language and computer literacy. Specifically, the case-profiles chosen were students with different ages, genders, socioeconomic and ethnic backgrounds represented in the class as a whole. The focal students represent both sexes and will as much as possible represent the backgrounds, ethnicities, and sociocultural/socioeconomic status of the class population. Using maximum variation sampling ensured that I would be able to identify themes across student types.
Anna

Anna is a 28 year old Rwandan refugee. She had been married for ten years and had three children. She came to this country in 2004 after having lived in a refugee camp in Tanzania for 11 years. She spoke several languages including Swahili, French, Kerundi, Kinarwanda, Khia. She could read and write in French. Her cultural background was of an oral tradition and so she felt most comfortable when people explained things to her orally rather than be given the information in writing (this will come into play as she learned about computer literacy). Anna was a quite, demure woman who spoke very softly and politely. She was a very traumatized individual who lost all her family in the terrible civil war. Understandably, she was very reluctant to talk about her past and any mention of her country or family would bring her to tears. She came to this country because she had no choice or as she put it “my country, no peace.” She had a full-time care-taker position which, from what I understood, did not require much language skills since she took care of handicap individuals and the elderly.

She had begun learning English upon her arrival in 2004. At the time of the study, she had taken 2 years worth of ESL. She had taken English at an adult education facility in Tucson for a year before coming to take courses at Pima Community College. I had had her as a student for about a month while I substituted for a teacher on maternity leave in the prior semester. I noticed then that her English was very limited, particularly in speaking and writing, but that she was a very diligent worker who always asked questions and made sure she did her homework. While she was taking this computer course in Spring 2006, she was taking ESL 70, a low-intermediate course and had received a “C.”
In the Fall 2006 semester, she skipped an ESL level and took a low-advanced reading and writing course where she got a “D” and a TOEFL preparation course for advanced students where she withdrew simply because her language skills were not sufficient. She was not supposed to take these courses but somehow was allowed to register for them. Nevertheless, she was and is a very focused, tenacious individual who despite her low language proficiency, was determined to learn English and get a Certified Nursing Assistant (I) certificate as soon as possible. What is interesting to note about Anna was that she was one of the few students who did not own a computer at home, and thus, she depended on the computer availability at school or at a friend’s home. This fact alone made her a unique case profile and had adverse consequences to the speed of her computer literacy acquisition which will be discussed in detail further in this chapter.

**Bob**

Bob is a 33 year old, originally from the Darfur region in Sudan. Bob has a kind-hearted, gentle, and charming personality who always wore pressed button-down shirts with belted, immaculately pressed trousers. Whenever he greeted me, he always offered a formal handshake. He too had a tragic story, but he was more open about his experience. His father was killed while they were both fleeing from the Muslim militia and to this day, he does not know where his mom and brother are. Living in refugee camps in Khartoum, he was sent to jail for teaching Christianity which eventually forced him to leave Sudan for good. He immigrated to Egypt where he worked at a travel agency for five years before eventually coming to this country through the United
Nations in 2004. He had gotten married in Egypt with a woman from his country. He now has three children and works as a housekeeper at a hospital full-time.

Bob, like Anna, was multi-lingual but his strongest language was Arabic which he could read and write. He had taken some EFL classes in Egypt and then continued with English upon his arrival in the US. From the beginning, his interest in learning about the computer was evident when he had also enrolled in “Computer Keyboarding and Document Production.” He took three separate, one-credit sections of this course, one for Keyboard, the other for format, and the third for applications. However, he never completed these courses having received two Withdrawals and an “F.” He said that he was not ready to take these classes because his English was not good enough.

Interestingly enough, the following semester, Spring 2005, he attempted to take Computer Keyboarding again but he withdrew again. He had also taken ESL 60 (an integrated skills course) that semester and received a “B.” In the summer, he took ESL 70, an intermediate course, and received a “C.” In Fall 2005, he took ESL 80, a high-intermediate course and received a “D.” When he was taking the computer course, he took a high-intermediate conversation course and received a “B.” For the next two semesters, he attempted to complete low-advanced reading and writing courses but failed in the fall semester and withdrew from the highest-level ESL course in the Spring 2007 semester. These grades were indicative of Bob’s struggle with written English. While he did well in conversation, his written skills were very weak and he struggled greatly as the levels of ESL progressed. Bob seemed to think that it was because he did not spend enough time studying English. One of his reading and writing teachers felt that he might
have had a learning disability. While he could write in Arabic, I had no way of knowing how well he wrote in Arabic.

Mario

Mario is a 36 year old who came from Mexico 15 years ago not for economic necessity but for spiritual necessity. He came from a remote, rural area in Mexico and grew up poor with many brothers and sisters. He was a pleasant man, always willing to help his classmates, and was very open and verbally expressive. While in the US, he received his GED and getting an education was still an important investment he was devoted to. Mario was a diligent and responsible student. He had a strong work ethic and did not understand why others gave up any opportunity to better themselves through education. In the Spring 2005, he returned to college to better his English skills, which up until that point, he mostly learned outside a formal class setting. Because of his strong work ethic and maturity level, he received B’s in the integrated skills classes he took. However, once he took more challenging academic English courses that involved extensive reading and writing, he struggled greatly to keep up most likely because his written and spoken English had become so fossilized. Mario eventually wanted to work as an aircraft mechanic. He was fiercely self-sufficient and independent both in his personal and professional life. He tried to figure things out for himself before asking for help.

What was also striking about him was that from a young adult, he had become a “yogi” or part of the Hare Chriensas. Since then he devoted his life to this religion and as
a result is a very spiritual person. From the beginning, he was not hesitant to talk about
his most personal thoughts and the way he lived his life:  “People think I’m no fun
because I don’t drink, smoke, so it’s hard to find a wife, but that’s my mission to get a
wife, have kids, and continue my mission” which was to find “the truth to find why I
supposed to find God.” As a result of his deep spiritual beliefs, Mario is non-
materialistic and a believer in karma. He explained that while he enjoyed the religious
freedom in the US, he did not like what empty lives Americans seemed to live:

Well there’s a lot of material. I feel that everybody has to buy a lot of things
because they need to be happy. Like for example, you have a TV, and then you
want a bigger TV. You have a computer, now I need a best computer. It’s
like..uh..you not happy with your life, but you buying more things they make you
happy. And what is all things? They just material stuff, it’s nothing, nothing that
will make you so happy. It’s just temporary stuff that you just buy.

He was also a pacifist and explained that he did not like the fact that the US was involved
in other countries’ affairs and always had to fight elucidating that

I don’t think it’s right being hated by others—you create bad karma. But this is
part of they [Americans] way they are, nothing can change that. But this is one
thing I don’t like. I think anybody can resolve everything by talking besides
going fight. I mean, I’m not a coward, but I think mutual respect for everyone,
and that’s the only way we can live in peace, besides the fighting. I think fighting
is the most primitive instance for all people. And that’s why I’m not agree.
He explained that he does not totally feel happy in this life and felt this world was a prison that he had to endure until he died and his soul would go back to Hare Chrisna’s house in paradise. There, “you don’t have to work, you don’t have to do anything…I think that that’s the most happy thing.” He related to me that if he was born again into this world, “I’m gonna be so sad, so sad.”

Erica

Erica, 39, came to this country 16 years ago. In Mexico, she had gotten her Bachelor’s degree and had taught for three years in middle school before moving with her husband to the US. During the early years of her marriage, she had stayed at home to raise her children while her husband, also college educated, worked and went to school. She confessed that in the beginning, she felt so lonely and homesick for her country that she “just stay[ed] home and I cry and cry.” To add insult to injury, she was hired to clean houses when she first arrived. She did not like it, but she had to because it meant income for her growing family. She did not like that the American family thought of her just as a cleaning lady: “I want to say that I have education; I am teacher, but I couldn’t. I keep my thoughts inside me and just cleaned.” She had also done some heavy cleaning at a restaurant where she came home crying everyday because that was not how she wanted to spend her life. Doing these jobs went against her identity as a modern woman. However, eventually she got certified to become a bilingual special ed substitute teacher and had been working in the same school for the past 8 years. She had taken a variety of courses since 1996 at Pima Community College, mostly math, ESL, and writing courses.
While she liked her job, she wanted to switch careers because teaching was very draining. She hoped to be a pharmaceutical technician where she could use more English.

At the time of the study, she was going through difficult times with her husband whom she described as having a lot of “machismo.” Apparently, machismo is embedded in Mexican culture and is something that modern and educated women like Erica are having a hard time coping with, especially living in a country like the US, where women are encouraged to do and be what they want. Erica had no problem opening up to me and revealing the troubled marriage she was in. Her identity struggles will be discussed in more detail under the identity changes section of this chapter.

What made Erica happy was that she was learning and getting something out of the computer class. She felt “so happy because I learn…I learning more, more and more and I like that.” For Erica, education is power and learning about computers would give her the satisfaction she was not getting from home. Erica described herself as a studious and responsible learner who always came to class prepared and organized. I could also attest to this since I noted how neat and organized her ring-binder was and she too had received an “A” for this course. While I saw that her speaking and writing suffered from fossilized structures, she did fairly well when she concurrently took the advanced writing class in Spring 2006 and received a “B.”

Lana

Lana, the last case-profile, was an exceptional learner. From the outside, her fellow-classmates thought she had been in this country for years and did not understand
why she was even in the class to begin with since she seemed to have a very firm grasp on computers. Nevertheless, Lana, who was 26 at the time, had only started learning English three years before, in 2003, when she had arrived to this country from Moldova. She had grown up with her mother and alcoholic step-father. She had to drop out of high-school at 16 in order to support her mom. She had moved to this country because she had married an American psychiatrist overseas. While she did not know a word of English, she communicated with her future husband through electronic translators on palm pilots and her fiancé had then shown her how to use email. This was her very first exposure to computers and technology of any kind.

What was fascinating about Lana was the speed of which she learned various skills. For example, within 6 months, she was able to learn Turkish and work at a Turkish department store for two years. She claimed that her Turkish “was almost perfect, but I cannot write it.” In order to verify that she had never taken English classes before, she proceeded to relate to me her very first experience in America which was at LAX airport:

We met one more time after that in Istanbul, uhm yeah. That time I can say ‘Hello, bye, my name is Lana’ and stuff like that. Still with the palm pilots okay and after that, we decide to marry and we start to make documents and stuff like that and I came in December. My English was very low. Like he [husband] was late in the airport like for one hour so I’ve been waiting there for hour in airport by myself in LAX. So my English was nothing so I couldn’t ask policeman or any person there what to do. How can I use the phone because in U.S. need to have coins and
I didn’t know that so I couldn’t ask even that like ‘How I can use phone or can I
please take your phone I pay you a couple dollars and call my husband?’ I
couldn’t do any of those it just was staying there in airport in the middle of
nowhere scared to death. Where is that person that’s supposed to wait for me here,
like $150 in my wallet and that’s it. No money to go back, no person to meet me
there. I was so scared but finally he came. Was traffic. [laughs] so was that bad.
And when we went first time in restaurant, I was so shocked because here like
‘Do you want soup or salad’ I don’t know. ‘Which dressing do you want,
thousand islands, la, la, la, la’ and I was totally lost. And I made like that [shrugs
her shoulders] and after they say ‘Do you want baked potato, mashed potato,
French fries?’ When I hear French fries like THAT ONE because I know what
was that. So was so funny in restaurant—couldn’t say anything.

After her scary experience of feeling abandoned in a foreign country, Lana had the time
to study English on her own. She also had the luxury of practicing with a native speaker.
Within a year, she had gotten her GED without taking any preparation courses. She had
bought the book and studied on her own. “It was pretty fun,” she remarked of her
experience studying for the GED. Her English, as can be seen from the above expert,
was quite fluent. Lana was very comfortable talking in English and relating to American
culture. She did not feel she needed any ESL classes (which she had never taken) but did
feel she needed to improve her writing skills. Because the other writing classes were at
inconvenient times, her advisor had told her that this computer class might be somewhat
appropriate. Spring 2006 was her first semester at a community college setting.
Lana was fortunate that she did not have to work outside the home although she took care of her two young children. Not only was she able to pick-up the English language within two years, but she had already become quite proficient with computers. In fact, when she registered for the computer course, she had also registered for an online Intermediate Algebra course. Her goal was to become a registered nurse because “I don’t want to be a doctor’s wife. I want to do something with my life. I just don’t want to be dependent on him and because he’s a lot older, if something happens one day, you know, I want to support my kids and just cover my back.” She had always wanted to be a nurse since she was a child. Lana was an ambitious, strong and confident woman who wanted to also feel somewhat independent from her husband. She took the initiative to learn English, to learn about computers, and to become a nurse.

**Discussion**

What was particularly unique and fortunate to have in this class was that there was a global representation of students. While the majority, 13 of 25 did come from neighboring Mexico, there were students from most of the continents, including Africa, Asia, and Europe. There were also four students from different Middle Eastern countries. Almost half of the class, 12 students, was in their thirties while there were three who were in their teens and two that were in their fifties adding to the sociocultural richness of the population sample. It was particularly interesting to note that while the majority of the class, about 90%, were in the US for less than four years, they were all quite eager to learn about computers despite not having attained a firm command of the English
language. This attests to immigrant students’ awareness that in order to succeed in this country and in the world economy, one must have computer skills, thus supporting other researchers who have documented the changing economy and the crucial role immigrants play in it (Mujtaba & Preziosi, 2006; Richard & D’Amico, 1997).

What was found in this population that differed from what previous studies had said about computer ownership (see Mossberger et al., 2003) was that 72% of the participants already owned a computer and had daily access to the computer. In fact, this class population illustrated the pervasiveness of technology since the majority of them, 89%, have been using computers in some sort of capacity before attending this course. Ninety-nine percent believed the computers were useful in school and work and the same percentage knew what the Internet was. All the participants indicated on the pre-survey that they liked using the computers, so there was no indication of computer anxiety, at least before the class began in earnest.

There was a small percentage, 6 of the 25 participants, who indicated that they did not need help with the computer. Three of those respondents were in their teens and two in their twenties thus supporting research showing that age is correlated to computer ability (Mossberger et al., 2003). Three of the students were females from Mexico, Cindy, 19, Karen 18 and Laura who was 23. They explained that they were exposed to computers while attending public school and thus, felt very comfortable using the computer. In contrast, Mario, the 36 year-old, and Erica, the 39 year-old, case-profile students had indicated that while he was growing up in Mexico, there were no computers in school, thus showing the pervasiveness of technology even in a developing country
like Mexico within a span of a generation. This finding corresponds to what Liu (1998) indicated that older immigrants’ first language education and prior experiences may have offered them little if any access to computers. Peter from Iran who was 19, also was quite comfortable around computers. He too indicated that computers were at school but only males were allowed to use them. Lana, 25, a case-profile student, already knew how to use the computer although in her case, it appears it was more due to socioeconomic circumstances more than age (to be discussed later). Finally, Alan, a 42 year-old from Russia was in the information technology field before coming to the US four years ago and had since taken over 15 information technology courses in the community college system and had subsequently gotten a certificate in Systems Administration and Networking. Alan was a very bright man who was highly educated in his native country and came from a country who had a strict, regimented system of education that emphasized the value of education. While he was in the country for only four years, he had only taken two semesters of ESL at the community college although he claimed he studied English for three years.

The five case-profile students are representative of the wide range of socioeconomic and sociocultural backgrounds that immigrants come from not only in general but particularly the participants in this class. Even in this small sample of profile students, one can see very different life experiences and backgrounds each of the profile students brought with them to this country. Based on the introductory information given, Anna, Bob, and Mario represent the working class population of immigrants while Erica represents the middle-class, and Lana belongs to the upwardly mobile class having
married an American doctor. The following findings will illustrate that socioeconomic class played a significant role in acquiring computer literacy.

*Social Inclusion*

After having triangulated formal and informal interviews with most of the participants, analyzed their reflection blogs, pre-surveys, and researcher’s reflection log, there was an overarching commonality among the participants when asked what their reason(s) were for taking the course. Whether asked directly or indirectly, students’ initial responses to why they were taking a computer class varied ranging from general to specific desires. One theme that stood out and was reoccurring in the data was the participants’ strong desire not to be left out from a world that is quickly evolving and changing. They wanted a chance to feel and be a part of a culture that values and integrates technology in almost every aspect of daily life and they felt they would be left behind if they did not take some steps to improve their computer abilities. As Mario poignantly remarked “somehow I need to…I need to follow the other monkies…you know?” To illustrate the above theme, written and oral participant testimonials are presented below. Again, as stated above, all the participants that are mentioned from here on have been given pseudonyms for anonymity’s sake. Please refer to Table 4.1 as a reference for each mentioned participants’ country of origin and age.

When asked in his first interview with me if he felt excluded from American culture for not knowing about computers, Mario reflected:
I think it’s it’s like uh. It’s like going to…how can I explain this. It’s like going to the place where everybody’s do, you know everybody computers and then you don’t know. It’s like you going to another planet and you don’t know how to do anything, you feel like you don’t belong here, cuz you don’t know anything so living here like everybody using computers for everything. It’s where the future goes and you have to move with them. I feel like I have to be, you know I have to learn everything with computers because right now we are in the 2000 probably ten years later we gonna be more like more computers for everything.

For Mario, learning about computers meant feeling part of the host culture.

Many others of Mario’s classmates also had an urgency to learn how to use computers in order to feel included in the culture. Lucy responded to the question “What would you like to learn from this class?” in her student reflection blog: “Now I am in USA and in USA everybody uses computer and computer make the life easier.” Denise responded to the same question writing “I want learn everyting for compoter because all peple here use all the time.” Peter remarked on his pre-survey that knowing how to use computers is important because “I have to use computer anywhere and anytime” thus showing that students not only see others using the computer all the time, but they themselves feel the urgency to use the computer all the time. Jacky responded to this question by writing, “I want to lern programs to use-communicat wit peple. All people use computer for comunicacion. I want too.”

John wrote in the open-ended pre-survey question that knowing how to use computers was important because “on the future everybody will use the computer for
everything and the person who not know how use the computer will be lost.” On the pre-
survey, Mike wrote, “All peple an the world there use a computers and why [not] me?”
Zora confided to me that “…I have one [ a computer] and need to know how use it”
because “everyone in this country use computer. I feel in the past if can’t use computer.”
Gaby mentioned in her reflection blog that she was at a disadvantage because “I feel I am
not growing like the technology is growing. I am trying to learn the computer basics,
because I feel I am living in the past. It is necessary to use the computer at home, work,
and everywhere you go!” Olivia wrote in her pre-survey that she felt she was at a
disadvantage in this country because “everybody use the computer and I wont [want] to
milt [melt] in new culture.” Danielle, Sara, Maria and Norma all indicated similar
sentiments when I spoke to them informally and jotted down their thoughts in my
researcher’s log about why they feel it is important to use computers. Specifically, they
alluded to the fact that it seemed everyone knew how to use computers so they also
wanted to learn so that they would not be left behind. Mario expressed a similar
sentiment in his first interview with me saying he feels he had no choice but to learn
about computers: “You know like monkey do, monkey do. I need to follow cuz I mean
everything is gonna be by computer now, so I need to know. I need to learn everything
about it.” Alan, the computer expert from Russia, summarized it best when he remarked
in an open-ended question on his pre-survey, “If one does not know computers in today’s
world, one will be lost…left behind…In the modern world, almost everything built using
computers, so from this point of view it is extremely important [knowing how to use
computers].” The above comments illustrate students’ need to feel and be connected to
the culture they have or are trying to adapt to. They see that their native-speaking peers are seemingly all connected to computers and so they too want that for themselves in order to feel socially and culturally included. They seem to correlate learning about computers and their ability with computers to their social mobility.

Their answers about why they wanted to learn about computers also illustrated the sociopolitical pressures that they were facing at the time to feel accepted in this culture. When asked on the open-ended section of the pre-survey if they felt that they were under pressure to learn about computers 23 of the 25 respondents answered affirmatively. They alluded to the discrimination they felt in the target-language culture. Olivia wrote that “I made to feel bad because I don’t work in office and don’t speak English good. That’s why I need to learn how use the computer. It help me with English too.” What was even more disturbing was Olivia’s first an only in-depth interview with me (as you may recall, she was one of the case-profile students before she dropped the class). She began crying when she answered my question of whether or not she felt excluded from American culture:

I feel that no matter how hard I try, I never good enough, my English is never good enough. I learn so much in ESL classes but still I don’t feel like them. They look at me funny when I try to talk and I see they have no patience with me when I try to explain myself. I miss my country and my lifestyle. In Syria, everyone said hello. No one felt low. I learn computer so people don’t laugh at me. I want to help my sons so my sons feel proud of me.
Lucy reflected that “It’s not like before when you no have to speak English good to have a good job. Now all the factory jobs gone and everything with technology. If you don’t know technology, you nothing.” Jorge explained, “Here in Tucson, I feel the discrimination. People think immigrants are lazy, they no want to learn English or make better life. They think immigrants are all illegal and want to live on welfare. But that not true. I pay taxes, I go to school to make better life for me and my family.” Yet another student, Kathy, explained that “I am tired of people treat me like I’m nothing because I don’t work in fancy job with computers. I was teacher in my country and I am very educated. It not fair that they want immigrants to learn language so fast and perfect. They look at you like low cuz you work as cleaning lady or something. It’s not fair.” Jacky wrote, “If you don’t know about computers, you nothing in this country.”

All these comments reflect the political turmoil surrounding the area at that time concerning illegal immigrants and how they felt discriminated against because of their immigrant status. It is interesting to note that all except for Olivia were comments made by Mexican-Americans which is not surprising since there was and still is an on-going controversy with illegal immigrants in that area of the country. These participants must have felt the daily subtle and direct discrimination doled out to them and they were venting their frustrations on the surveys. They felt pressure to make their lives better by not only trying to improve their English, but also learning about computers so that they can be treated with respect. They did not want their native-speaking peers thinking they were somehow defective, lazy, or unintelligent. They wanted to prove that they too can lead successful, productive lives.
Upward Mobility

In addition to social mobility, the majority of the participants had the perception that the computer is used in almost every aspect of life and that those who know how to use the computer have a better lifestyle, thus prompting them to want to learn about computers. Many remarked that knowing computers leads to better job opportunities. Laura felt she was at a disadvantage because “I can’t get a better job because I don’t know how to use the computer.” Kathy wrote “I feel me in a big disadvantage because we are living in the computers media and if I can’t use it I can’t to progress.” Karen wrote “computers are our future” while Olivia wrote “computer make the life easier.” Maria wrote “It is important to used computer because computer is help me to find job.” In his pre-survey, Bob’s reason for taking this class was not only to learn English but to get a better job. When I asked him why he had such a strong desire to learn more about computers, he explained in his first interview with me:

I need computer. So, computer right now is…ehm…you need to use computer for a job or uh a lot of experience in computer because you need to like, like for example, I need to write about my country. So you need to use computer even email to how to go to shopping. So a lot of stuff going on there, so even computer is technology to. You need to use that.

Bob saw endless possibilities with computers. He imagined himself being able to use the computer for different purposes. He wanted to take more computer classes after this class because he felt he needed more practice and needed to learn more than what this class offered. Becoming proficient with computers translated into a better life for
him explaining that without “certificate for computer, you can’t be good at school and you can’t find a better job.”

In a culture that values computer literacy, Mario explained in his first interview with me that “if I have any idea to working in the mechanic aircraft, probably I’m gonna need one day a computer so I can find out things, so I always become more interested in the computers.” In her pre-survey, Denise wrote that knowing how to use computers are important because “in this world now a day without computer you cannot even find a nice job.” In her reflection blog, Lucy responded to the question “What is your prior computer experience?” by explaining that she “can’t get a better job because I don’t know how to use the computer.” The participants in this study felt the importance and urgency of knowing how to use computers in the culture they have been living in. They felt that learning about computers would give them an economic advantage in a culture that highly values computer skills.

*Life of Convenience*

Others repeatedly mentioned how the computer affords a more convenient lifestyle. Bob talked about how easy it is to use the computer for shopping although he confused it with email when he said: “email to how to go to shopping.” He saw the computer not only as a social and economic tool, but also as a way to complete tasks easier. Mario also remarked in his interview with me that “it’s more faster finding information and everything.” Gaby, Anna, Denise, Danielle, Cindy, Olivia, Jorge,
Norma, Laura and Sara all wrote very similar responses in the open-ended pre-surveys about how computers make life more convenient in terms of finding information instantly, going shopping on-line, communicating with friends from all over the world, or doing banking on-line. For example Anna wrote in her pre-survey that “you can find a nice job and communication. You can use computer for communication and you can search any information in the computer.” Laura wrote that knowing how to use computers is important because “you can learn a lot information faster then go to the library, find a book…you can manage bank accounts a lot more.” Cindy wrote in her pre-survey that knowing how to use computers would “make your work easier.” Sara wrote that computers can “make everything in life quicker and faster like go banking, email to friends in my country, find information fast.”

Adding More Knowledge

A number of participants mentioned in either their reflection blogs, pre-surveys, or conversations with me that learning about computers would be meaningful to them because it would increase their knowledge base. Erica mentioned in her first interview that she felt “like a dinosaur. So I interesting for learn everything. To learn more about the technology. The technology is very advanced.” Many of the mothers in the class like Olivia, Jacky, Maria, Anna, Erica, Denise, and Norma mentioned to me informally in class and/or in their pre-surveys that learning about the computer would enable them to help their children with their schoolwork. Zora confided to me in class that she heavily
relied on her children for help with the computer since before this class she never touched a computer but now realizes she needs to be more independent when it comes to working with a computer because “my children they sometimes no patience with me.” For her, learning about computers was about becoming independent.

Many simply stated in general terms that they just wanted to learn more about computers without having anything specific in mind like Laura, Lucy, John, Mike, Lana, Jim and Peter. Their sentiments were much like the sentiment Mario emphasized in his interview that “I’m gonna learn at least more, more things than I used to know.” Some students were a little bit more specific in the types of knowledge they wanted to get out of the computer. For instance, Sara, Maria, Norma and Gaby wanted to improve their typing skills while Jacky, Kathy, Cindy, and Karen wanted to learn about “programs.” They felt that knowledge, provided by computer technology, would help them be productive members in the target-language culture.

*Improvement of Language Skills*

Through their pre-surveys and/or reflection blogs, Anna, Peter, Gaby, Sara, Jacky, Denise, Olivia, John, Jim, Laura, Cindy, and Karen all mentioned that they hoped this class would improve their English language skills via computers which was not surprising since it was advertised as computer technology to improve one’s language skills. Specifically, Lana and Alan were exclusively taking this course to improve their writing skills. Mario explained that computers would help his English skills improve so
that he can go to college. Bob wrote that he was taking this class “for learning English and new word for good job.” In fact, during the class, he was excited because he used the computer to improve his reading and vocabulary: “I’ve been looking right now more in English, so I can find a new word. Like for example, when I been looking for Katrina, so there is a new word like boxweed and hurricane, all kinds of stuff. I need to learn language so, you can find a new word and how they use it.”

When asked for their second reflective journal “What would you like to learn from this class,” John, Jim, Laura, Cindy, Olivia and Karen who posted reflections on Nicenet that week desired to better their English through learning more about computers. These were their answers respectively: “I would like to learn in this class how to write better in English and how to use computer,” “i would like to learn new word,” “I would like to learn a lot of things about how i should use the computer .also practice more English in reading and writing also typing too,” “[I would like to learn] ms office, and english for the computers e.t.c,” “I wont to learn english,” and “I want to learn more about inernet and practicing my english.”

Discussion

The participants’ responses indicated that they wanted to find better jobs by improving their chances for present and future job opportunities, improve and develop their English and typing skills, increase their knowledge about computers, communicate with family and friends, keep current with the exponential growth of computer technology, and to access information they may need. These varied reasons pointed to
one commonality which was their strong desire for social inclusion and economic mobility. As a result, as is typical in many ESL classes (Bosher & Rowekamp, 1998), these students were highly motivated and enthusiastic to be in this class because of the many benefits they perceived from learning about computers. As mentioned previously, the participants in this study felt an urgent need to learn as much as they could about computers despite not having mastered the English language because of the economic trend for more service and information jobs that require higher skill levels (Richard & D’Amico, 1997). Most participants emphasized that computers are everywhere and everybody is using them and therefore, by default, they should be too.

Just as many immigrants believe taking English courses would help improve their social status and acceptance from the target-language culture (Saville-Troike, 2003), they believed that taking computer classes would also improve their social status in the wider community. It was disturbing that students felt sociopolitical pressures in the form of overt and subtle discrimination from the target-language culture and that the only way they knew how to combat it was to better themselves by attending school and learning about computers. They felt that getting better jobs would eliminate the prejudice they felt from native-speakers in their community. There was a lot of hurt and anger in Olivia, Lucy, Kathy, Jorge, and Jacky’s testimonials. This attests to their marginality in the target-language culture and their struggle to assimilate. I find it paradoxical that while there was definitely great motivation for this class, many students brought into this class a feeling of hurt and resentment based on these comments which is commonly found among immigrants (Alfred, 2003).
However, unlike Kern (2006) who had argued that Western cultural values about computer use, including valuing speed, availability, openness, quick response, critical inquiry, and informality in communication may not be universally esteemed by all cultures, this did not seem to affect this group of participants. From their initial responses, all the participants embraced all the advantages the computer seemed to offer including the Western values that it espoused. Thus, socioculturally speaking, despite their distinctive and varied demographic backgrounds, all the students in this class shared the same views about computers and the benefits they would bring to their lives.

And Then There were Thirteen

Unfortunately, despite all their enthusiasm and motivation for this class, what was to occur in the next six to eight weeks was an unexpected drop-out of more than half the class. Fourteen of those who agreed to participate in the study and one student who opted not to participate in the study had dropped the course. What became evident in the data was that the cultural, economic, and educational backgrounds of students predictably played major roles in the degree of how successful they were with the class. Because of this unexpected turn of events, success had to be defined as those who remained in the class and those who did not. How well those students who remained in the class was not as significant as the considerable drop-out rate and the implications of this event. Thus, for this study, success was measured by those who remained in class and those who did not. In the end, those remaining were my five-case profile students, a Vietnamese couple who opted not to participate at all in the study, Gaby, Jacky, Sara, Maria, Alan, and Peter.
(Not) Learning to do School

Admittedly, the first half of the semester was a trying time both for students and the instructor, whose pseudonym will be Sally. As mentioned previously, I also acted as a participant observer which involved not only observation and reflection, but also taking an active role in the class, and so I was also a teacher’s aide. To review, this class met every Saturday morning for three hours for 16 weeks. The first two months of classes were especially chaotic and stressful. Both the students and the teachers needed a lot of patience in order to get through the lesson and be given one-on-one attention. What became apparent was that the majority of students were not prepared to handle a regimented, structured class agenda where they were given the responsibility to be proactive in their learning. While this is typical of what is expected in a higher education classroom setting (Schleppegrell, 2004; Alfred, 2003; Althen, 2003), the students in this class while eager, were confused and lost during those first few weeks of classes. What I had observed during those chaotic weeks, along with student testimonials and the other data sets revealed that at least this group of students needed to learn how to “do school.”

I officially began my observation the second week of class since my IRB consent began on that date. Sally was very professional and ran her classroom like clockwork, i.e., according to a planned schedule and set agenda. If people were not on-time, it was their responsibility to catch up what they missed. Sally like most college professors always began her classes promptly and was very organized. In those first few classes, many students were still trying to feel their way through this class and trying to catch up
with what Sally was reviewing. These are my observation notes describing student behaviors on the second day of class:

At first glance the room was a sea of students rummaging through their bags to find a pen/pencil, others looking at their computer screens trying to turn on their computers and having no luck, others furiously taking down notes as Sally reviewed how to create a password and user Id for the computer and for email. Still others came 15 minutes late to class and I thought “Oh know, where do I begin to have them catch up to the lecture?”

On that second day of classes, there were still new students that had not shown up last week who had registered late. I needed to make extra copies of syllabi and handouts for Sally. Since I had stepped out to make copies, I am not sure if Sally went over the syllabus and course requirements again as a review. However, based on what she had on the board, I knew she had gone over logging onto the lab computers and working with email. Sally introduced the concept of passwords and user Ids in order to log onto the lab computers on the first day of class. She had also helped people create email accounts through Yahoo last week and as part of their homework, students needed to send a group email to all their classmates introducing themselves. When I came back from the copier (I had missed 20 minutes at that point), Sally was in the process of explaining to students why many of them got “returned” mail. Only five students were able to complete the assignment on the day it was due. Another three thought they had completed the assignment but realized that they had gotten a returned mail message in their mailbox. Sally was explaining to them that they had to carefully type all the email addresses or else
the message would not be sent to those people whose email was typed in wrong. What was apparent, however, is that at least a dozen students had not even logged onto their computers when all this explaining of log-ins and emails was going on. In my reflection log, I had written the following:

Many students seemed not prepared for this class. They are not sure how to log on, they seem to have misplaced or not written down their log-in/password information from last week and these are the ones who came last week. The new students had blank stares once I handed them the lengthy syllabus and the sheets of handouts they missed last class. Some are still confused about what log-in means. They have looks of quiet desperation on their faces as they try to catch up with what the teacher is saying and trying to turn on their computers. I tried to help as many people as I could but it took more time than I expected. By the time I had helped Danielle, Zora, Olivia, Anna, Lucy, Jorge, and Jim, Sally was already deep into discussing the way Nicenet works. It felt very stressful for me to see how so many students seemed to be floundering…I need to ask how they feel about this situation.

The following week, before class started, I had asked those same students whom I helped get logged on to their computers how they felt about the last two classes. Zora, Lucy, Jorge, and Jim confided that while it was confusing, they found it interesting. Danielle complained that she could not keep up with the teacher and was concerned how she would learn all the material. She could not write fast enough what Sally was saying. I wrote in my reflection log that she seemed to be having a lot of anxiety. On the other hand, Olivia told me: “This class remind me of my high school teachers in Syria. Very strict and they want a lot from you. That’s good thing.” I then asked her if this ESL class was any different from other ESL classes she took before. She said that the other ESL classes she took were good but they were more relaxed. Teachers were less strict but that she liked Sally’s teaching style and appreciated that she could ask a lot of questions
which was something that was not encouraged when she went to school in Syria. Anna only said “I feel good” despite her apparent confusion and extreme dependence on my and Sally’s help.

In those first couple of weeks of class, I observed that many students had very disorganized notes, messy school bags, coming late to class, and/or not having completed the homework Sally assigned. I had made a note in my researcher’s log to check the number of people who tried to be organized by at least buying a ring-binder and organizing all the handouts from the class so that when Sally referred to a certain handout, they could have easy access to it and would know exactly where everything was. In the fourth week of class, I quickly went around the room as the class was getting started and noticed that out of the 20 people that were there, only nine, Maria, Gaby, Jacky, Alan, Mario, Erica, Lana, Sara, and Olivia had somewhat decent ring-binders so that when Sally asked them to find a particular worksheet, they knew where to go. Interestingly, all these students except Olivia had completed the course. However, the rest of the students, had sloppy notebooks with crammed papers and handouts, some from this class, some from other classes. These students included Mike, John, Lucy, Bob, Anna, Denise, Jim, Jorge, Norma, Zora, and Danielle. By the time they found the paper they were looking for, Sally had already gone to the next item on the agenda. The younger students, like Cindy, Karen, Laura, Lana, and Peter were much more organized and prepared. Erica, who had a Bachelor’s degree in education from her country had the best organized notebook with dividers and pockets. I found it interesting that the younger students did have some sense of what was expected in school being that they had just graduated from
a public school setting or had not been out of school that long. Erica, while older, was a school teacher in her country and was a teaching assistant at a bilingual school, so her being organized was also not surprising.

For the older students who have been out of school for a long time, it was hard for them to adjust to being back in school in a higher-education setting, let alone trying to be organized. I believe that had they been a bit more organized, it would have helped them follow the class better and perhaps prevented their withdrawal from the class. While the pre-survey did not explicitly ask for L1 educational background, I was able to find out from students’ transcripts how long ago they had completed their high-school education. To enter Pima, they all had to have had at least a high-school diploma or a GED. Their transcripts also indicated if they had gone onto a tertiary institution and/or had gotten a higher-education degree. Below is a table of students older than 30 and their high-school graduation dates:

<table>
<thead>
<tr>
<th>Name</th>
<th>High-School Completion Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mario</td>
<td>1999 (GED)</td>
</tr>
<tr>
<td>Erica</td>
<td>1985</td>
</tr>
<tr>
<td></td>
<td>1989 (BA in Teaching)</td>
</tr>
<tr>
<td>John</td>
<td>1991 (23 years old)</td>
</tr>
<tr>
<td>Olivia</td>
<td>1992</td>
</tr>
<tr>
<td>Gaby</td>
<td>1973</td>
</tr>
<tr>
<td>Norma</td>
<td>1999 (GED)</td>
</tr>
<tr>
<td>Mike</td>
<td>1995 (21 years old)</td>
</tr>
</tbody>
</table>
Table 4.3: High-School Graduation Dates

<table>
<thead>
<tr>
<th>Name</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alan</td>
<td>1980</td>
</tr>
<tr>
<td></td>
<td>Also a 4-year degree</td>
</tr>
<tr>
<td>Jacky</td>
<td>1988</td>
</tr>
<tr>
<td>Jim</td>
<td>1989</td>
</tr>
<tr>
<td>Maria</td>
<td>1987</td>
</tr>
<tr>
<td>Danielle</td>
<td>1969</td>
</tr>
<tr>
<td>Kathy</td>
<td>1984</td>
</tr>
<tr>
<td>Zora</td>
<td>1983</td>
</tr>
<tr>
<td>Sara</td>
<td>1993</td>
</tr>
<tr>
<td>Bob</td>
<td>1996 (23 years old)</td>
</tr>
<tr>
<td>Jorge</td>
<td>1992</td>
</tr>
<tr>
<td>Lucy</td>
<td>1979</td>
</tr>
</tbody>
</table>

Of the above who are age 30 and over, Maria, Gaby, Jacky, Mario, Erica, Sara, Bob, and Alan completed the class. Everyone else, a total of ten, dropped out. Three of eight who completed the class were my case-profile students.

Another common occurrence was tardiness from at least half a dozen people per week. With so much material being covered, I would think students would make a more concerted effort to get there early (which most did), or at least on time, since Sally always started promptly. Among the daily late-comers were Bob and Anna, my two case-profile students, Mike, Jorge, Jim, and Norma. Others that came late from time to time in those first few weeks were Zora, Lucy, Alan, and Kathy. The reason Anna came late was
because she was coming from her job and so it could not be helped. Bob claimed that he had to wait for his wife to come back from work to look after the kids. Mike, Jorge, Norma and Jim all sheepishly admitted that they were chronically late for most things. I asked them if they worried that their tardiness would affect their performance in this class, and they were concerned and promised they would make more of an effort to come on time. Eventually the latter four students dropped the class. I suspect if Anna and Bob were not my case-profile students, they too would have been part of the dropout statistics of this class.

Finally, what was also a troubling aspect in that first half of the semester was the large amount of students who came unprepared for class. They did not have their homework done and instead waited until the following week to ask for help. According to my reflection blog, there was a consistent 10-13 students who did not do the homework in the first six classes. The majority of students tended to hand in assignments long past the deadline. Fortunately, Sally was flexible enough to allow for the lateness of these assignments but in a class where everything hinged on what was taught from the previous class, it became apparent that more and more students were falling behind. In the third week of classes, I had asked a handful of students why they did not complete the assignments. Jim confessed, “I am confused. I didn’t understand.” Mike complained that there was a lot of information and he didn’t understand all of the homework. Lucy became frustrated because she kept getting messages from her computer saying “failed.” When I checked her email inbox, I discovered that she was among the many students who tried to unsuccessfully send an email introducing herself to all her new classmates.
Unfortunately, she had typed several of her classmates’ email addresses wrong and so her homework assignment was not sent to everybody and she could not understand why. Zora, Kathy and Gaby confessed that she had their children help them with their assignment.

While they were being taught how to email, they apparently did not make the connection that they could use the email for the very practical purpose of contacting either Sally or myself for homework they did not understand. Since I had asked Sally to forward to me any email correspondence students had with her in between class sessions, I observed that on the whole there was very little correspondence between the teacher and students through the electronic medium, especially in the first month of classes. Three of the 25 students had sent an email not for help or questions, but to fulfill requirements for homework assignments. For instance, Erica sent her biography as an attachment. She had never done this before and she expressed that to Sally below:

Datum: Thu, 9 Feb 2006 21:58:35 -0800 (PST)

Von: XXXXX<xxxxx_parga2006@yahoo.com>

Antwort an: XXXXX <xxxxx_parga2006@yahoo.com>

Betreff: homework

Sally, I hope so, that my homework is o.k. Is the first time that I use attachments.

Erica

Laura, who would eventually drop out did email Sally to let her know of an email address change along with a very brief introduction of herself, which was part of a homework
assignment that was due the second week of class, but was only until a month afterwards Laura sent it to Sally.

---

**Date:** Sun, 19 Feb 2006 21:15:03 -0700 [Sunday February 19, 2006 09:15:03 PM MST]

**From:** xxxxxxx@email.arizona.edu

**To:** xxxxxxx <xxxxxx01_judith@yahoo.com>

**Reply-To:** xxxxxxx@u.arizona.edu

**Subject:** Re: my new address xxxxx

**X-Spam-Level:**

**Headers:** Show All Headers

Thank you

Sally

--

Quoting xxxxxxx<xxxxxx01_judith@yahoo.com>:

> this is my new address I going to sent all my homework in this address now so sorry for.
> changing my address my new earning is xxxxxxx01_judith@yahoo.com
> > my name is xxxxxx “Laura”
> > my class is computer learning
> > ESL 075
> > Saturday 11:10 to 1:50

---

Olivia sent her introduction about herself to Sally. Sally tried to initiate more conversation with her but Olivia never responded to her email inquiry.

---

**Date:** Fri, 3 Feb 2006 13:42:46 -0700 [Friday February 03, 2006 01:42:46 PM MST]

**From:** “xxxxxxxx” <xxxxx@email.arizona.edu>

**To:** xxxxxxx@hotmail.com

**Reply-To:** xxxxxxx@u.arizona.edu

**Subject:** Re: FW: RE: Hello everyone!!

**X-Spam-Level:**

**Headers:** Show All Headers

Hi “Olivia,”
how are you? I had a student from Syria last semester, too. She was very nice.
Her name was Jennan. Do you know her? Welcome to the class and to Tucson.
Sally

> -------------------------
> From: _“xxxxxxxx” _
> To: _xxxxxxxxxxxxxxxxxxxxxxxxx_
> Subject: _RE: Hello everyone!!_
> >> Hi everybody,
> >> I am “Olivia”, I am from earn I earn to earni three years ago when I get married
> >> I hope to use benefit time for all of us .
> >>

While there was a lot of confusion about class procedure and homework assignments, neither Sally or myself were contacted by students via email. They preferred to wait to see the instructor the following week face-to-face. While I asked these students why they had not emailed Sally for help or at least call her, they could not give me a clear answer other than it did not occur to them. Zora even mentioned that she did not want to “bother the teacher” while Mike said he did not think it was appropriate. These answers indicate a cultural barrier to their educational success. For these students, they put the burden of being able to do the assignment by themselves without the assistance of the teacher. Their attitudes seemed to be one of humility in that they believed the teacher did her job by exposing them to email and showing them how to use it and that it was up to them to figure out the homework. The idea of asking for help outside of classroom time seemed anathema to these students. Here is another instance where at least this group of students did not seem to know how to navigate the culture of a higher-education classroom. They
did not know how to “do school” either because of inexperience, previous experience with ESL classes, and/or their own cultural idiosyncrasies.

Discussion

It was evident that in those first few crucial weeks of class, the majority of students were simply not prepared to handle the large amount of input from the class and the responsibilities that went with attending a higher-education class. While coming late to class could be seen as a cultural idiosyncrasy (Althen, 2003) as was the case of the late-comers I had asked, other reasons like family and work pressures also came into play that affected their performance in class. Two of my case-profile students, Bob and Anna were chronic late-comers due to job obligations. Olivia, who was originally going to be one of my case-profile students, dropped out because of family obligations. Her mother-in-law who usually baby-sat for her left unexpectedly back to Syria, leaving her no choice but to withdraw. Zora had developed health issues that forced her to withdraw half-way through the class as well. As Portes & Rumbaut (2006) explain, immigrant lives in today’s world, like everyone else’s, are overscheduled. They lead very busy lives, most of them spent at jobs requiring a lot of hours for menial pay. Their education often takes a backseat to their other overwhelming responsibilities of taking care of their families and reporting to work.

As for not coming prepared to class, that could be attributed to an inadequate L1 educational background. In my researcher’s log, I noted that just doing a simple act of keeping an organized ring-binder would have helped these students with their time-
management in class and at least help them keep up with the teacher’s lecture to some degree. However, many did not know how to, as I refer to it, “do school,” meaning that it did not seem that they knew how to be students at least in a higher-education setting. It is typical for immigrants to have gaps and holes in their first educational background (Bosher & Roweckamp, 1998; Lee & Sheared, 2002; Bell, 2003; Portes & Rumbaut, 2006), thus contributing to their not being able to “do school.” Many immigrants unfortunately have this perception that it is their fault if they cannot keep up with their teacher (Bosher & Roweckamp, 1998). As mentioned above, some students felt ashamed to ask for help between classes either by phone or email for fear that they would “bother” the teacher. For students just beginning to learn about computer literacy, emailing professors about questions did not seem natural for them even though it has become the norm for college students to email their professors if they have any questions or want help with homework (Warschauer, 2003b). While it is hard to know how they perceived the class since I only saw them five times at the most before many of them dropped out, many of them, at least ten who were 30 years and older, most likely felt overwhelmed by the content of the course since it was not only traditional literacy, but also hypertext literacy that they needed to negotiate. It had been a while since they had a rigorous course curriculum and assume their role of students again.

Moreover, the quality of education they received in their home-countries could also be a factor as to why they could not keep up with the assignments, ask questions, be organized and prepared for class. Bob, who was one of my case-profile students, did not finish high school until he was 23. His schooling was interrupted since he was forced out
of his village as a teen into a refugee camp. There is no telling what kind of curriculum existed in the camps even though he did receive his high-school diploma. Anna, my other case-profile student, also had a very similar experience, having lived most of her teens in a refugee camp in Tanzania. Many others came from poor villages in Mexico, so there is no telling what kind of education they were first predisposed to. That is why their previous L1 educational background could have played a significant role in their not being able to complete the course. This supports earlier research by Bosher & Rowekamp (1998) which negatively correlated L1 educational background with academic success in the US. Interestingly, Mario, Anna, and Bob, who had all had one-on-one extra help and support from me were able to complete the course which has certain pedagogical implications for these types of students who come from a lower socioeconomic working class.

What was evident with many of the participants in this classroom was the different socialization processes they experienced in their home-countries particularly in education. A number of students had confessed during impromptu chats in class that I recorded with my digital recorder that they felt embarrassed to ask questions of the teacher either because they were not prepared enough, they were ashamed because their English proficiency was not strong enough to understand the teacher and that they did not want to burden their teacher because of their perceived deficiencies, and the fact that they were socialized to hold great respect for teachers who were educated, and thus, according to them, knew far better than them. This kind of mentality comes from the socialization practices that their first language education exposed them to. Differing socialization
experiences in immigrants’ first-language schooling were the culprit of their failure not only in this study, but also in Skilton-Sylvester (2002) and again in Alfred’s (2003) studies of immigrant women (see Chapter 2). Their dropout, i.e. failure in this class, also replicates the results in Bell’s 2003’s study of immigrant adults trying to get job retraining in a community-college program. Bell concluded that the participants in her study failed because they had never been properly socialized in an academic environment where they needed to produce and participate in academic discourses. Furthermore, some participants’ inability to do school could be explained by cultural discontinuity, or the cultural gap that exists between a learner’s native culture and his/her current school culture. The idea of cultural discontinuity has been found as the major reason for dropout rates among minority and immigrant students, according to Lee & Sheared (2002). In fact, through their survey of various studies documenting adult immigrant experiences in school settings, Lee & Sheared conclude that “cultural differences exist between immigrant students’ culture and the Euro-American culture in schools and society [and] the degree of cultural difference between teachers and student and the student reaction to the cultural difference contributes to how students perceive their culture, learning experience, and themselves” (p. 31).

_Socioeconomics and Computer Literacy_

Closely related to their L1 educational backgrounds that prevented many of the participants in this study to “do school” and subsequently leading to the large drop-out
rate, their socioeconomic backgrounds seemed to play a significant role in how successful students were with not only acquiring technological skills but remaining in the class. Socioeconomics had a dynamo effect on the overall success students had, i.e., the more money coming into a home, the more stability in the home, the more material advantages (in this case top-of-the-line computers with fast Internet connection), the more time students had to practice and experiment with their computers. This was clearly shown after getting to know all five case profile students.

Anna was a full-time student and had a full-time caregiver job. Her husband also had a full-time job and between the two of them, they took care of their three children. They are from a working class family who at the time, could not afford to buy a computer of their own. Not having a computer and having no time to practice were mostly due to Anna’s economic status and affected her successful acquisition of computer literacy. She was successful in terms of completing the course, but that was most likely due to the extraordinary amount of intervention she received on my helping her. Bob and Mario had similar circumstances. Both Bob and his wife worked full-time shifts. On each other’s day off, they would take care of their three children and whenever the one got off from work, he/she would look after the kids while the other one went to work. While Bob did have a computer, as can be seen, he had a very hectic work and babysitting schedule leaving him little time for his studies or to practice on the computer. Mario, while single, had two jobs, one full time and the other part time. Often he would complain of being extremely tired. He also felt very frustrated because his computer kept on getting viruses. He was left at the mercy of his young nephews to help him with his
computer woes since he himself did not know how to fix the problems he kept on having with his computer. His busy work schedule and frustration with not being able to do anything on the computer when he did have time left him with the feeling that he did not know how to use computers very well and he also had a perpetual feeling of frustration to the point he would “rather go to bed than try to practice on computer.” Nevertheless, Anna, Bob and Mario remained in class despite their socioeconomic levels. The common denominator amongst the three was that they were my case-profile students and they had received extra help and attention from me throughout the semester. They also could have felt an obligation to stay in the class since they were helping me with my research.

Erica had been in the United States for fifteen years and came from a middle-class background. Both she and her husband are very well-educated and Erica worked as a Spanish bilingual teacher for special education kids in a predominately Spanish-speaking school system. Her love of school and her ability to “do school” helped her succeed in class. Because she was a teacher, it allowed her to have time for herself to do her homework while her husband watched the kids. Also, they had more than one computer in the home even though, as will be discussed later on, it was still difficult to get independent computer time.

On the extreme opposite end was Lana who while arriving to this country at about the same time as Anna and Bob (a little over two years ago), had become very accustomed and acculturated to using the computer on a daily basis. This was because Lana, a non-Hispanic, had an upper middle-class economic status having married an American doctor who was able to provide her with her own computer. She was fortunate
in that she did not have to work outside the home, leaving her with time to practice. In
addition, her husband was an avid user of computers and technology of any sort and he
had the patience to give Lana a lot of support when she began practicing and learning
how to use the computer on her own. Lana had access to her own top-of-the-line lap top
with high-speed connection. She quickly learned to use the computer and Internet to help
her manage her daily living from paying bills, looking for airline tickets, consumer
shopping, and managing her various household accounts. Thus, for this study,
socioeconomic status definitely had an impact on how comfortable participants became
with the computer.

Along with the five case-profile students who remained in the class, two of the
Vietnamese students had remained but elected not to participate in the study at all. The
remaining six students, Maria, Gaby, Jacky, Peter, Sara, and Alan all came from different
socioeconomic backgrounds as well. Maria had been married for 17 years, had been in
the US for ten years, and was a busy homemaker. Her husband worked a 60 hour work-
week as a cook in a restaurant and she took care of their three kids. Since her kids were
almost grown, she wanted to learn computers not only to help her kids but in hopes of
getting a job as a receptionist or something with computers. She was very motivated to
take the class because her children were showing her how to go on the Internet and look
for Spanish news websites. They had also helped her create an email address so she
could communicate with family members in Mexico. Gaby has only been in the US for
three years and is also a homemaker taking care of her two children and her eldest
daughter’s child. She too has been inspired by her kids to learn more about computers.
In her pre-survey she lamented that she feels she is “not growing like the technology is growing.” Her husband is a co-deli owner in the Spanish section of town. From time to time, she also helps her husband at his business. Economically, they are well-off as she had mentioned to me that the business is doing quite well. This allows Gaby the freedom to expand her education and grow as an individual. Jacky has been in the US for 12 years and is a co-owner of a hair-salon in the Spanish section of town. Being an independent and modern business woman and having spent a number of years in the US has made her an avid proponent of learning as much as she can about computers, as she wrote in one of her reflection blogs, “computers are used for everything. I want to learn about excel, and other important programs for my business.” Peter, the youngest person to remain in the class, had only been in the US for a little over a year. He had just graduated high school and wanted to become a civil engineer. He had still not established himself in this world and so he had all the ambition and motivation to complete such a class. Sara had been in the country for four years and was a working mother. She knew how to type and use the computer for clerical work and so for her, learning more about computers was in order to improve her existing computer skills. Finally, Alan was one of the two students who had received a four-year degree in his own country, Russia. He had already gotten a computer networking certificate from Pima Community College and was very knowledgeable about computers already, so it was not difficult to see why he remained in the class and did quite well in it. His reasons for taking the class, as mentioned above, was more to improve his English than his computer skills.
For the students who had dropped out of the class, I was not able to get enough data and background information since many of them dropped out of class within the first month. I knew from informal conversations I had with Mike, John, and Jorge which I subsequently jotted down in my reflection log, that these men were working two jobs. Mike and John worked at different hotels as janitors; both had one full-time job and the other was a part-time job. Jorge worked part time as a dishwasher at a Mexican restaurant and part time in construction. They all had no benefits. With these 60 hour plus work schedules, there was barely enough time to work on the various homework assignments for this class or to even be alert in class. I had noted in my reflection log on the third day of class: “Mike, John, and Jorge seem so tired, as if they were up all night. I need to ask them why they look so tired.” Once I approached them, they informed me of their job situations. In my reflection log, I noted what Jorge stated “I came here to make money…have a family in Mexico…need to make money.” Mario also had the same work schedule although unlike the other three, he had been in this country considerably longer.

The remaining students who dropped out of the class, including Cindy, 19, Laura, 23, Karen, 18, stayed until mid-semester with Laura coming to class sporadically and eventually dropping out in late April. They left for various reasons which I was to later find out through my case-profile students who had spent more time with them in previous ESL classes and/or this class. Cindy and Karen while quite computer literate, having been exposed to computers during their public school education in Mexico, had very low proficiency in English having only been a few months in the US. Mario had had classes
with Laura before and it seemed, according to him, had a laissez-faire attitude toward school since she had been frequently tardy and missed assignments in other classes. In one of her writing assignments, she did mention that she had just become a mom and so I imagine juggling her studies with being a mom must have been a hardship.

Unfortunately, I never found out why Denise, from Somalia, dropped out of class by the third week of classes. She seemed, from her pre-survey and early reflection blogs that she was excited about the class, writing in her first week reflection blog: “hi, I know some about computers, but I still need to improve my computer skills. Hope fully I will learn a lot from u thx u [instructor’s name] u explain ever thing clearly and neatly.” In her second week reflection blog she wrote: “I feel confident, because I learn so much and I understand=yes I try to learn as much as I could get. Iam happy with my class and what iam learing.” She sounded very confident about the class and seemed as if she felt comfortable around computers but for some reason, she had dropped out suddenly before I even had a chance to get to know her a little bit better. In her pre-survey, she mentioned she had a family and I could only speculate based on the reasons other women who dropped out of class with similar situations had mentioned, that she left for personal reasons that made it difficult for her to stay in this class.

Olivia, whose husband was a successful business man, did come from a upper-middle class background. Nevertheless, she too had dropped out by the sixth week of classes. I had gone to her house to get a first in-depth interview (she was one of my original case-profile students) and she explained her frustration of the limitations of being a woman and not being able to do all the things one wants to do once one has a family:
“You fall in love, get marry, have kids. You don’t have life. You’re life is for children but...[her voice falters as her eyes well up with tears]...I don’t know...I love my kids but...it’s like my husband he can go out of house and be free to work or whatever. I feel I can’t. Need to stay and take care house and kids...it’s hard you know...I was good student. I want become dentist but I marry.” I then asked her if she was happy as she was trying to hold back tears and prevent herself from crying. She responded “I love my kids. I so happy to have my kids. For women not so many choices but I see American womens can do whatever. I hope I can do same for me because I love school.” Olivia, much like Erica, was struggling with the idea of being trapped into being “a housewife” and a “caregiver,” yet they both felt there was more to life than what they were dealt with. They were both clearly unhappy. Erica stayed on but after our first interview, I never saw Olivia again. I called her house, but she was never home and she never returned my calls or my emails. She was clearly depressed for a variety of reasons which most likely led to her dropping out of this class, despite her great enthusiasm. In fact, in my reflection log, I had identified her as “the one who asked a lot of questions.” It was unfortunate that she dropped out inexplicably. While economically, she was relatively well-off, her cultural background was in conflict with America’s culture where she saw women as liberated and herself as trapped.

Zora, a widow with two children, dropped the class because of medical reasons. As for Norma, Lucy, Kathy and Danielle, I was not able to get to know them well-enough to find out what their reasons were from dropping out of class, since they all disappeared between the second and fourth week of classes. Most likely, based on what was just
discussed and what will be discussed later in this chapter about the effect of proficiency levels on successful computer literacy acquisition played a significant role in the drastic dropout rate for this class.

**Discussion**

Not surprisingly, this study supports numerous studies done in the past in all levels of education showing that immigrants’ socioeconomic status is highly correlated with academic performance and success (Nieto, 2002; Norton, 2000; Amott & Matthaei, 1996; McDermott, 1987; Ogbu; 1987). Specifically, “the more wealth and education one has, the smoother the transition into the U.S. cultural milieu” (Lee & Sheared, 2002, p. 29). Alan, Erica, and Lana were all highly educated and all had stable economic statuses in the U.S. While Lana was technically a high-school dropout, she came from a country that highly valued education and had high academic standards which allowed her to be able to quickly pick up the English language and get her GED in short amount of time. Jacky, a bright and motivated woman, had a thriving salon business in which there was an immediate need for her to learn. Learning about computers was not just something that could be “good for the future.” She wanted to apply her new skills simultaneously with her growing business. Gaby and Maria also had the economic freedom to pursue this class.

All the men, except for Peter, worked over-time and maintained the roles of breadwinners. While they were initially motivated to take the class, it became clear that work was more of a priority leading to their not doing their homework, falling behind,
and eventually dropping out of class, as was the case of Jim, Jorge, Mike, and John. Interestingly, Mario and Bob had similar situations but perhaps because they were committed to being my case-profiles, they stayed in class. Zora was a widow struggling to raise two children. She was an administrative assistant in Afghanistan before immigrating to the US but because of health problems, she could not stay in class. While health problems do not directly deal with socioeconomics, it must have been hard for her to be all alone in a foreign country raising two children, working full-time and then getting sick without any spousal or extended family support. Olivia also had a strong educational background and because of her husband and extended family, was living a relatively comfortable life in the States. She was a very inquisitive and enthusiastic student, and I believe, would have done well in the class, but unfortunately she mysteriously disappeared. She may have had personal problems based on her initial interview with me but at this point it would only be speculation. Nevertheless, what is clear is that most immigrants do not have the luxury of economic freedom. Coming to classes prepared and ready to participate does not come that easily since they have so many other responsibilities and priorities in their lives, foremost being basic survival.

**Acculturation**

The amount of time spent in this country, or at least the degree of acculturation a participant had, also seemed to play a role in how they used and integrated computers in their daily lives and contributed to the possible reason they successfully completed the
class. When living in a new country, no matter how positive the experience is, it takes some time to adopt the foreign culture as one’s own. All five of the students who had been in the country for more than five years completed the course. These students and how long they resided in the US are as follows: Alan, seven years, Jacky, 12 years, Maria, 10 years, Erica, 15 years, and Mario 15 years. Their length of residency coincides to how established they are in the host culture allowing them to have a comfort level compared to those participants who are still in the process of acculturating to the new culture and country.

In Anna and Bob’s cases, both of whom immigrated as refugees about two and a half years ago at the time of the study, were still trying to acculturate themselves in their new culture and environment. They both had traumatic experiences that at some level affected them spiritually and psychologically. For instance, when Anna began presenting her PowerPoint presentation about Rwanda, she began gasping for air, lowering and shaking her head, and wailing while recollecting how beautiful her country once was. Neither I or Sally had realized just how traumatized Anna was until she had made that presentation. While Anna did say she loved America and its people and that she wanted to forget about her country, she still carried a heartache for the loved ones she lost and for the country that she could never go back to. Despite all this mental and historical baggage Anna was carrying with her, she had set out to learn English as fast as possible, get a certified nursing certificate, and learn how to use the computer within a short period of time. While her goals were admirable, she had put herself in a very stressful and
unrealistic situation where she tried to accomplish too much, too fast given her economic situation.

Bob, while not as emotional as Anna, spoke about the events in Sudan in a quiet, dignified tone:

I left my village in cuz of the war in Southern Sudan at that time [1986]. So, the militia call themselves Maraheel [phonetically transcribed from Arabic pronunciation], so that entire village…and in that time they kill my father and I dunno where is my mom and brother live until right now. That time I running because our village was attacked. We running, me and my father, and that time my father killed when we running away from village.

Bob lost his father when he was 13 while running from the Muslim militia who was attacking the village where his mother and brother were. He still does not know what happened to his mother and brother. He never returned to his village since then and had been living in camps in Khartoum, Sudan and then spent five years in Cairo before coming to the United States through the United Nations. He had to flee Khartoum because of religious persecution from the Muslim militia (Bob is Christian). His emotional baggage was evident when he explained how homesick he was about his country: “I miss country because I was born there and I’m homesickness. I don’t feel happy because many problems going on there. So, I always miss my country and I can’t go back. It’s a problem.” Thus, Bob, like Anna, has been through a lot. When he came to the US in 2003, he was newly married, just starting a family, getting adjusted to a new culture, language and life, and trying to get financially stable. All these factors interfered
with his acculturation into American society and how quickly he could learn how to use the computer as part of his daily life.

While both Mario and Erica have been in the US for over 15 years, their assimilation and acculturation into American culture was of an ambiguous nature, i.e., they had one foot in their culture and one foot in American culture, but they did not feel that they completely belonged in the culture they lived in for so long. Each had different reasons. Mario was a practicing Hari Chrisna so he did not identify with any country or nationality:

Well, first of all, I don’t feel any identification to Mehico or United States. I don’t like this planet. I don’t like everything what we do here. I don’t feel like ‘I must be in my country because my country is first one.’ No, I never feel that way. I always feel like I’m here in this prison in this world. I feel that I don’t belong to this planet. I feel like more get out of here. I swear if born again here, I’m gonna be so sad, so sad.

Mario’s identity is connected to his spirituality, not his cultural background, and so for him, he feels that this life is only temporary until he can be born into a better life and onto a better planet.

Another aspect of Mario’s cultural background is that he feels that his own country rejected him for not being Catholic. So, he does not have any real ties to either Mexico or the United States due to his profound spiritual beliefs. He feels that in the United States, people respect him more because “nobody interfere with the way that you think…I found out here many people has many religions and they do what they want and
nobody is mad with you. You can work anywhere despite religion. In Mexico, I could
not work because of my religion. They told me to get outta here.” However, in the
United States, people have found his beliefs to be strange and always joked with him:
“Actually, you know, the first American I met, working with him and everything…he
told me okay he was my chef, he said “Okay Mario, so you a vegetarian, you don’t eat
meat, don’t drink, you don’t smoke, you don’t do any drugs, so what do you do? Do you
like womens?” Because his religious beliefs do not conform with the beliefs of the
macro-society Mario lives in, he has remained a relative outsider despite having lived in
the United States for over 15 years. His religious beliefs combined with the political
climate against Latino immigrants has made his acculturation in the United States a bit
tenuous. His feeling of non-belonging has contributed to a certain extent, to his not being
totally comfortable with using the computer even though he feels he must learn how to
use it in order to “follow the other monkies.”

Erica, who also comes from a Mexican background, has also not fully integrated
or acculturated herself into American society even though she’s been here for over 16
years. All these years, she had been living in a predominately Spanish-speaking
neighborhood. She has been working in an elementary school whose children are
predominately Spanish speaking. Therefore, despite having lived in this country for quite
a number of years, her acculturation has been minimal into the target-language speaking
culture. She had not come into much contact with Americans over the years. In fact,
going to the Downtown Campus of Pima Community College was her first prolonged
contact with a mixed population of speakers other than just Spanish speakers. In addition,
she along with Gaby, Jacky, and Maria, spoke about male machismo and the impact it
had on women’s lives. Machismo, according to Erica, is when “The man thinks he is
better than the womens…he has control the womens. The womens can’t do nothing,
nothing wrong but the mans is always right.” Erica usually complained to me about her
own unhappy situation with her husband who had a full-time job and was going to
graduate school full-time. He would not let Erica quit her job so she could go to school
full-time to become a pharmaceutical technician. In regards to machismo, she
complained,

It’s hard, when I get married, it’s very hard. I can see a lot of womans, I don’t
know why the womens prefer, we prefer that husband go to school and we stay in
home…Actually, the woman grow up more in education. But they [their
husbands] don’t accept that the woman grow up in education. I don’t know
what …that’s typical macho man, yeah.

Thus, Erica’s minimal acculturation into American society and machismo which is part
of her cultural background that seeks to degrade women, all worked against Erica in the
way she thought about herself as a woman and ultimately how quickly she was able to
integrate computer literacy skills in her daily life. When talking to Erica, she would
always tear up when talking about how each day was a struggle for her voice to be heard
in her home. While her children loved her, they thought she spoke English funny and
made her feel unintelligent (unwittingly). Her husband, being a “macho man,” degraded
his wife directly by calling her “stupid,” and “ungrateful.” Consequently, Erica had a lot
of emotional and cultural baggage that affected her being able to use the computer as
widely as someone as Lana. However, to her credit, Erica persevered in this class because she was determined to prove her family, especially her husband, wrong.

Lana, on the other hand, proved to be an interesting case because while she had not been in the culture long, she managed to learn the language quickly and was very fluent in it. Moreover, within the three years she arrived, she got her GED diploma and was using the computer on a daily basis for a wide range of purposes. While her higher economic status was partially the reason for her quick and high degree of computer literacy, her acculturation into American society was almost instantaneous. This is because she distanced herself from her native culture and fully embraced American culture. It also may be due to her race and the fact she married an American, thus she did not have to face the discrimination her peers, like Sara, from Afghanistan, Jacky, Erica, Mario, Maria, Gaby from Mexico, Bob and Anna from Africa, and Peter from Iran who were of different races and/or ethnicities. Thus, her distancing from her own culture in combination with her race, could explain her success with computers. She stated frankly and without any reservation,

I don’t care about Moldova honestly because this country didn’t give me anything—no education, nothing. It’s just like mother country, or whatever, it doesn’t work with me. I don’t know. If I had everything in my country, probably you know is different. But I need to work really hard. I was working from 17 years. And working very hard everyday with no day off. So I don’t care about that country. So I cannot wait until my mom be able to come. As soon as I get citizenship, she will be able to come here.
After asking her if she identifies herself with Americans, she explained her philosophy about immigrants and the way they should and should not learn the language:

Yeah, you live in this country. About the language, also I want to tell you. Lots of people who comes here like Russians, they try to hang out only with Russians. Mexicans they only hang out with Mexicans and stuff like you know, that’s why they can’t learn very well language because they don’t speak English at home they speak Russian or Spanish or whatever. We have in this class, Lenny, he don’t speak with me English, he speaks with me Russian, so you know, I don’t like that. That’s why I don’t like, I don’t have Russian friends. That doesn’t help you study English.

When I asked her if she read Russian news on the Internet, she responded, “Yeah, I have some Russian news, but, you know, I don’t live in Russia now, I don’t care about them anymore.” Her strong aversion to her culture and her whole-hearted embrace of American culture helps explain, to some extent why she was able to learn the language quickly and was able to use the computer in a short amount of time. She left a culture and country that made her life miserable and married a man who gave her the world and that world was based in American culture. Out of all five participants, Lana was the most acculturated due to the fact that she was white, she married a well-to-do American who was very knowledgeable about computers and had the patience to support her when she was learning about computers, and she had distanced herself psychologically and physically from her native country. These cultural and economic factors help explain
why Lana became so computer literate in such a short amount of time while the others seemed to lag behind her.

Discussion

Acculturation seemed to wield a double-edged sword in these students’ success rates (by success, again, I mean completing the course and receiving a passing grade for the purposes of this study). Embracing the host culture too much, like Lana did, led to her completely rejecting her native culture. She seemed to fit Schumann’s (1978) theory of successful acculturation not only in language learning but also in computer acquisition, but at what cost? It certainly begs the question at what lengths immigrants need to go through to be “accepted” or “acceptable” in this culture? She seemed to have assimilated nicely due to having literally and figuratively married into the culture and she now looks down on foreigners who seem not to be putting as much energy to learn English as whole-heartedly as she did. She sneered at fellow Russians and Spanish-speakers who tried to maintain their cultural heritage by hanging-out with each other, believing that that is their downfall not only in learning English but getting ahead. What she does not realize is that they did not have the advantages that she had when marrying an American. She also does not comprehend the rich cultural heritage she is denying to her children by cutting off all ties with Moldova. From an etic perspective, Lana is a success story, but from an emic, or insider’s perspective, it is not so clear-cut as to whether she is a success story since the price she paid was severing all ties with her heritage.
Does this imply that all immigrants, in order to be successful in this country, must sever ties with their own cultural heritage?

Lana’s assimilation into American culture was facilitated by the fact that she was blond and blue-eyed, and so she fit the American-WASP milieu. By contrast, there are many more non-white, dark-eyed immigrants who encounter obstacles to their acculturation; subsequently, they “often learn to resist and develop ways of coping for survival and identity exclusive of assimilation” (Lee & Sheared, 2002, p. 31). Lana’s observation and subsequent disdain of immigrants who insist on speaking their mother-tongue illustrates Lee & Sheared’s argument. Moreover, it shows that not all immigrants are created equal. What is meant here is to then consider the participants in this group who came to this country voluntarily and involuntarily which would then explain their degree of assimilation which is in turn reflected in the degree of success at school. Ogbu (1992) categorized immigrant populations as voluntary if they enter the US by choice and involuntary if they were brought here with no choice or by force. Besides Lana and Alan, all of the participants in this study came to this country involuntarily—most for economic necessity, some, like Bob, Anna, Zora, and Sara as political refugees, others from religious persecution, like Olivia who was Christian in a country that was predominately Muslim. According Lee & Sheared (2002), “the story of how one comes to and survives in the United States is an important factor in determining the opportunities one has here” (p. 31). Through history and experience with Euro-Americans, those who came involuntarily, who are physically different from the natives in their new country come to understand that their skin color can prevent them from assimilating, according to Ogbu
(1992). Most of the students who dropped out of the class were the least assimilated of the group. Most had not been in the country long and therefore had many obstacles in front of them. All of them were non-white, with the exception of Zora, who dropped out because of illness, Olivia, who mysteriously disappeared, and Danielle, from Poland, who only attended two classes. When students face such situations, things like their education usually suffers because they are going through a roller-coaster of emotions trying to fit into their new country’s cultural norms. Because it takes longer for involuntary immigrants to acculturate, it further helps to explain why there was such a dramatic dropout rate for this class.

No Return on Their Investment

Another reason that could help explain the dropout rate was simply that some students were dissatisfied with the class. The reasons why these students were dissatisfied are interesting to consider from the theoretical standpoint of Norton Pierce’s (1995) Investment Theory discussed at length in chapter 2. Briefly, this theory stipulates that a student’s motivation is closely tied to the social world that that student interacts on a day to day basis. She uses this theory to explain why in any given moment an extraverted student can be motivated one day and then be unmotivated and anxious the next day. This erratic behavior is explained by the fact that immigrants must deal with inequitable relations of power that are in place between them and those in the target language culture who have more available resources and/or are often the gatekeepers to
those economic, social and political resources. In the case of some who dropped out, they may have viewed the teachers, the expert users of technology, as gatekeepers or they may have seen the way the information was presented as an obstacle that served to dis-motivate them, as the following examples show.

While none of the students who suddenly dropped out confided in me as to why they left the class, I did get second-hand accounts from the remaining participants and from the instructor and temporary teaching assistant, Alex. These accounts were only from a handful of dropouts and do not suggest that all 15 people who dropped out were disgruntled with the class. Nevertheless, one student’s dramatic departure had left a considerable impression. “Katy,” from Iran, had opted not to be part of the study. She had left in the middle of the third class session, walking out in frustration. She never came back. She was among the first to drop-out, albeit the only one who left in a dramatic way that made a statement to the instructors and the rest of the class that she was unhappy.

Sally and Alex had primarily worked with Katy. Alex related to me that Katy used to work with computers in her country years ago and viewed this course as a refresher course. Thus, she probably felt that she could quickly get back into the swing of things once she came up to speed with the new technologies that came about in the time since she had worked with computers. Unfortunately for Katy, she could not pick up where she had left off. Alex commented that Katy felt frustrated that she could not get back into learning computers quickly. She needed constant one-on-one attention and became agitated quickly. Alex said she hated being pointed out things and kept on asking
what was the usefulness of the things she was being taught. For example, she questioned why they needed to learn about formatting in Microsoft Word. Alex and Sally, as very highly proficient computer users, both agreed that formatting was essential in everything you did on the computer. Katy could not understand the usefulness and why she was being asked to work with spacing, margins, bold, and highlighting features of Microsoft Word. She could not imagine how that would be useful in her imagined professional community of computer users. Katy’s initial investment in this class was made on the assumption that she belonged to this imagined community of professional computer users based on her past experience with computers. She became angry and combative when she perceived that her teacher and the TA failed to acknowledge her professional history, positioning her as a newcomer to computers while Sally and Alex represented the gatekeepers who prevented her access to this new world of computers.

Sally was disappointed that Katy had left so early on in the semester but felt that this type of learning environment was not appropriate for her learning style. She commented that she projected a very negative personality that “wasn’t good for the well-being of the entire class” and that she would perhaps be better served on a one-on-one learning environment instead of being left to try to figure things out for herself. Alex and I felt that her comprehension level was also to blame for her dissatisfaction for the class and that she needed more time with improving her literacy skills. Katy felt she was not getting a good investment on her return because she felt she was not picking up the material as quickly as she would have liked and she felt that she was not learning
anything well, as her only posting on Nicenet attested to: “I have good feel for learning
more about computer but I am confused and I thingt I did not learned well.”

While the expert users of technology failed to address Katy’s imagined identity
which was linked to her investment in taking this class, others who stayed on in the class
had different imagined identities which made their investments in the class different. For
instance, Bob had posted this message on Nicenet: “I feel very good today because I
understand 50% I confused a loys but I very happy because I understand I learned this
week I hope in the next time Teacher talk slowly because my English sample and hear
little bit.” In this instance, while Bob claimed to only understand 50% of the lecture, he
still felt happy. This is because his investment in this class was a chance to be exposed to
computers. He had never had any exposure to computers before; therefore, just getting
the opportunity to work with computers was a major achievement. He was grateful for
any enlightenment he received in this class because he knew knowing how to use
computers would help him with his school work and as he stated in his pre-survey, “for
the future.” For him, his investment had a good return because he imagined that his
exposure to computers would give him access and privileges that were unavailable to him
whilst he was a non-computer user. For him, this was enough to give him the privileges
and access to the host-culture which presently was an obstacle to him.

Erica also came into this class with an imagined identity and while she too
struggled in the beginning, she persevered because she was getting a good return in her
investment. Erica was a teacher in Mexico and a substitute teacher in this country. Like
Katy, she had had exposure to computers and used them to some extent, but unlike Katy,
she knew that her skills were outdated. She realized that technology had gotten far more advanced and had left her behind. While she was a teacher, she wanted to get out of this profession and become a pharmaceutical technician. She hoped to one day be a practicing member in this imagined community in which computer skills were a necessity. Thus, her investment in this class was for her to update her skills knowing, however, that she had a lot to learn since the time she had been exposed to computers.

In the beginning of the class, Erica was intimidated by Sally’s strong, professional demeanor. At first, she was afraid to ask Sally questions and became very nervous whenever Sally approached them in the beginning of the semester: “The first was hard, she was very, very strict. We are like kinder or first graders. But that’s okay and actually I speak with one of the persons from Japan, China, [the Vietnamese couple who opted not be part of the study] I don’t know, and we feel nervous when Sally close to us, we much nervous.” However, she grew to respect Sally’s old-timer status as an experienced and knowledgeable computer user, commenting that “I have a good teacher and knows what she’s doing. She has energy for teaching. My teacher in Desert Vista is tired, I don’t know---she has no energy. We have 30 minutes for break.” She respected the fact that Sally was a professional and demanded and expected a lot from them unlike her other teacher at the Desert Vista campus. For her, the investment in this class had very good returns because she felt Sally, as an old-timer, was not treating her as an immigrant with limited computer and language skills, but as someone who was capable of doing the work. Erica felt validated and respected because she saw how hard the teacher worked to
expose them to computers the way native-speaking users in the target culture used computers. For her, this class was a good return on her investment.

Alan, the expert computer user from Russia, had related to me Lucy and Mike’s situations as to why they may have left. I transcribed what Alan related to me in an impromptu conversation I had with him in the 12 week of classes. I had recorded the conversation with a digital recorder I always had clipped onto my shirt:

Lucy kept ask me for my help. She felt she was…I don’t know to say…slower than other students because she couldn’t keep up with the information.

[Researcher I] Did she feel the information was too difficult? She couldn’t understand the information? [Alan] No, no, she felt like stupid because she thought the teacher doing a great job and what she teach us was simple, but she felt bad because she couldn’t keep with the rest of the class. She kept say to me “sorry to bother to you” but I didn’t mind. [R] Do you think she didn’t like the class and that’s why she left? [Alan] I think she felt more stress…how do you say…more frustrate. [R] Did she come prepared to class and do the homework assignments? [Alan] No, that’s the thing, she came with no homework, she very behind. [R] Did you ask her why she didn’t do her homework? [Alan] No, I never ask, but she say she couldn’t do it by herself and no one could help her at home.

[R] Anything else she may have said to you? [Alan] Well, the last time I saw her, she say that the class was too fast for her and that she was not learning too much. [R] I see. Did you talk to any other student who you see is not here anymore? [Alan] Yeah, I talk to that guy from Africa…I don’t remember his name…[R]
Was he young or older? [Alan] Young guy. [R] That was Mike. [Alan] Oh, ok, well, he tell me one day that the class was not what he thought to be. [R] What did he mean by that, do you think? [Alan] Well, he just thought that it would be basic computer and that the things Sally teach was too high for what he wanted to learn. He wanted to learn more English to type…[R] Oh, did he think it would be more of a typing class or something like that? [Alan] Yeah, that what he thought. I helped him a couple of times but he also never do his homework. It has been long time I see him.

For Lucy and Mike, who dropped out before mid-semester, or about the eighth week of classes, they seemed disgruntled with the class. At first, Lucy seemed to like the course and be frustrated with herself, but later on, it was evident that she had become more and more disgruntled. I had emailed Sally to see if Lucy ever tried to email her for help, but she had never contacted Sally or myself to get help for her homework in between classes despite Sally’s constant encouragement to have students email either her or myself. Mike had imagined a different type of class altogether. Once he realized that that was not what was in store for him, he dropped-out.

Jacky, one of the remaining students, had also confided in me one day about two drop-outs, Norma and Kathy, both from Mexico. Since Norma and Kathy used to sit near Jacky and that they were from the same country, I thought I would ask her whether or not she knew why Norma and Kathy had left. At first, Jacky was reluctant to tell me why these women left. Our conversation, which I had recorded with my digital recorder, is transcribed below:
[R] What happened to Kathy and Norma? Why aren’t they coming to class anymore? [Jacky] Uh…I’m not sure, maybe because…I don’t know [R] Hmm, I think you know, I want to know what their experience was like but I didn’t get a chance to get to know them as you have, could you help me out? [Jacky] Well, ok. You know you both are good teachers, you teach us very well, but…Kathy thought it was too fast and too much homework…she couldn’t keep up the class. Both Kathy and Norma too much complain, say “oh my God, this crazy.” You know, things like that. [R] Why did they say things like that? [Jacky] Well I think they expect slower class, you know more practice with one thing, but this class shows us so many things and we need to do the homework and stay with the teacher or else you confuse. They can’t stay with the lesson. [R] Do you mean they felt they couldn’t keep up with the lesson? [Jacky] Yeah, yes, can’t keep up. They expect to learn more perfect the Microsoft Word and they frustrate about email o they didn’t understand about NiceNet. Too many things for them to do I guess. [R] Did you help them out a lot? [Jacky] Sometimes, but Sally or the man [Alex, the TA], helped them too. They seem confuse about what we learn. They thought the course be something else. It wasn’t for them.

Here is another example where students had different expectations of the class and while they were motivated to learn, as Norma and Kathy’s pre-surveys suggest, “I’m so exited to learn more the computers,” and “Now, I can help my childrens with this class,” respectively, they seemed to be dissatisfied with what or how they were learning the material, based on the conversations they had with Jacky. Finally, John, from Libya, who
was a quiet man, was overheard by Lana to have said that he was not getting enough help with the class, thus showing his dissatisfaction with his investment.

Discussion

The alarming dropout rate in this class was characterized by a common occurrence in the way ESL students show their dissatisfaction with a class, and that is to suddenly not show up to class for the rest of the semester. According to Althen (2003), typically American students, when they are having trouble with the course content or have questions, they contact the professor via phone, email, and/or office hours. If they are really disgruntled by the class, they could even go to a director, dean, or president to complain about the class. For ESL students who do not have a voice or at least feel they do not have a voice because of their language proficiency and/or any sociopolitical perceived barriers from the target-language culture, they show their dissatisfaction with their feet. They tend to be non-confrontational. While their walking out does not necessarily mean they do not complain outwardly, they typically would never dream of complaining in front of a teacher or the teacher’s superior.

As a quick review, the theory of investment offers a more historical and macro-societal perspective of students’ motivation or investment to learn a particular skill, in this case computer literacy. As Norton (2001) explains, the concept of investment “signals the socially and historically constructed relationship” learners have with learning about the computer, and “their often ambivalent desire to learn and practice it” (p. 165-166) depending on the conditions under which they practice these computer skills.
Norton sees investment as explaining why some days students seem excited to learn about something and other days not so much. By taking the computer course, the students in this study made an investment that they hope will give them a good return, namely that learning about technology will give them access to the privileges of target language speakers.

The social-historical context that surrounded Katy’s abrupt departure from the class can be explained by how her investment in this course was compromised. Katy wanted to reacquaint herself with computers having had already worked with computers in her country ten years before. While she had joined a class with relative novice users of computers, she connected herself to her previous professional status in her country where she had used computers before and was a highly respected professional. In her mind, her social status was a bit higher than her other classmates because she had previous computer experience and she identified herself as a computer user. She imagined that with reacquainting herself and updating her existing computer skills, she would get into working with computers in this country, despite the fact that she did not have a computer at home to practice the things she learned in class. Her imagined community was the primary reason she invested in taking this class; therefore, when she saw that she was not getting what she wanted from the class, she shut down and became non-participatory by walking out of the class. Her investment in becoming more computer literate was tied up in her identity. She felt she was not getting a good return on her investment; therefore, she did not feel good about herself and removed herself from that dissatisfying situation.
Conversely, Sally, Alex, and I saw Katy as a newcomer and novice to computers who needed to become engaged in the practices and activities that were occurring in this community of practice but disregarded Katy’s imagined identity (i.e., a person who was a working professional before and who imagines herself being a working professional in this country) causing her to dis-invest in this class. Thus, this situation confirms the findings that Norton (2001) also concluded in her study of ESL students’ non-participation patterns in class due to variable investment and the negligence to consider a student’s socio-historical background.

The others mentioned above who quietly disappeared from the class imagined a different class agenda and curriculum. Some thought it would be a more in-depth introduction to a few programs, while others thought it would spend more time teaching them how to spell and type on the English keyboard. They felt the class was too fast for them and some felt they were not getting enough help, as was the case with John and Katy. They quickly became disinvested in the class because their expectations were not meant. Rather than voicing their concerns, as many American students would do, they showed their dissatisfaction with their feet. However, those who identified themselves as novices with little or no computer experience embraced everything that the course offered and bravely took on the material without looking back. Bob, Erica and Jacky felt that this course was a good return on their investment because they were exposed to so many new things. While they were not total beginners with computers, they did not feel that this course was too much for them because it was exposing them to many different programs and chances to work on the Internet, primarily through NiceNet, Web Quests, and email.
While they too, had good and bad days, i.e., days that they were invested and days they were not, they remained in the course because overall, their needs were consistently being meant based on their imagined selves.

Language Literacy Levels and Attrition

Perhaps one of the biggest obstacles towards successfully acquiring computer literacy was the level of language proficiency the participants of this study had. Due to the extraordinary drop-out rate, success in this study, as mentioned earlier, was measured by those who remained as opposed to those who dropped-out. Success in this study was not measured, therefore, with the grade they received, but by whether or not they completed the course and its requirements. Lack of language proficiency was a major factor in this class’s unsuccessful acquisition of computer literacy. The prerequisite to take this course was that students be at an intermediate language level. While technically speaking the majority of the students were at the defined “intermediate level,” looking closely at their arrival dates in the country, the times spent learning English in their home countries and this country, the grades received in their prior ESL work and the quality of education they had in their countries creates a different picture of their true language proficiency which helps explain why many of them were unable to successfully complete this course.

Regarding the number of years spent learning English formally, i.e., learning in a structured classroom setting, in the U.S. and in their own countries are compared in
Figure 4.4. The pre-survey results show that the majority of students have taken ESL courses between 1 semester (4 months) and 4 years in the U.S. Two students had never taken formal ESL classes in the U.S. at the time of the study. Five students indicated that they were in their second semester of studying English, 6 had taken English for a year, 4 for two years, 3 for three years, 1 for four years, and one had taken ESL courses intermittently for 10 years in the U.S. (see Figure 4.4). While a significant majority, 9 students, had never taken English as a Foreign Language (EFL) in their own countries. Two students had taken EFL for 10 years while four students studied EFL for 3 years in their countries.

Consequently, the students’ English proficiency levels were widely dispersed based on how long they have lived in the U.S. and on the number of years spent learning English. Figure 4.5 shows the most recent CELSA scores, which is an ESL entrance exam, that students took prior to taking this course in January 2006. Some of the
respondents to the pre-survey had never taken the CELSA entrance exam and many students’ scores were last taken 2-3 years prior to January 2006. In order to be eligible to take this course, students either had to have had a score of 34 or higher on the CELSA or have passed ESL 60 with a grade of “C” or better. Figure 4.5 only shows the scores of those students who had most recently taken the CELSA exam, i.e., between June-December 2005. There were 18 out of the 25 respondents who had taken the CELSA exam. Ten of the 18 students have taken the exam between June-December 2005 (these are the scores reflected in Figure 4.5). The others had taken the exam prior to those dates and therefore it is assumed that their CELSA exam scores most likely have gotten higher since those dates on account that they had taken English classes and were immersed in English-speaking culture for a few years prior to taking ESL 75. As is illustrated, the majority of students fall under the 34-55 score range; thus, most students had enough language proficiency to take the course as an elective. Specifically, anyone scoring between 34-45 on the CELSA gets placed in the intermediate level classes, i.e. ESL 70s. Anyone scoring between 46-56 gets placed in the high-intermediate level classes, i.e., ESL 80s. There were three students, however, whose English was not advanced enough to take this type of course. Their specific scores, which are not shown in Figure 4.5 were 18 (taken July 15, 2005), 29 (taken December 5, 2005), and 30 (taken December 7, 2005).
To get a further comparison of English language proficiencies among the 25 respondents, Figure 4.6 illustrates which courses the respondents had already taken and the grade that they received for the course in the semester immediately preceding Spring 2006, i.e., Fall 2005. The legend indicates the four core courses that were mentioned in the pre-survey and including Writing 75 which is a developmental writing course for non-native speakers offered outside the ESL curriculum. Cross-listed courses are not illustrated although most of the respondents who were enrolled in ESL 75 were also taking other ESL and/or non-ESL courses during the Spring 2006 semester. The most frequent grade received across courses was “B.” Seven of the 25 respondents had been enrolled in ESL 60 in the previous semester, most of whom received passing grades, with 1 “C,” 1 “D,” and 1 receiving an Incomplete grade. Six respondents had taken ESL 80, the high-intermediate course, the previous semester but only one person received a
passing grade of “B,” while one person received a “C,” three received “Ds,” and one received an “F.” This indicates that the proficiency levels of most ESL 80 students were not much higher than intermediate. Thus, the majority of ESL learners were at an intermediate level of ESL despite having taken higher-level ESL courses. Not depicted in Figure 4.6, but important to mention are the three students who had never taken the CELSA and either had or had not taken non-ESL courses. These three students had a high level of English proficiency based on their performance and interaction in the class throughout the semester. Thus, there was a wide variety of English language training, proficiency, and backgrounds in this class.

**Figure 4.6 ESL Courses and Grades in Fall 2005**

The pre-survey had also asked students to self-assess their language ability in English across the four skills of writing, reading, speaking, and listening. Figure 4.7 shows that an overwhelming majority of the respondents thought that their language skills were “good” with a slightly less number feeling that their language skills were fair. Specifically, 18 believed their writing skills to be “good” compared to 6 who felt their
writing skills were “fair,” with one student indicating their writing skills were “poor.”

For reading, 14 students believed their reading to be “good,” while one student marked
“very good,” and 10 students marked themselves as having “fair” reading skills. For
speaking, 12 students marked themselves as having “good” speaking skills, 10 marked as
having “fair” speaking skills, with three indicating “poor” speaking skills. Finally, a
majority of 17 respondents felt they had “good” listening skills with one person
indicating “excellent,” and another indicating “very good.” Six students felt their
listening skills were fair (see Figure 4.7).

**Figure 4.7 Language Perception Across Four Skills**

![Bar chart showing the distribution of language skills]

In sum, Figure 4.5 indicated that at least 7 of the 25 initial participants scored
between the intermediate to high-intermediate score ranges, between 34-55, on the ESL
placement exam (CELSA). At least three students had scored below a 34, indicating that
their language proficiency was not adequate to take this course. The other 8 participants
who had taken the CELSA before June 2005 also had lower scores but because they had
taken ESL courses prior to this course and passed with a “C” or better, they were able to
then take the course. However, those entering with a “high-intermediate” level were not
more advanced than the intermediates based on the grades they received in their
intermediate ESL 70 class (one “B,” three “Cs,” one “D,” and one “F”). The remaining 7
students never took the CELSA but their number of years in the United States and initial
interviews with advisors had them placed in this course. Thus, the proficiency levels of
the majority of students were not high even though the majority of them technically were
eligible to take the class.

Limited proficiency skills were perhaps the most telling in illustrating the chaos
and confusion of the first month of classes which hampered computer literacy acquisition.
For five class sessions, the majority of students indicated on the Nicenet blog posts that
they were confused in one way or the other when asked “How do you feel about what
you learned today and why?” Here is a sample of the first blog posts written after the
very first class on January 21: Jim wrote, “I feel frustrated, I try to learn it well,”
Danielle, wrote “I feel frustrated, I learn alittle bit,” Gaby wrote, “The first time I use the
computer I confused a lots. But I very happy because the first time I use computer Email
for everybody in the class,” Jorge wrote, “I feel lots of confused,” Kathy wrote
“earning and a lette confused,” Sara wrote, “I feel good about that all I learned today,
but still I need more practice,” Maria wrote, “I feel little nervous and confused too. I
learned new thing I didn’t know,” Zora wrote, “I have goodfeel for learing more about
computer but I am confused and I thingt I did not learned well,” Mario wrote, “I’m feel
nerveus, confused and a little frusted,I think that I need practice more step by step,”
Olivia wrote, “I feelin sometime frustrated because was the first time and I get a lot informacion.”

The feeling of confusion and being lost continued into the fifth week of classes, February 17, with these students posting the following on Nicenet: Norma, “I feel a lot confusing because verything go fast little bit learning,” Kathy, “I’m feel not happy because I understand not too much. Maybe teacher need to speak more slow.” In response to the last comment, Erica wrote, “I thinking lake you, that the teacher [should] talk slowly next Saturday.” In any case, through their written expression, one can see that they were having a very difficult time trying to understand the content of the class, wishing that the pace would go a bit slower, but still feeling encouraged that they are learning something.

I have left the previous quotes exactly how students wrote them to give an idea of their language and typing abilities. Throughout the weeks I observed them, they painstakingly typed in their reflective posts and various homework assignments. Their limited language ability in combination with their unfamiliarity with the English keyboard took them quite a while to complete any homework assignment, thus adding to the frustration. In Mario’s second interview on March 26, I asked him whether he thought everyone in the class was understanding more. His response was:

I think some people they know a lot, more than me, but the thing is, the one problem I can still see is don’t understand when Sally say something, you know with English. There’s still a problem with that. Because I notice many people still no understand her. Sometimes I go there and try to talk somebody and they
talk me in Spanish. They don’t want to talk to me in English. I don’t want to be mean and say you have to talk in English and so I talk to them in Spanish and explain to them what she means and what she wants us to do. Some people I think they know good computer, they have all the skills in computers, but English is the problem. I understand what she’s saying but sometimes, I don’t know, sometimes seems to me like when she’s working a computer and I distracted just a little, I don’t know how she go back again. So ‘can you explain again, how you do this, because you did it too fast and I didn’t see it.’ I understand everything what she say. Maybe 1-2 words probably not, but I still ask her again. “how do you want this? Do you want this like that? And then she explain me and then I got it.

From an insider’s perspective, Mario observed first-hand how many of the Spanish-speaking students were having a difficult time with keeping up with the class and the teacher. The excessive drop-out rate was primarily due to the fact that they could not understand and that the workload, which required a lot of reading and writing was overwhelming. Karen and Cindy, the two young Mexican women right out of high school whose computer literacy was very high but whose English proficiency was very low (they had only been in the US for 3 months when this class began) had dropped out, not because they were not capable of the work since they were exposed to computers in their own country, but because they could not understand the teacher and could not keep up with the workload this class demanded.
Mario was not the only one who commented on student drop-out level in this class. In her exit interview, Erica reflected:

You know when we started how many people there are. Some people that I talking with they told me ‘oh, it’s too hard, I can’t do this.’ Well I told them I didn’t know anything either. They said the problem was English. They don’t understand what she’s saying. Because they ask me, ‘What is she saying? What does she wants?’

I asked her why they just didn’t just ask the instructors in the class—there was Sally, me, and Alex, the TA. She said, “They feel embarrassed to say ‘Hey, I didn’t understand you.’” So, instead of asking the teacher’s help, many students dropped out because of their embarrassment of not being proficient enough in English. Those who stayed in the class despite their limited English proficiency heavily depended on their classmates to assist them while not letting on to the teacher that they did not understand. For example, Erica laughed when she recounted how Anna always used to ask her about what the instructor had just said or asked them to do: “I laugh with Anna because when Sally explains to her, she say she understand but when Sally moves, she say to me, ‘tell me, tell me! [laughs]’”

Lana, on the other hand, whose literacy level was one of the highest in the class, had gotten annoyed at one point why her fellow classmates did not ask questions and she felt that feeling embarrassed was just a poor excuse, as is implied from this recollection she had:
And also what I was doing like was some people who comes from different countries and they have accent, they afraid to talk cuz people don’t understand them. I saw that many times. They, like, ‘oh, I don’t want ask cuz they don’t understand me and I need to repeat again and again.’ Even my friend, she has really bad accent and it’s really hard to understand her when she speaks any English and that’s why she’s talking and nobody understands her and she needs to repeat that she get kind of like ‘okay, I don’t want to talk about anymore’ but in my case, I was like, okay, ‘begin conversation, I from Russia, if you don’t understand me, tell me, I will try to repeat again.’ That’s what all my conversation was starting all the time, so even like in Starbucks when you go and they ask you what you want, I needed sometimes to repeat five times until they will understand what I want. So they like, ‘okay, take your time, tell me again.’

Lana took her own initiative to learn the language and was not afraid to make mistakes and have people help her no matter how long it took. She felt this was the only way to learn a language—to take charge of her own learning and not care what others thought of her accent or bad English. She did not feel that feeling embarrassed about not speaking perfect English or having an accent or not understanding was an excuse for not practicing the language. Lana distinguished herself from the rest of her classmates by pointing out that she was at Pima to seek a degree, not to study English which she felt she had a good grasp on. The primary reason she took this class was to improve her writing skills, not her computer skills.
Those who had a positive experience throughout the semester were those who had higher language proficiency. Lana was the most proficient out of the five case-profile students. The handful of others in the class who successfully completed the course wrote in their earlier reflection blogs that they felt good what they learned but just needed to practice it more. Here is a sample of these students’ reflections from just after the second class period: Jacky wrote, “I feel very good because I’m learning more stuff about computer,” Peter wrote, “I feel confident because I learn so much and I understand. Yes, I did try to learn as much as I could get,” Lana wrote, “I feel good because I am learned a lot.”

To address the various levels of proficiency, by the third class period, Sally decided to present her lesson at the regular pace, as she had been doing, and then have me, Alex and herself help students on an individual basis after her lecture ended, making sure that the advanced students kept on track with the syllabus agenda and allowing them the freedom to either stay and help weaker students or to leave early from class. In order to help students practice with the programs she was going over in class at home, Sally had prepared a series of meticulous step-by-step “how-to’s” including instructions on Computer basics, Email, NiceNet, Using Microsoft Word, Saving devices, Keys and Tricks, Track Changes on Microsoft Word (See Appendix H). For some, these sheets were very useful, but because the computer works in a very flexible, iterative environment, i.e., there is at least five different ways to do one thing on the computer. Therefore, these logical, step by step instructions did not always work when students were at home. I talked to two students, Mike and Jorge, that day who had said they tried
following the instructions but the computer sent them messages that would not allow them to continue to the next step, prompting them to give up. If they typed or did something that veered away from these steps, it would throw them off.

Another troubling aspect of these sheets was the amount of print students needed to read. For novice readers, who were not used to large amounts of print, these sheets proved to be overwhelming rather than helpful. In my reflection log, I had asked a couple of students how they felt about these sheets and here were their responses: Laura said, “They good but I don’t know…too much.” When I asked her why she thought it was too much, she responded, “I mean, is good for everything write, but it’s confused. I see so much words and I…don’t know…I can’t read anymore.” I asked her if she reads a lot in her own language or in English, and she said that while she reads a lot in Spanish, she does not read that much in English. When I Jim about how he felt about the “how-to” sheets, he joked that when he sees a lot of English, “my head begin to hurt.” Many other students said that while they were grateful for the “how-to” sheets, they preferred to be shown rather than read through the sheets. Their responses are indicative of people who did not have a high literacy level, at least in English. Indeed, if one were to look at the Pima ESL curriculum, there was not a lot of emphasis on extensive reading and writing. Many of these students have been through this curriculum track and so were not used to the extensive L2 input flood. As a result, these sheets were lost on many of the class whose language proficiency was not high.
Discussion

The above data is a further testament to the unfortunate reality that more and more ESL programs at the post-secondary level have been forced to adopt less rigorous curricula in order to deal with the increasing influx of immigrants who lack or have low-level L1 literacy skills (Contreras, 2002; Bosher & Rowekamp, 1998; Graham & Cookson, 1990). Being very close to the Mexican border, Tucson is a city in constant flux with its immigrant population. Tucson is also a destination city for political refugees from Russia and various African countries. Pima Community College’s ESL curriculum has had to adjust its offerings to meet the demand. There is only so much adult education facilities can do for immigrants until they themselves feel they need more English and so they turn to the community colleges (Orem, 2000) who try to accommodate the best they can to their population’s needs. As discussed in Chapter 3, Pima Community College’s ESL curriculum is fragmented in that while it offers four semester-long levels of low-beginning to high-intermediate integrated skills courses, the advanced level courses are a giant cognitive leap. They consist of two sequential courses of English for Academic Purposes that require a high-level of reading and writing skills for which the previous series of integrated skills courses did not adequately prepare those students who have gone through the previous series of four courses.

Pima’s ESL curriculum developed this way to answer to the large influx of immigrants that were overflowing from the adult education centers in the city. For many of these immigrants, they stayed with these basic four courses in order to get the basic communicative skills needed to land a job. Many of Pima’s students took one, two or all
of these basic skills courses ranging from low-beginning to high-intermediate and then discontinued. Very few of those from the high-intermediate level stayed on to continue to the advanced, English for Academic Purposes courses simply because they were not interested in obtaining a college-degree. I am familiar with Pima’s curriculum and ESL student body since I had worked there for six years and have witnessed first-hand the number of students who stopped taking classes just before or after the high-intermediate courses. Those who continued to the advanced level courses were few. The advanced level courses seemed to be filled by first-semester students or those immigrants who had been in the country for a number of years, or had a strong L1 educational background or both.

This computer course, which was at the intermediate level, required a lot of reading, writing, and higher-order cognitive skills which was much more than they were used to in their current classes and with very little grammar support. The participants in this study were at low-intermediate to high-intermediate level. At the time, many of them were taking low-intermediate courses and high-intermediate courses that were still concentrating on basic communicative listening, speaking, grammar and writing skills with very little reading. This is the reason why many of them felt overwhelmed by the amount of L2 input flood. While some took on the challenge because they knew that they would benefit from it, others felt overwhelmed and disgruntled and dropped the class. Had the curriculum at Pima been progressively rigorous throughout the levels rather than having a big leap in cognitive ability from the high-intermediate level to the advanced level, then perhaps the students would have been able to cope with this level-
appropriate course. As it was, however, there was a mismatch between students’ abilities which varied from barely communicative to fluent speakers and writers, and the curriculum content of this course which did not seem to follow the same expectation outcomes of the majority of the participants’ current courses.

PART II: Technology’s Effects on Immigrants’ Social Identity

Along with the sociocultural and sociopolitical factors that impacted immigrants’ acquisition of computer literacy, one of the goals of this study was to also see how technology impacted adult immigrants’ social identity throughout the duration of the study and beyond. Past studies of social identity in SLA focused on language learning and how successful experiences with language learning led to or sparked the desire to identify with certain groups and to locate themselves in imagined communities where they were seen as successful L2 users (Norton, 2001; Norton, 2000; Cook, 1999; Norton, 1997; Noels et. al., 1996; Norton Peirce, 1995).

Rather than focusing on language learning, this study focused on computer literacy learning of adult immigrants. I wanted to see how immigrants’ personal identities intertwined, developed, and evolved with their learning about computers and if it indeed led to their imagined community of being part of a community of practice, in this case computer users. An imagined community refers to the social construction to which participants belong and/or to which they aspire. Despite the alarming dropout rate, for a few participants who started the class and for those who remained in the class
throughout the semester, the mere fact that they were attending such a course had a positive impact on their social identities as immigrant learners. This class empowered students in many ways, as the following section will demonstrate.

*Positive Sense of Self*

One of the most resounding ways computers empowered students was by increasing their self-esteem, confidence, and comfort level with using the computers. No matter their literacy level or the reality of their true abilities with computers, students felt proud of themselves for having taken the steps to learn about computers. This went a long way into contributing to their sense of imagined community, i.e., the mere fact that they were taking such a class allowed them to imagine themselves as part of a larger community of practice while at the same time they were participating in a local community of practice with their fellow immigrant classmates who had various levels of computer and language proficiencies.

When I asked Lana if she thought this course helped prepare her for a future career, she reflected, “You know, I think yeah, in the way that, I was always afraid that I am not smart enough, not good enough, to go in the college, so I think this course gives me self-confidence that I can make it. Cuz, I was all the time concerned about that I was not good enough to do stuff like that.” When she made this surprising confession to me, I asked her why she felt this way about herself and she responded, “I don’t know, cuz I guess my stepfather was probably saying ‘You stupid, you idiot’ whatever.” Lana also
received further emotional abuse from her first husband whom she was married to when she was 19. He was “saying that I was stupid too, so yeah, I think behind my head I feel I’m stupid.” However, after taking this course, her confidence level about herself and her abilities were restored:

[Being able to use a computer means] A lot. It makes me feel better. It makes me feel like I know something, like I’m not totally dummy. Because sometimes when people talking about stuff, um, and you don’t know what they’re talking about you don’t feel that good. So it makes you feel like you know that stuff too. If you know about computer and people around you are talking about computers you don’t feel like you don’t know anything. You can put a word in conversation because you know something about computers, too. This class was good. I can talk now a little bit more about Excel program, PowerPoint program and Word. Like I know right now some little tricks there like how to make faster, how to put that. Like before I knew how to type information just to type in Microsoft Word but I didn’t know how to put the picture in there. So now I know that and I teached my husband to do that because he didn’t know that.

Lana felt proud that she was able to show her “technology freak” husband a few tricks on the software programs that he did not know about. For instance, she recalled having been excited when she was able to put her mom’s picture into her PowerPoint and exclaimed to her husband, “Bill, LOOK, I did my mom’s picture!!!” Her husband did not know how to do this and she then proceeded to show her husband how to upload a picture from her personal picture files and paste it onto her PowerPoint presentation. She was smiling
from ear to ear when she was retelling this event saying how her husband “was impressed and it made me feel very good and confident.” This was the reaction of the most proficient user of technology in the class.

Many other of the less proficient technology users had similar stories to tell of how learning about the computer empowered them. When asked how confident they felt about their computer knowledge on their post-surveys, Gaby wrote, “I feel better then before”; Jacky wrote, “My confidence is 90% now because I don’t use a lot of computer before and now I can use more and I feel more comfortable with the programs”; Sara wrote, “I think my knowledge is about 95%. Sometimes I steal need to review some of the information I learned in this class”; Peter wrote, “I feel more comfortable and sure”; Maria wrote, “This class helped me to feel more relaxed around computers”; and Anna wrote, “I feel very good now.” Bob said that he “will use computer more to learn and practice.” When I asked Erica what it meant for her to use the computer, she responded, “I feel very good. I feel comfortable. I try to do the best and good student. Because I know a different women that don’t know about any computers…I feel stronger…more advanced, more modern.”

In her reflection post on NiceNet toward the end of the semester, Maria mentioned how she helped her son in his PowerPoint presentation explaining that, “my son is proud of me. He told me how proud he was.” Jacky noted in one of her reflection postings that “Now I can help more other person that they don’t know about computer. And also is important to help the children in the school and in the home.” Erica mentioned in a conversation with me how she used her newly acquired PowerPoint skills
to make a presentation in her other ESL class and wrote how the others were impressed with her presentation: “I feel very good that I can do this. No one in that class can use the PowerPoint. The other persons like how I prepare my presentation for that class.” Gaby wrote in one of her reflection posts that “In my house, I teach my children and husband how they can use the attachment and accept changes with the track changes program.” Erica said that she would love being Sally’s teaching assistant next semester if she were asked to because she feels comfortable with computers now. Bob related an experience that he had with his boss where he had shown his knowledge of computers:

I go to my boss this semester and I need to apply for green card and I need to all information—when did I start a job and how long I’ve been taking it. So take to my boss to get me all this information. Uhm, okay he said he don’t have a lot of experience with computer and they need to print out everything. He couldn’t print all this stuff—wouldn’t allow me, so I sent all information from internet as attachment on my email. So, he was surprised, and ‘you have a lot of experience with computers.’ So I say, yes because I now have been using computers. He say, ‘Even me, I don’t know about that.’ I say, ‘It’s okay.’ So they know that I’m learning and growing. That is good. That made me feel great. I have a experience now, but little bit, it’s kind of step. You know, that’s good.

As the above examples illustrate, knowledge about computers empowered these students by making them feel good about themselves particularly when they were able to demonstrate their new skills to their family members, colleagues, or even employers.
Another way this class empowered students was that it sparked more interest in learning more about computers. Many of the participants wrote that they wanted to take more computer courses at the college, specifically computer application courses which Sally talked about in class. Others wanted to take more courses because they knew their future careers would require computer skills. Erica now had a newfound interest in computers because of the communicative capabilities they offered: “I feel like I have more interest in the computers because I have my email account in the job but I doesn’t use before. So now I can use both but use yahoo more.” She also wanted to take more classes that would give her more practice with programs like Excel and Microsoft Word, stating that “if I practice, I got it.” Lana, who had been taking an on-line math course while taking this computer course, wrote “I think I will be using computers more and more, because I am planning to take more classes online.” When asked if she thinks she could learn anything more, she responded, “Yeah, of course you can learn always learning something new cuz that’s just learning about, you cannot know everything in this world. Yeah, I think I can learn something more advanced for of computers not like in Sally’s class. But if I take more advanced something, yeah probably that’s what I need.” I asked her what she considered “advanced,” and she said she would be interested in learning about designing webpages. However, she said she was finished taking computer courses for the time being since she wanted to get started on her nursing degree.

When asked if they would feel more comfortable applying for a job that requires computer experience, Maria, Jacky, Erica, Peter, Sara, Alan and Lana responded positively saying that they felt they learned the basics about computer software. Erica
mentioned that she was considering applying for the secretarial position that was being offered at her school. Lana was open to the idea of applying for a secretarial position depending on what skills were required for the job: “I would ask what kind of skills you asking for, like, uh, you know so, do I need to improve my skills, you know, I don’t want to be there totally foolish work, cuz, you know.” She considered herself an expert in using email, attachments, and Microsoft Word and while she did not type fast, she would just learn how to type from an Internet program. Gaby, Anna, Bob and Mario, however, were conscious about their limited language skills and did not feel confident to apply for a position that required computer skills. Mario stated that he “will never applying for a job that requires computers experience” because “I still need more English.” Gaby wrote in her post-survey that “I still need to learn lot more. I not ready for a secretary job or somting like that.” Bob mentioned in his interview with me that he still needed to work on his language skills, just as Mario confessed. Anna was still very hopeful that she could get a job but that she “need more practice for the computer.”

While overall, the participants who stayed throughout the semester had positive experiences taking this course, some expressed that they wished the course offered more. Of those who remained in the class, Jacky, Peter, Maria, and Sara all commented on their post-surveys that they feel they need to know a lot more about computers. Mario represented this sentiment best when he explained:

Well, like I said, this class, it was really good, really helpful. I wish it can be more, you know more like, more like uh, more like technique for computer. How to use, fix many things in the computer sometimes you know. But I know that
before I begin the class it was only for English skills. For exam, how you take all
the virus out of your computer, how you can program your computer for other
things. Because I know, there are many other ways you can use the computer, not
just for PowerPoint or for Excel. It’s for more things in there. I feel like I don’t
know anything about it. But I would like to know. So but I know this class
wasn’t for these things because Sally told me before start of the semester how is
going to be.

Bob and Lana also expressed that they would have liked to know more about how to fix
computers if viruses got into them since they both always have to ask for help if their
computers suddenly break down. Lana explained,

I feel like I know a lot less than my husband does because to fix something on
computer, I usually don’t mess up with that like um, Monday, on my laptop, on
the front you just do with your finger so was all over the place and I couldn’t
figure out why. So he [her husband] came and he said it is too humid here and
you need to do here, here, here and that’s what you do. And all these viruses—he
has three different programs for virus scanning stuff. He knows better than I do.

Bob had said he still needs help from others when something breaks down in his
computer and he must go to Best Buy to fix something, saying that not everyone knows
how to fix computers. I assured him that not even I know how to fix the computer if it
breaks down and that most people who own computers do not know how to fix them by
themselves. In any case, here, students are aware of their limitations of computer
knowledge but it was not enough discourage them from learning more about computers.
Evolving Social Identity

Focusing on the evolving identities of the five case-profile students, one can further understand what the other participants may have felt like while taking this class as it relates to their evolving social identities. As mentioned earlier, the five case-profiles represent a wide range of socioeconomic and sociocultural classes and while I was not able to extensively profile each and every one of the 25 original participants in this study, tracing the evolving social identities of the case-profile students would give further insight into how learning about technology impacted immigrants’ lives.

When Anna first began this computer class, she had stated that she did not feel good about not knowing how to use computers. She had never been exposed to computers saying that while in her job she never had to use computers, there were computers in the big offices in the hospital in Tanzania, where she was a refugee. For her, she saw the computer as a sign of prestige and class. During the duration of this course, her constant mantra was “I like this class because I need…I need more…experience with about computers.” I asked her why she was so determined to take this computer course and she responded, “Here, a lot of people they have computer. I don’t feel good because I don’t know the computer. I myself don’t feel good. But if I buy a computer it will help me. And my husband knows how to use the computer.” Thus, Anna felt deficient and had a low opinion about herself because of her lack of computer skills and in order to make her feel good about herself, she felt that computers would validate her self-worth. For her, investing in computer lessons was intricately linked to how she felt about herself as a person. Without computer skills, she felt like an outsider. She felt that learning
about technology would give her access and privileges to the society where she lived in. Indeed, just looking at the various reasons why the participants of this course wanted to take a computer class (see section 1 of this chapter), it would not be unreasonable to assume that their identity was tied up in how they viewed themselves in relation to their experience and expertise with using computers.

In case of point, like Anna, Danielle, the 55 year-old from Poland, also wrote in her pre-survey that she did not feel good about herself because she did not know how to use the computer effectively. For Danielle, unfortunately, she had dropped out by the third week of classes. While I never contacted Danielle about her decision to withdraw, her social identity with computers was compromised in that she was never able to develop a sense of imagined community. She never got to imagine herself as a legitimate practitioner of technology. The repercussions of her decision to drop this course will never be known which is quite unfortunate since her identity and sense of worth was tied up into her ability to use computers. By dropping out of the class, she in a sense gave up on herself or at least felt she was not worthy enough to join this community of practice. One could only imagine the repercussions to the identities of the 15 other participants and non-participants of this study who dropped out.

Returning to Anna’s case study, despite the fact that she was not doing all the work, was not practicing on the computer, and did not have the time to practice, her identity depended on her learning about computers and getting a certificate stating that she had completed this computer class. She explained that in Tanzania, if one had a certificate, they could find a nice-paying job. She transferred her world view about job
certification to this culture and was quite adamant that she receive some sort of proof that she had completed a computer class because for her, a computer certificate translated into a nicer-paying job regardless of her true skill or expertise with the computer. Within a month of taking the class, she consistently kept reiterating how she felt good about the computer, explaining that “But now I feel comfortable, it is okay. If I see before and now, my….the process is goes up for using computers. Before I start this class, I was nothing nothing I know about computer. Now I feel good.”

Nevertheless, her lack of self-sufficiency on the computer was evident when she asked to fill out the post-survey by pencil instead of computer like everyone else had done. As an excuse, she told me that she “understand to do everything” but it would take her too long to complete due to the fact that she typed so slowly. There were many factors working against Anna which will be discussed in further detail below, but her time spent on the computer was not enough to make her computer proficient by any stretch of the imagination. Anna’s computer literacy was integral for her to feel good about herself. It was enough that she enrolled in a computer class, persevered and finished it, and got her certificate for the course. To her, this was a step towards a better future and it did not matter how proficient she truly was, so long as she at least took the course and completed it successfully. In her subsequent interviews with me, she kept saying “I feel good, I feel good.” For her, this was perhaps enough to satisfy her negative feelings about herself and created a positive self-image where her identity in her new culture and society was strengthened due to the mere fact that she took a computer course. Here, the mere fact she was attending, despite all odds, contributed greatly to her feeling
of worthiness and having a positive self-esteem. Now she could say that she can “use” a computer like her American peers. However, her true computer ability was low compared to her fellow-classmates.

Bob aspired to become a professor of political science as he was an avid reader of history and politics of his own country. This was a lofty goal he set for himself; however, he already had a positive identity with computers before the class started because he was already familiar with using the Internet and email. Thus, he had already established imagined identity where he did see himself eventually becoming a legitimate practitioner of not only the local community of practice, i.e., this class, but also the wider community of computer users. His low language proficiency was a major deterrent to his being able to master the computer programs he was exposed to during this class. He admitted that he was struggling with keeping up with the class because of all the new vocabulary. While he felt a bit more confident at the end of the semester, he reflected that, “Right now I know what I can do and it’s not confusing now. I have to go and do whatever I need to do. But a little bit, little bit but is okay. It’s a little bit confusing like how to move from Excel to a PowerPoint.” He felt frustrated that it took him a lot of time to do his homework although he felt that all the programs he was learning in this class were relevant in his life because he wanted to major in politics.

While he felt happy about the class and felt he was learning, he did not feel comfortable enough to become a teaching assistant because he felt he needed more English and did not know the programs perfectly since he “forget[s] many thing.” Bob felt he could not be a TA because a TA “need to be perfect” and “maybe I do a lot of
mistakes if TA.” When I tried to communicate with him via email after the class ended, he only responded once out of the six times I emailed him, forcing me to call him to see how things were going. He was always saying that he was too busy and had no time but that he still used the computer to check news. His purpose for using the computer had not really expanded to the many other uses he had alluded to in his first interview with me. His relationship with computers had remained the same as before the class despite his positive feelings about the class.

Erica represented those Latino women in class who felt a sense of empowerment just for taking classes at the community college, regardless of content or whether or not they led to a degree. This realization was verified when several of the remaining Latino women who did their oral PowerPoint presentations in class all mentioned the idea of “machismo” that was present in their culture. “Machismo” is the term used to describe the typical alpha-males who are always right, are superior to women and expect women to serve them because they see women as subservient to them. Thus, it was not unreasonable to assume that most of the Latino women taking this class had a sense of liberation when taking such an empowering class, but it was interesting to see how it affected Erica, this group’s representative in her relationship with computer technology and her evolving social identity.

As mentioned earlier, Erica was a highly educated woman in her native Mexico. She had received a BA in education and had taught elementary for a few years before immigrating to the US. She had stopped working to raise a family in the US. Years later, when she started taking English and Math classes at Pima, Erica’s husband was against it
telling her that she already had a good job and that she was good in her job. He saw no reason for her to go back to school. However, Erica saw herself as a liberated woman in the US and identified her plight with other Mexican women whom she thought felt the same way:

I like because the life is more easy. We have more opportunities [in the US], like we as women, we have more opportunities, more chance, more support for everything and that life I think is easy. But, we came from the other country I feel like we stop, just my case. I stop for 6 years because I stay home. So the life continue but we stop. But when I start go to school, I love it, I like, like more because I know more people and the life is change and is different and I like it.

However, it did not help that she demeaned herself when comparing herself to her husband, whom she saw as more intelligent than her. It seemed that her husband did not respect her and always made her feel inferior by telling her she speaks “bad English” and emphasizing that he “do[es] everything, you don’t do anything” and that everything that they had was due to him. She felt inferior to him and that affected the way she saw herself. It affected her self-worth as a woman and her identity as a woman. So at once, she had painted herself as an educated, liberated woman who loved learning, but at the same time she questioned her intelligence and her worth as a woman under her husband’s emotional abuse and control.

No matter how difficult the class seemed to be for her in the beginning and how nervous Sally made her feel, she was able to overcome those fears and felt that she was able to continue with the class. Erica had taken a computer class in her country years ago
but felt “like a dinosaur” compared to where technology was now. That is why it was so important for her to update her skills. She felt that having computer skills was important in the job that she wanted to pursue. When I asked her how she saw herself compared to the rest of the class, she said that she felt she was “in the middle in computer and language.” So she came to the class with some computer knowledge. She had been using email to communicate with some of her Spanish-speaking friends. She also was familiar with word processing since she had to type up letters with pictures she used from clip art to distribute to her students. She was also at an advantage because she knew how to type fast in Spanish, and therefore, her English typing was not as slow or cumbersome as it was for many of the other students.

She felt proud and saw it as a significant accomplishment to have finished such a rigorous course: “I just want to finish this class. And I don’t like to leave the class. I need time for the homework. I needed more time because when I try to do my homework is 10pm til most of the night. Was hard.” She respected Sally and the class because “the class more serious, more, you know. Other class [the advanced ESL writing class she had been taking] was for socialize.” After the computer class finished, she felt more comfortable working on computers and even said she would feel comfortable applying for a job that asked for computer skills and becoming a Teaching Assistant for this course if Sally ever asked her to. What she also liked about this class was that she was not surrounded by Spanish speakers and got a chance to speak English the majority of the time. In fact, she wanted to take all her future classes at the Downtown Campus of Pima because there seemed to be more diversity in the classes. In sum, technology had a
positive impact on Erica’s identity because it was a liberating experience for her and it meant that she was one step closer to changing careers where she would be exposed to more English and American culture. Erica represented the other Latino women in the class, like Jacky, Maria, and Gaby who persevered overcoming emotional and cultural hardships from their personal lives. Their positive experiences in this class helped them to cultivate their imagined communities. The more they stuck with the class, the more they could imagine themselves being daily users of computers not only in their immediate classroom but in the larger community.

Lana was the most atypical immigrant in this study because of her extensive use and comfort level of using computers before the class started. She represented people like Alan, Peter, Cindy, Laura and Karen in that they all had strong affinities towards using computers on a daily basis. In the cases of Cindy, Laura and Karen, they dropped out not because they felt they could not participate in the larger community of practice, but because of their low language proficiency level that interfered with their completion of this course’s assignments. Had these women elected to be case-profiles and received the extra support I had given to the other five case-profiles, perhaps they too would have continued with the course. Nevertheless, the students mentioned above all had a positive self image when it came to using the computer. For instance, Cindy wrote in her pre-survey that “computer is easy an fun a lot.” Laura listed previous Microsoft Word and keyboarding courses she had taken as non-credit in past semesters and in which she received a good grade in. Karen wrote in her pre-survey that she “practice lot the computer pero [but] my english is no good.” Thus, these individuals saw themselves as
computer users, but who wanted to improve their computer skills a bit more along with their English skills.

Lana’s social identity with computers seemed to be strong from the beginning but as mentioned earlier, she too had had psychological trauma in her past with various family members putting her down. She had quit school in her native Moldova to support herself and her mother when she eventually met her future husband in Turkey and with whom she started communicating with via email and extensive translating. At the beginning of her marriage, she had a lot of time to practice and, as she said, “play” with the computer her husband had bought for her. Her husband installed Adobe Photoshop and other programs that allowed her to make greeting and holiday cards. This had peaked her interest in computers and made her want to learn more. In her first interview, she proclaimed that “computer is a big thing in my life.” In fact, she was using the computer in ways that her fellow-classmates only gave lip-service to. For instance, she manages all their bank accounts on line, including paying their bills, she shops on line, uses E-bay, manages her green card status, is constantly on email, registered for courses on-line, and even felt comfortable taking a course on-line. She actually preferred on-line courses because they were more convenient.

Her quick acquisition of computer literacy was not so surprising considering that she had a lot of support from her “technology freak” husband. Lana humorously explained how her house was a technology museum:

We have three, one desktop and another laptop. He’s a technology freak—all over house, you will see these ipods, palm pilots, uhm super-dooper cameras,
superdooper phones. Uhm, phones what we have in the house, they talk. They tell you who calls and everything supposed to be super doper so. Like memory stick what you have, this saving device, people has 265 whatever..i have 5 gigabytes. He said, ‘If you buy something, buy good, don’t buy just something’ and I’m like, ‘okay.’ He’s writing his book on that [computer]. He says I can use but don’t mess up with my stuff. So it’s like that.

Despite her advanced computer and English skills, Lana did not feel that the class was a waste of time despite the fact that most of her fellow students were lost for a good portion of the semester. She graciously helped her classmates whenever Sara, Alex or I were busy helping others. On Nicenet, she offered words of encouragement to her fellow classmates by saying things like, “Just keep practice and practice. This is the secret and don’t be afraid to explore.” She even offered to meet Anna outside of class, but Anna never showed up at their rendezvous, which understandably irritated Lana and made her think twice about helping anybody outside of class. She particularly enjoyed learning about PowerPoint, stating in one of her blog posts: “I learn how to use Microsoft PowerPoint. Its really COOL!!!!!!!!!!” When someone complemented her on her mini-presentation she had made in class that day on PowerPoint, Lana thanked her classmate by saying “I really like to play with computer. Its fun.” For Lana, the computer was already a part of her identity and helped her to acculturate faster in this culture because she used the computer in ways that many native-speakers use it. This course further solidified her connection and love of computers.
Compromised Social Identity

Despite the increased feeling of self-worth and a positive energy that led to students’ imagined communities of practice, for some who remained and for those who dropped out, their lack of imagined communities was a result of their frustrating experiences in this class. While he enjoyed the class, Mario still had self-doubts about his computer abilities because he compared himself to very proficient users: “I can say [I feel] 50% [confident about using computers] compared to the other people. I feel like I’m behind because that I know they told me, ‘Oh, this is a piece of cake,’ you know. And I was like, ‘Oh really?’ I no think was piece of cake.” When asked if he would consider being a Teaching Assistant (TA) for this class the following semester, Mario felt that he could not be a TA for this course because he compared himself with Alex, the TA, who knew a lot about computers: “I mean Alex knows many things. I’m sure he was probably like boring over here but you know…” Mario also seemed to think that he needed to know everything there was about computers in order to be a competent TA. Moreover, he admitted that even if he had excellent computer skills, he would probably not teach anybody because he feels teaching is hard and it is definitely not for him.

When I asked him to describe how he felt about computers, he related this historical information about what he felt about technology:

Okay, computers always, always uhm, when I first hear about computers I was like when I was like, I don’t know, 5, 7, 8 years old, something like that. I hear about in the future they talk they tole us about in the future, uh, everybody’s going to use computers for everything. You know, everybody is gonna do this,
everybody is gonna need it for moving a cars, for everything. So, I always have the idea like ‘How the computer works? How, how what is inside, what is in the in the computer so they can make all kind of things?’ So I become more interested like five years ago I become more interested to learn how use it because I never had access when I was a kid, I never had access to any computer. For computers, only for rich people, you know. People who go to Europe or other countries and buy something new. They we don’t have no access in there. I remember the cell phone that I saw in my hands was like that big [makes a gesture with his hands to indicate the size of cell phone]. Almost like, almost like, more bigger probably than a normal phone. Computers are more like, more, more like how do you say, more like, uhm….like evolution the computers go more, more up, like more, more better.

When talking about his reasons for taking this course, Mario ascribed not knowing about computers with not being as smart as everyone else, not even as smart as his 7-year-old nephew seemed to be, thus motivating him to learn more about computers:

My nephew, he was like 7 years old and I saw him working at the computers and doing everything and I was like “Oh my God, this guy has be like more smart han me [chuckles]. How he can do that? And I was like “I have to learn too.” Why not? You know. It’s always good learn things, good things you know.

Before this class, he relied on friends and relatives to help him with the computer which he mainly used to look for information. He rarely used email because most of it was junk-mail. He also used MSN instant chat with his younger friend in California, but
confessed he did not have time most of the time since he used the computer for schoolwork and nothing else. He did not want to be bothered by distractions because his time with the computer was so limited due to the fact he worked a full-time job at a supermarket deli and a part-time job as a dishwasher in addition to going to school part-time.

He was critical of his fellow-classmates who seemed so willing to give up once they saw how hard the class was. He did not understand why others gave up any opportunity to better themselves through education. He related a story about a fellow classmate who was always giving excuses to her teachers as to why she was not doing the work in class saying it was her job. He explained,

That’s not an excuse. That’s why I think they [people who dropped the class] not responsible. They don’t want to get up early to come to class. That’s what it is, you know. So, she doesn’t have job, get up early, start going to school, do work until you finish. And at least you don’t lose the semester…she wanted me to help her but I wasn’t going to show her my homework and she just copy and paste, you know what I’m say? I can just give you an idea but I’m not gonna do your homework.

The harder Mario worked, the more aware he was of his limitations. Throughout the duration of the study, he never really saw himself as a legitimate computer user, constantly comparing himself with much more proficient computer users like his nephews, nieces, and friends who were all much younger than him. He felt he was old and was not able to learn easily: “I’m like a burro [donkey]. I can’t learn easily cuz I not
young anymore. It’s hard. You can’t teach old dog new tricks, like Americans say.” He was sensitive to the fact that his family and friends kept telling him how easy computers were to figure out, but when he was alone with his computer, he could not figure things out which made him feel worse about himself. He always had to tell his relatives to slow down when they tried explaining what he could do to fix his computer which seemed to be always plagued by viruses. He also mentioned that his family sometimes does not have the patience to explain to him what to do so they just fix the computer problem for him without trying to explain why.

When I asked him if he felt he was on his way to becoming a proficient computer user, his answer, not surprisingly, was negative:

No cuz, I mean, I see people doing things that I can’t imagine, you know. I mean, like my nephew, he impress me because he’s like 15 and he know how to do all kinds of great things in there, you know…he, he,…it looks to me he’s more smart for using the computer, than I do. And I think, what I’m saying you know in this point that I start this class, I think I’m still far away from other people.

Mario also mentioned how his younger computer savvy friend had explained all these other things you can do with the computer making him feel inadequate with the things he was just learning in this class. Mario attributed his friend’s knowledge about computers to being smart (and by saying this, he himself feels he is not that smart). He also felt that he needed a lot more ESL classes and did not feel comfortable taking classes with Americans just yet.
He was really self-conscious about his poor writing skills and was disappointed that Sally did not take the time to correct the written work he had handed in to her over the course of the semester. When I asked him why he did not email Sally to get written feedback for his Microsoft Word written project, he rationalized,

You know, I think about tell her on email you know, I have this idea, but I always thinking, ‘Okay, maybe she doesn’t like it. Maybe she knows what she’s doing. I’m not gonna…’ You know what I’m saying, I’m not gonna say, ‘Hey, you not doing your right work. You’re not doing right things here’ Cuz who am I? So, I didn’t send email to her.

In this instance, he showed his deference to the authority figure not because he felt what she was doing (or not doing in this case) was right, but because he had low self-esteem—“who am I” to tell her what to do. His identity held him back from speaking his true feelings about this situation because he saw himself as someone who was over-the-hill, not very intelligent, and far from becoming a computer literate individual. Nevertheless, he received an “A,” for this course and continued taking advanced ESL writing classes in the Fall 2006 and Spring 2007 semesters. He struggled with these classes and religiously went to a writing tutor for help. He admitted he was quite overwhelmed by the classes but that he was trying to do his best. His writing tutor admired his tenacity in trying to learn, but his fossilized English structures were difficult to break away from. He had received “Cs” in both classes.

Mario’s world view made him stand out from most others in not only his culture but also in American culture. The difference is that in American culture, he felt
Americans let him be who he wanted whereas when he was in Mexico, they discriminated against him because he was not Catholic. Nevertheless, he still felt alienated by his American peers because they did not share the same spiritual views as him. As a single man, trying to look for love, he struck me as a lonely person who was painfully aware of his limitations as a man. He felt like a failure in some ways because he had not started a family yet and felt women would not give him a second glance because he was not perceived as “fun.” He was also down on himself when realizing his limitations with his English and computer literacy and made his weaknesses define his identity. This shows he had very low self-esteem and low opinion of himself and it was not only because he could not pick up computer skills very quickly, but because he felt alienated by his own culture and American culture who did not quite get his spiritual outlook on life. It leads one to wonder if learning more about technology would have ever led to his inclusion into the target-language culture.

Because Mario was one of my case-profiles, I was able to talk to him extensively to get insight on his social identity. I view him as representing most of those who dropped out of class as I imagine they too felt a distancing between themselves, their more computer and language literate classmates, and finally to the larger community of technology users. While many of those felt empowered to be participating in such a class, their identities were compromised because they did not see their needs met and it was becoming increasingly evident that they would not become as computer proficient as they would have liked to be or imagined themselves of becoming. For instance, before dropping out of the class because of medical reasons, Zora expressed bit more caution
about her newly acquired computer skills saying that “I still need to learn more about the computers, so for myself, I have 50% confidence but not to use it at a workplace.” Lucy commented on a reflection post that, “I learn Microsoft word and PowerPoint but it’s not enough. I want to take more classes maybe for one year and then I will be able to use computer in my job.” Jim had mentioned to me that the more he learned about the computer, the more things he knew he still had to learn which was overwhelming for him as this transcribed interaction attests to:

Too many things to learn…I learn one thing but now I see you have to learn this, this and this. I don have time. I don know how the other people learn the things. Need to practice but I no have the time. I don think I can never learn these things. It too much.

With this kind of thinking, it made me wonder just how many others felt overwhelmed by having to learn all these new technologies and the stress that it brought to their lives. Learning about computers ultimately distanced them from their imagined community by first distancing them (those who dropped out) from their seemingly more proficient classmates and then coming to the realization that if they cannot keep up with their immigrant classmates, they saw no hope in their being able to participate in the wider community of technology practitioners. Unfortunately for those students who opted to dropout, their social identities were compromised.

Discussion

As discussed in Chapter 2, Lave & Wenger’s (1991) Situated Learning theory
stipulates that learning is a social practice that takes place through legitimate participation in a community of practice, in this case, computer users. Those who do not achieve legitimate participation in a classroom of practitioners can be considered peripheral or marginal learners, i.e., they have not mastered certain skills in comparison to or in relation to others who are considered legitimate practitioners of that skill within that community of practice. In this particular class, where computer and literacy levels were so disparate, those who were on the bottom rung of computer and language skill comprehension had only the instructor’s expertise to rely on (at least in the beginning of the semester). Unfortunately, computer and language learning activities that offer the highly proficient computer user as an ideal model are often in danger of creating moments where the lower proficient computer and/or language learners disassociate themselves from their imagined communities of practice. This is due to the typically overwhelming distance of the highly proficient computer users (Sally, myself, and Alex, in this case) and moderate proficient users (those students who remained in the class) from the struggling L2 computer learner. This distancing leads to various levels of non-participation in the community of practice which also explained the large dropout rate.

PART III: Social Inclusion Via Computers

As mentioned in the Introduction, my interest in immigrants and their perceptions of learning about the computer for the first time has a lot to do with how they use computers to assimilate into American culture. The computer and technology use in
general has become synonymous with what it means being in a Western, developed
country. As shown above, the participants in this study strongly felt that knowing and
being comfortable with using computers would lead to their inclusion in the target-
language (TL) culture. While learning how to use computers, attending class, and finally
finishing the course did lead to a sense of accomplishment, higher self-esteem, and
empowerment, their ultimate goal and reason for taking this class was that of social
inclusion which seemed a far more difficult task.

There is a wide variety of uses and reasons for using the computer and the
Internet. Many native-speakers use it only for communicative and informational
purposes while others use it as a life-line to the world. When I asked this question to
students, I did not realize how relative this question was, i.e., what is typical computer
use? To what degree do native-speakers use computers? How can I measure this? I have
no concrete answers to these questions except to say that the way I see native-speakers
use computers is in a naturalistic way, sort of an automatic part of their daily routine.
Some use the computer for communication while others use it to order groceries or a
movie. So I correlate the ease of using the computer as a degree of how using the
computer is second-nature to them, an automatic aspect in their lives.

While the design of the study did allow me to track the progress of the five-case
profile students after the class ended in May, an extended longitudinal study with
monitoring of more participants was what was needed to really get at the heart of this
question. Nevertheless, there were some useful data obtained that gave invaluable insight
into the world of immigrant students as they developed their technology skills in the
United States. As with previous students with immigrant groups (see Warschauer, 2003a), the participants in this study, while shown how technology is used by many native-speakers, did not reach the point of using it to fully integrate with the culture, at least in the time period that they were observed. This was due to a number of factors as will be discussed below.

*Downplaying their Computer Use*

At the beginning of the course, most students felt that they were not experienced users with the computer. Many would preface that they did not have much experience with the computer but then listed the things that they did use the computer for, which was mostly for communicative purposes like email or chatting. For instance, Maria wrote in her Nicenet posting that “I don’t have experience with the computer. I used only for checking my email and use msn messenger.” Gaby also downplayed her use of computers when she wrote the following on her very first Nicenet reflective post: “This is my first time that I use the computer and I feel frustrated, and embarrassing. I am trying how to learn the computer basics, because I feel I am living in the past. It is necessary to use the computer at home, work, and everywhere you go. I feel so happy! Because I started to learn how to use the computer.” However, in a subsequent post later that day, she wrote how she used the Internet to check her bank balances. For Alan, Lana, Cindy, Laura, Zora, Erica, Karen, and Sara, they all had various degrees of daily exposure to technology due to their job as in the case of Alan and Sara; through previous schooling,
like Laura, Karen and Cindy; and through family, like Zora and Lana. With the exception of Lana and Alan whose reasons for taking the class was to improve their English rather than their computer skills, most felt that they did not have enough computer skills to improve their social and economic status in the TL culture before the class started.

Their responses to the open-ended and close-ended questions on the pre-survey also showed their downplaying of prior computer use. Table 4.4 lists the ways they mentioned how they used the computer and information technology and the percentage of how many used the computer in this way. The data for this table was collected from the 25 pre-surveys, from open-ended question #8 (See Appendix B).

<table>
<thead>
<tr>
<th>Purposes for Using the Computer</th>
<th>% of How many used it in this way</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surfing the Internet for Information</td>
<td>56%</td>
</tr>
<tr>
<td>Email</td>
<td>76%</td>
</tr>
<tr>
<td>Chatrooms/MSN messenger</td>
<td>12%</td>
</tr>
<tr>
<td>Writing Papers</td>
<td>4%</td>
</tr>
<tr>
<td>Checking Bank Balances</td>
<td>12%</td>
</tr>
<tr>
<td>Make purchases</td>
<td>12%</td>
</tr>
<tr>
<td>Writing letters</td>
<td>8%</td>
</tr>
<tr>
<td>Doing homework</td>
<td>16%</td>
</tr>
</tbody>
</table>
Table 4.4: What Participants Used the Computer For

<table>
<thead>
<tr>
<th>Application</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never used the computer before</td>
<td>24%</td>
</tr>
<tr>
<td>Paying bills on-line</td>
<td>4%</td>
</tr>
<tr>
<td>Photoshop</td>
<td>4%</td>
</tr>
<tr>
<td>On-line courses</td>
<td>4%</td>
</tr>
<tr>
<td>Scanning information</td>
<td>4%</td>
</tr>
<tr>
<td>E-cards</td>
<td>8%</td>
</tr>
<tr>
<td>Downloading games</td>
<td>4%</td>
</tr>
<tr>
<td>Visiting ESL sites</td>
<td>8%</td>
</tr>
<tr>
<td>Registering for courses on-line</td>
<td>4%</td>
</tr>
</tbody>
</table>

For self-proclaimed novice users, the participants in this study for the most part were using computers mostly for informational and communicative purposes; however, for more sophisticated purposes, only Lana listed the many other ways she used computers, including applying for and checking on the status of her Green Card, registering on-line for courses and participating in an on-line math course.

Students were also asked to circle the applications that they already used prior to attending the class which are listed in Table 4.5 in a given set of computer applications. Their answers were not very divergent from their open-ended responses in Table 4.4. A large majority, 76% of the respondents indicated that they used email and 56% surfed the Internet for news or information, which reflected what they responded in the open-ended question. A surprising 4% said they used some sort of word processing program to type papers while relatively few knew how to use PowerPoint (20%), clip art (24%), or a
paint/draw program (20%). Few used a chat program (16%) and still fewer knew what a blog program was (8%).

<table>
<thead>
<tr>
<th>Computer Application Items</th>
<th>% of Responses (out of 25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Typed a paper</td>
<td>4%</td>
</tr>
<tr>
<td>2. Used software</td>
<td>16%</td>
</tr>
<tr>
<td>3. Used clip art</td>
<td>24%</td>
</tr>
<tr>
<td>4. Use email</td>
<td>76%</td>
</tr>
<tr>
<td>5. Use the Internet</td>
<td>56%</td>
</tr>
<tr>
<td>6. Use a chat program</td>
<td>16%</td>
</tr>
<tr>
<td>7. Use a blog program</td>
<td>8%</td>
</tr>
<tr>
<td>8. Use PowerPoint</td>
<td>20%</td>
</tr>
<tr>
<td>9. Use a draw/paint program</td>
<td>20%</td>
</tr>
</tbody>
</table>

Table 4.5: Prior Knowledge of Computer Applications

Nevertheless, what was really telling of the degree they used these computer applications was when they were asked how often they used these features. Table 4.6 lists the results. Unfortunately, the open-ended question did not ask how often they used the computer applications they themselves listed, but at least this list gives an idea of the degree of use. Looking at email and surfing the Internet, which were the most used computer applications people listed in Tables 4.4 and 4.5, only 2 respondents used email daily, while 7 used it sometimes, and the majority indicated that they rarely used it. For
Internet use, only 1 person said they used it daily, while 6 used it rarely, and 7 respondents surfed the Internet sometimes (see Table 4.6).

<table>
<thead>
<tr>
<th>Computer Application Items</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4) Typed a paper</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(1 respondent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Used software</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(4 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Used clip art</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(6 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Use email</td>
<td>10</td>
<td>7</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>(19 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Use the Internet</td>
<td>6</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(14 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Use a chat program</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>(4 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Use a blog program</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(2 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Use PowerPoint</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>(5 respondents)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.6: Pre-Survey, Frequency of Computer Application Use

Thus, in addition to using the Internet for basic purposes, their frequency of use showed that they had not made the computer and its various capabilities an integrated, automatic, second-nature instinct in their lives. This is probably the reason why they downplayed their computer use. They simply were not using the computer in their daily lives because they did not make that transition from using the computer for class purposes to using it for personal ones. Their confidence with computers took a slow time to develop as the following recorded impromptu conversation with four participants in class. Toward the middle of the semester, the students were working on miscellaneous homework and class work assignments when we got to naturally talking about their comfort level with computers:

[Researcher, I] So how are we doing here? [Jorge] I don know teacher. The computer is difficult. Too much to learn. I no can type too fast. Take me a long time to find the letters. [Lucy] Ya, me too. This take too long but I like it pero es [but it] is too confusion. [R] Did you use the computer before taking this class? [Lucy] Oh, yeah…like for communicate the email. [R] Well, isn’t this homework the same kind of work? [Lucy] It too complicado [complicated] because I don’t know “attachment” before y [and] I email in Spanish so type faster. [Jorge] Ya, in Spanish can type and understand but that no help in this country. You need know to communicate with all people. [R] Why do you feel that way? [Jorge] Is no
good only Spanish. Lot of information there with English… I don’t know like eh… buy things, look for things, news, can use for bank. Is hard if you don’t know the English and to use the computer. Everyone use it. [R] How did you use the computer before this class? [Jorge] Only for look the information. [R] In English or Spanish? [Jorge] For both. [Lucy] Ya, me too, I look for information in English because everything in English but in Spanish too. [R] Mike, what about you, did you use the computer a lot before this class? [Mike] A little, to see email and look for information but I know need to learn more, lot more. [Kathy] We know there lot more to learn for computers, we don’t know too much. [R] Is this true guys? [Jorge, Lucy, Mike and Kathy] All nod head in agreement.

This conversation shows how they feel that what they did know prior to this class was not sufficient and they felt disconnected with people who they felt knew much more about computers. However, the fact that they went on the computer to check email and look for information on the Internet regardless of what language they communicated in was significant, but they did not seem to think it was enough because they felt disconnected from the culture. These sentiments mirror the same sentiments that Mario, one of my case-profile students, had with his perception of computer use. They saw that they could not take advantage of all the opportunities computers afforded people and that they only scratched the surface of what the computer and Internet could allow them to do. They seemed to blame their limited English skills although they did say that they did search English websites.
During and at the end of the computer course, participants indicated that they used computers much more often but because, as Peter put it in his post-survey, “there lot of homework to do for this class. We need to use computer much more than before to check Internet for information, work on writing about our country, and need to go to Nicenet for answer to questions.” On the post-survey (See Appendix C), Maria, Gaby, Jacky, Mario, Erica, Peter, Sara, Anna, Bob, and Lana indicated that they would continue using computers more because, as Maria put it “they are for the future.” One of the questions on the post-survey asked if they would feel comfortable registering for their fall-semester courses on-line. Out of the 9 students who filled out the post-survey, all five case-profile students, Jacky and Sara said that they would feel comfortable and five of those seven said they were definitely registering for courses. However, in September, when I looked into their records to see if these students registered on-line, Lana was the only one who had registered on-line. Mario, Erica, Anna, Bob, Erica, and Sara registered on-site. Maria and Gaby did not register for courses the following semester.

Table 4.7 shows the list of computer applications and the frequency they indicated they would use these applications now that they practiced with them for one semester. Not surprisingly, most said that they would use their email and Internet daily and often respectively. Gaby wrote in her post-survey that she would use the computer more now because “I know more about it, and I like to use,” but also forewarned that “sometime I don’t have time. Neither in home and the school.” After the class was over and I kept track of the five case-profile students in the following months, this admission proved particularly true for 4 of the 5 case-profiles.
<table>
<thead>
<tr>
<th>Computer Application Items</th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>(4 email) (9 respondents)</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Internet (9 respondents)</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. PowerPoint (9 respondents)</td>
<td></td>
<td></td>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>4. Microsoft Word (9 respondents)</td>
<td></td>
<td></td>
<td></td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>5. Excel (9 respondents)</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Message Posts (blogs) (1 respondent)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Photoshop (1 respondent)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>8. Chat Room (1 respondent)</td>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.7: Post-Survey, Frequency of Computer Application Use
The results above, while promising still show that they would only use the computer for the basic purposes of emailing and finding information, much like before they took this course. None except Lana, seemed to be inspired to use the Internet for social networking such as blogs and chat rooms. Bob, Anna, Mario, and Erica, despite having said they would use the computer more now that they learned all these new programs and became more proficient with email and the Internet, all admitted to me that they did not have time and that their current classes did not require them to use the computer so much. It is important to note that I tried emailing and keeping correspondence with them during the five months after the course ended, but Lana was the only one who kept any consistent correspondence. Anna and Bob never responded back to me, prompting me to call them in order to set up interview appointments. Anna could not afford to buy a computer and Bob said that he “couldn’t find my email.” Mario and Erica emailed me a total of 3 times between the two of them. They both admitted that they had a lot of work to do both at school and work and that they were too tired to work at the computer.

While the issue of time is certainly one factor, another factor is purpose. If they did not have a real reason to go onto the computer, they did not, as Mario confessed, “No one email me beside you. Only have junk mail and my computer so slow, I frustrated and tired. I don’t want to look at it anymore.” When I asked Mario if he strongly identifies with the computer, he responded, “No, I think I still so far. I think so, yeah. Cuz I don’t use a lot, I don’t use a lot of the computer. I mean, I use it for school but in my life, I’m not all the time in the computers. I would like to, you know, but right now I
still have problems with a little virus. They don’t let me do anything.” He admitted that before the class, he only used the computer about 10% of the time and that at the time of this interview, he was only using it 30% of the time, “because of school work.” Thus, for Mario, the computer remained a foreign object to him—something that he had to put up with if he was assigned school work, but he did not use it for a wider array of purposes at the end of this study.

Lana, not surprisingly, was the only one who kept a consistent correspondence with me via email. She also informed me how her citizenship process was going since she had been doing it all online and she kept me informed of how her online classes were going at the college. Lana, as one of the most proficient users in the class, used the computer as second-nature. She did not see it as something that was time-consuming and burdensome like the other case-profile students. She used it to the same degree as a typical native-speaker. Besides time, she had real-life specific and meaningful purposes to use the computer. For instance, she used the computer for emailing her friends, keeping correspondence with various vendors she did business with over the Internet, keeping track of her bank accounts, paying her household bills online, attending her online courses, using the online dictionary to help her with her English, manipulating and downloading digital photographs on her computer, creating e-cards, etc. Interestingly enough, while she said she would use PowerPoint more often since she knows how to use it now in the post-survey, later she admitted that there really was not any reason to use it. Her second-nature use of the computer was not a result of this class, but because of her unique background.
Discussion

There are two issues that the data illustrates about immigrants and their computer use that relate to social inclusion. First, there is the issue of purpose and the second issue is the second-hand nature or their instinctual affinity to use the computer as an intrinsic part of their daily lives. They downplayed their knowledge of the computer because they felt the computer was being used in so many other ways that how they were using the Internet and computer was of little consequence. Their use of email and looking up information on the Internet are the two activities that many beginning native-speakers use the computer for (Mossberger et. Al., 2003), however, as they and Warschauer (2003b) pointed out, it is not enough just to have an Internet account and to use technology only for informational purposes. For social inclusion to occur, immigrants “need knowledge of the languages and discourses of power and opportunities to reflect critically on whether, when and how to use them as well as opportunities to develop and use their own dialects and languages as they wish” (Warschauer, 1999, p. 177). By their own admission, Lucy, Jorge, Mike, Kathy, and Mario realized that they did not have enough language skills to fully take advantage of the computer’s capabilities. While many promised to use the computer more often, only Lana used it in ways that not only included school-related work, but also social, personal, and financial use and continued using for these purposes after the class finished. As discussed earlier, her socioeconomic class afforded her to become an expert user and integrate the computer into her daily routine. Lana also was highly literate in Russian and English, having earned her GED within a year of coming to the US. The participants in this study showed that the
relationship between education, literacy and economic development is mutual and iterative and that reading, writing and thinking skills still remain crucial for being able to use the Internet in ways to create new knowledge. Native-speakers who use the Internet for these purposes are the ones who are successful in society compared to those who only use it for entertainment, communicative, and informational purposes (Warschauer, 2003b).

As for their comfort level and using the computer on a daily, automatic basis, most of the participants during the study did not show that they had begun using the Internet other than for the purposes of the class. Even here, while many purported to use email often never connected the idea that they can contact the instructor or myself if they had a question with their homework, preferring to wait until the next class period.

Digital Inequality Revisited

As mentioned earlier in this chapter, out of the 25 participants, 18 had computers at home, but it became evident that while having a computer at home did not mean that people taking this class automatized their use of the computer on a daily basis or used the computer in ways that their native-speaking counterparts used it. As discussed in Chapter 2, Dimaggio & Hargittai (2001) had identified five outliers that that show where digital inequality exist among those who had computers and Internet access in their homes: 1) technical means; 2) autonomy; 3) skill; 4) social support; and 5) purpose. The findings in this study replicate those in Dimaggio & Hargittai, Mossberger et. Al. (2003), and
Warschauer (2003b) in discovering that digital inequality does exist but in this case it confirms that it does exist among immigrant populations which the other three studies did not solely focus on.

Before discussing the digital inequalities that existed among those who had computers at home, there were seven who had no computers at home who attended this class. Those students were, Anna, Lucy, Mike, John, Danielle, Jorge, and Jim. Out of these seven, only Anna, my case-profile student remained in the class. While she completed the class and received an “A,” her grade was largely due to hours of extra-tutoring she received from me after pleading with me to help her catch up on her work for this class. What was impressive about Anna was her unusual determination to learn all there is about computers despite having a full-time job and being a full-time student. I am not sure what the outcome would have been had the other six students been as tenacious and fierce as Anna in learning as much as they could about computers and if they had asked for extra one-on-one help. However, as discussed in the first section of this chapter, there were many reasons leading to student truancy and none of these students had the same fierce determination to learn as much as they could about computers, at least as far as I could see from the time I had spent with them.

Out of the five case-profile students, Anna’s interaction with the computer and the Internet was slow and deliberate, although by the end of the semester she did feel confident in turning the computer on and off, opening Microsoft Word and PowerPoint, and saving things into her jump drive. She still needed help in sending email messages and using the attachment feature. She also never really mastered the NiceNet classroom
management system. Thus, while she successfully completed the course, and by
successful, I mean did not drop out and handed in all the assignments, her computer skills
were still far behind from those of her remaining classmates. However, as discussed in
the previous section, for Anna, that was a milestone to complete such a course and to just
be exposed to computers.

From an emic perspective, Anna felt successful just for having accomplished this
feat. From an outsider’s perspective, the fact that she did not have a computer in her
home and that she did not have time to practice were debilitating factors. These factors
severely hindered her practice time on the computer and prevented her from really being
a part of the TL culture after the course had ended. She was at the mercy of a draining
work schedule, family obligations, and low language proficiency. In terms of Dimaggio
& Hargittai’s (2001) five indicators of digital inequality, Anna had compromised
autonomy, i.e. she was at the mercy of language lab times at school or occasionally
visiting her friend’s home to use the computer. Anna confessed that she went only once
or twice to an American friend’s house to use her computer. She waited until the
following week to catch up on assignments which was nearly impossible because every
week there was a new task to learn and so the work just kept on piling up for Anna.

In addition to compromised autonomy, she did not have a consistent or large
amount of social support, which is essential for digital equality to exist within a society.
While in this class, she did have the social support from more experienced users, this was
only once a week. When I asked if her American friend helped her at all, Anna said she
wished her friend could help her type up her homework but that like her, her friend was
very busy—“you know, every people here go to work to work, no time no time. My friend she don’t have time because she’s working.” Aside from asking her to type some homework, Anna asked her friend if she could show her how to cut and paste pictures from the Internet to a Microsoft Word document. Anna, however, spent no more than an hour at her friend’s house and she confessed she did not get much of her homework done.

Because she fell behind in her work, she heavily relied on her classmates, teacher, myself, and Alex, the TA, in order to reacquaint herself with the basic functions of the computer and the programs the class was working on in any given week. The only other time she had access to a computer was when she came to class. While she came to class faithfully every week, she always came five to ten minutes late, spent about 30 minutes figuring out what the instructor was teaching for the day, and always looking over her classmates’ shoulders to get an idea of what to do. A month before class ended, Anna had asked me to help her with her homework assignments but never stayed more than an hour since she had to go to work on Saturday afternoons. I had suggested to her that she ask Sally to customize the final project for her given her unique situation. However, she never asked the instructor to tailor the project based on her circumstances.

Her lack of access to and lack of consistent and extended time practicing on a computer along with limited social support prompted her to plead with me to help her finish her final PowerPoint and written Microsoft Word project: “Scuze me, I need help. When do you have time you can help me to type fast I can do this. Because I need more marks and I type so slow, very slow---big problem.” I helped her because I empathized
with her struggles as a refugee from Rwanda and my great admiration for her determination to learn all she could about computers despite overwhelming obstacles. Thus, in the final weeks of class, Anna and I scheduled weekly meetings lasting from 2-4 hours each to help her complete her projects for this class. While I tried to facilitate the process and make her responsible for what content she wanted to put in, she simply never came prepared to provide me with what she wanted to put in her project. Consequently, I heavily guided her through all the reports (16 in all) and created her PowerPoint project of those written reports about her country in order for her to complete the project on time.

Because she did not have the luxury of easy access and support, her computer skills remained at a very basic level focused on completing her homework assignments. Her literacy skills prevented her from being comfortable with surfing the Web and finding the information she needed to complete assignments. It took her a much longer time to complete a Web Quest compared to those classmates who had a higher literacy and computer skill level. She had a hard time searching for information and did this in a very deliberate fashion needing a lot of guidance or social support. She was able to access the Internet but only manually type given url’s, i.e., she did not seem aware that she could type in key search words in a search engine to find the same url address (which was practiced in class repeatedly). She also was able to access her email but she did not know how to send attachments and when she replied to someone’s email, it took her, according to my reflection log notes, at least 15 minutes to click the right buttons and type in the correct spaces. She also had trouble working with the bells and whistles of the software programs they were taught that semester.
Her lack of skills and literacy caught up to her the following semester where she struggled in a computer-based TOEFL preparation course I was teaching. This course required that she heavily use a timed testing program to finish certain listening, reading, writing and speaking exercises. Those attending this class already came in with intermediate to advanced computer and language skills. Anna lacked both and heavily relied on other to help her navigate the program while class was in session. She also still did not own her own computer so the only time she had access to a computer was during class time which was three hours a week. As a result, she fell behind in her work yet again, but this time, I advised her that she drop not because of her missing assignments and lack of computer skills, but because her English proficiency was simply not advanced enough to take such a course.

Finally, her purpose for using the computer was at a very basic and superficial level. At the end of the study, she maintained that she could use the computer for email, looking for information, and writing papers. Despite this, she still was not using the computer for these purposes. She confessed that she did not have anyone to email so she rarely checked email. For writing papers, she asked her teachers for permission to hand write her papers because she did not have access to the computer, thus any skills she attained in the computer class atrophied because she did not put to daily practice what she was exposed to in the course. In terms of her claiming to use the computer for information, this also proved suspect in my interaction with her. In an April conversation with her, she began asking me questions about the nursing program at Pima College. I told her that I was not the appropriate person to ask but advised her to go on-line and find
out the basics such as how long the program took, requirements, tuition, etc. She seemed hesitant but I wanted to encourage her to use the Internet in a practical way. Once she got onto the Internet, she seemed not to know where to go on from there. I told her to go to the Pima Community College Website. She then asked me what the address was. I told her she could type up the name of the college in the Yahoo search engine she was on. She did so, but it took her a little over ten minutes to type that address. Once she got onto the website, she did not know where to go on the site or what to do next. I told her she needed to scan the site for information and “play” with the site a bit to get the answers she wanted. With this, she announced that she had to go to work and that she would “try later.”

A month later, I asked how she made out looking for information about the nursing program, but she informed me she never had the chance to look up the information and that she would make an appointment with an advisor instead. This incident demonstrated that even though she could use the computer for finding information, she still preferred to find information the “old-fashioned” way. It did not occur to her to use the computer in as a natural, efficient, everyday tool to make her life easier. Instead, at the time, she saw the computer as a time-consuming hindrance to accessing the information she wanted to find quickly. She wanted someone just to tell her rather than her spending the time on the Internet. This shows that she had barely integrated the computer in her daily life. Despite her admirable determination to finish the course and learn to use the computer, this was still not enough to make her an expert computer user at the end of this class. This was due to lack of access or autonomy to a
computer, her heavy dependence on others with more computer experience to complete her assignments, and her lack of spending quality time practicing on the computer on a trial and error basis. She showed no indication that she could use the computer to create new information from researched information, or to use the Internet for social networking, increasing of economic productivity, improving of social capital, entertainment or just being a consumer. Since she did not have a computer, the issue of what kind of bandwidth she had is a moot point.

Bob was also a marginal user of technology by the end of the study and months after the class was over. Unlike Anna, however, he did have a computer at home and he had been using the computer to read the news both in Arabic and in English before this class started. His major obstacle was lack of time. Like Anna, he had a full time job as a janitor at the hospital and on his days off, he raised his three children while his wife worked. Throughout the semester, he heavily relied on support from his classmates but he never gave up. He faithfully came to every class. Perhaps what hindered his progression into a legitimate user of technology was that his computer kept on breaking on him and he had dial-up access to the Internet. These factors alone would frustrate anyone trying to improve their computer skills. This and his lack of time worked against his progression as a legitimate practitioner of technology. In terms of DiMaggio & Hargittai’s (2001) indicators, he lacked proper technical means with only dial-up access and an out-dated computer system; he had a busy schedule and hectic family life that compromised his autonomy or frequent use of the computer; his social support largely
consisted of the help he received in the classroom, and his purpose for using the computer and its technologies still remained at an elementary level after the class had ended.

More specifically, Bob showed that he had not integrated the computer in a way to make his life easier. For instance, in his mid-semester interview, he related to me that he had lost a Web Quest assignment and looked for hours trying to find the hardcopy at his home. Afterwards, he gave up and decided he would wait until next class to get the assignment from a classmate (even though the assignment was due that day). I had asked him why he did not just email the instructor for the assignment. He looked dumbfounded and said that the thought had never occurred to him. I asked him if he felt afraid of asking the instructor for the assignment, but he reassured me that he loved Sally and felt very comfortable asking her for things. He just never thought about emailing her for the assignment. This incident shows that he still did not see the computer as a means to an end. He saw it as a tool to complete assignments but not to use for practical things like emailing the instructor for a missing homework assignment.

His lack of mastery and comfort level with the computer was evident the following semester when I learned that he had been failing his high-intermediate Reading and Writing class which required typed papers. When I asked him why he was doing poorly, he just attributed to not enough time to do homework. His English teacher at the time explained to me how his typed papers lacked fundamental formatting like proper margins, spacing, fonts, etc. Bob’s lack of time, social support, and technology access all contributed to a lack of digital inequality that proved to hurt his chances of social inclusion despite his positive feelings towards computers.
On the other hand, Erica and Mario’s computer skills had improved over the course of the semester. Their comfort and ease with the computer was evident in that they successfully completed their final project, and they became accustomed to helping others who were struggling in the class, like Anna, Bob and Gaby. However, they were not yet seasoned practitioners of technology at the time the study ended. This was because both of their social support varied depending on who was there to help them and if that second party was willing to help them at the time. Their autonomy was compromised most of the time, and they too had very limited time to practice the new skills they were acquiring in class. Moreover, their purpose for using technology did not progress into using computers for a wider variety of activities. Nevertheless, when they started the class, they had had exposure to computers before so they had a foundation that Anna and Bob did not have at the beginning of the course. Moreover, while both needed help as apprentices in the first half of the course, they began to have old-timer status in that weaker students looked to them for help and support in the class.

Erica had taken a beginner’s computing class back in the mid 1980s in Mexico, but she had never practiced with computers since her arrival in the United States. At the time, she had learned how to type and learned basic word processing. Before this class, Erica used the computer to check her email from her Spanish friends and also to type up letters to students in the school where she worked. Thus, she was already a more experienced computer user than Anna or Bob at the beginning of the class; however, she admits that it was difficult for her to follow the class at the beginning of the semester: “The first time, oh my God!!! In the first time the class with the computer, I feel the
teacher is so faster.” However, as she grew to respect Sally’s teaching style, she was determined to learn about the various computer programs. As the semester progressed, she felt more and more comfortable to help her classmates, especially Anna and Bob.

Like Anna and Bob, however, her autonomy was compromised most of the time. While she had two computers in her home, her husband and three children usually monopolized the computer forcing Erica to use the computer after 10pm. Many times, she stayed up most of the night working on her homework assignments. It did not help that she had dial-up access to the Internet making it even longer to finish the work she had to do. Most of the time, she also used her half hour lunch breaks at school to work on her homework and at times, stayed at school after hours to work. She also confessed that sometimes she did not do the homework from her ESL reading and writing class in order to keep up with the work in this class. Thus, despite having computers in the home, her family’s needs seemed to come first before her own, forcing her to have access to the computer at the most inconvenient times and consequently causing her a lot of hardship. For one, whenever she was on the computer, she was exhausted from a long day’s work, school, and family responsibilities.

Another obstacle that showed Erica’s digital inequality was her limited circle of social support. Her husband and kids were reluctant to help her, and when they did, they did the tasks for her rather than having her do the task step by step by herself. She did try emailing a few students in the class, but they never seemed to respond to her. However, to her credit, she did email Sally when she did not understand something which shows how her purpose for using the computer was beginning to transcend the weekly
assignments and requirements of the class into something that was a practical, convenient tool. Speaking of purpose, by the end of this study, Erica was beginning to send and forward email jokes and Spanish PowerPoint poems to her friends and myself. However, she still did not feel comfortable using the computer and Internet for more practical purposes such as banking, registering for classes, chatting, etc. She still preferred doing these things the old-fashioned way. She also wished she had more time to spend on the computer but that her job, school, and family responsibilities kept that from happening.

Mario, like Erica, was evolving into a legitimate practitioner of technology by the end of the study although he too faced similar factors that prevented him from becoming a full legitimate participant. Mario had his own computer, but he did not have time to practice the new applications that were taught. He had a full-time and a part-time job at the time he was taking this class. Along with limited time, he too only had dial-up Internet, making it even more frustrating and time-consuming to complete the enormous amount of work demanded from this computer class. Like Erica, his social support was not consistent. At the beginning of the semester, he held an apprentice status in the classroom and he was not afraid to ask the teacher if he did not understand something. This is important to note because in one of his interviews, he mentioned how many other of the Spanish-speaking students were afraid to ask for help preferring, instead, to ask him or to not ask at all. This is what helped him become a relative old-timer by the end of class where weaker students came to him for help. Away from the school environment, he had his younger nephew and niece help him but like with Erica, they would not have the patience to explain things to him step by step and would either write down the
directions in Spanish or just do the task for him. Mario complained that he would feel overwhelmed by how much his younger nephew and niece seemed to know about computers and this would make him feel unintelligent. He admitted that he did not feel comfortable asking them for help a lot of times because he always felt that he was imposing on them. He felt self-conscious that he could not get certain computer functions, thus this kept him from asking for help. He did not contact Sally because he felt that the instructor was very busy and so he tried to figure things out for himself through the written directions Sally handed out in class.

Like Erica, Mario’s purpose for using the computer remained at a basic level. He used it for email (although he never had anyone to email to except for some people in this class), searching for information, and doing his papers. In fact, his use of the Internet and computer programs dropped in the following semester because he only needed to use Microsoft Word to write papers for his ESL reading and writing class. He had no time to use the computer for anything else. I asked him if he would ever consider registering for courses on-line or doing banking on-line and he said he would like to do that but that it seemed “too difficult” and that he needed “more time to do this things.” Thus, factors of time, access to Internet, and limited social support still impacted Mario’s status as an expert computer user who used the computer for daily and essential purposes. His digital inequality was not as pronounced as Anna’s or Bob’s, but compared to Lana, Alan, and even Peter, the youngest remaining student in this class, he did not use the computer in ways that would increase his economic prosperity or social capital.
The other remaining students who shared similar characteristics with Mario and Erica were Jacky and Sara. Jacky, a successful business owner of a salon, used the computer for email and writing correspondence for her business. She wanted to learn other ways she could use the computer to enhance her business. Since she was a business owner, she was particularly excited about learning Excel although she had mentioned to me, “my math is no good and for Excel you need to know math.” When I asked her if she saw herself using Excel in the future for her business, she replied, “Yes, is very useful, but I need more practice..maybe need more math.” In fact when I looked up Jacky’s record for the Fall 2006 semester, I had seen she enrolled in a basic algebra math course which was a good indicator that this course directly impacted her future economic well-being by being able to use a new computer program to make her business run more smoothly and make her life a bit easier rather than doing all the business calculation in her head. Sara, who was a clerical worker at a day care center wanted to improve upon her existing computer skills. She came to the class with a fair amount of comfort level using computers for word processing documents and emails. She was a quiet individual who kept to herself, but diligently followed through on all the homework assignments. Toward the end of the semester, I had asked her how she would use the computer differently after she has taken this class, we had the following conversation which I had recorded on my digital recorder and transcribed for you below:

Now, I can use more programs on computer like PowerPoint and Excel. I learn to use the NiceNet and know more about Internet by WebQuests.” [R] Will you use these skills in your current job? [Sara] Yes, I can use everything but I don’t know
well how to use Excel. I need more practice in that. [R] How would you use NiceNet at your job? [After hesitating and thinking for a minute Sara finally responded] Ehh…umm…I don’t know if we have the NiceNet. [R] Do you know what NiceNet is used for? [Sara] Well, we use in class for the three question we need to answer for the teacher but I don’t know how I can use it at work, no.

Her response about the uses of NiceNet did not surprise me as I had much earlier realized that not many people really understood its purpose. What I found even more troubling was the fact that she jumped to say she would use NiceNet at work, but upon further probing, confirmed my suspicion that she really had no idea of the usefulness of these online management systems. She, along with the few remaining students who posted on NiceNet, saw it as a place to deposit their weekly homework assignments. Because they were exposed to it in class, they automatically figured that it would be useful in their lives without really comprehending its uses other than a place to upload their weekly responses. As the semester progressed, Sara, along with Jacky, Maria, Lana, Mario, and Erica helped fellow students and eventually each other as the class became smaller and smaller.

Lana, the fifth case-profile, came to the class as an already advanced user of technology. Lana did not suffer from digital inequality but it was not this class that immunized her from it. Her socioeconomic circumstances afforded her with opportunities that her classmates were not privy to and thus her technological experience, despite her immigrant origins, were a stark contrast to her classmates who were not as fortunate as she. In the microcosm of this computer classroom, the idea of digital divide
was clearly illustrated with Lana being the “have” and the others being the “nots.” Lana used the computer frequently and for a wide variety of practical and convenient purposes. She was able to do this because unlike the other case-profiles, she did not work outside the home, although she was a full-time care giver to her two children. She had sole-access to her own computer which had DSL hook-up. This gave her the freedom and convenience to surf the Net quickly without the frustration of dial-up. She also had a lot of time to practice and “play” with the computer on a trial and error basis. Another plus was that she had great social support from her husband whom she called a “computer geek.” Her husband was always supportive and had a lot of patience with her whenever she asked for his help. Despite her expert status, she did learn many new things from this computer class which only further enhanced her enthusiasm and imagination to use the computer in new and creative ways. She was considered a role-model in this ESL computer class where students deferred to her for questions when Sally or I were busy helping others.

Because she had full autonomy, DSL access, and positive, full-time social support, she had become very comfortable using the computer for a variety of practical, day-to-day tasks such as paying her husband’s tuition bills on line, personal banking, shopping, registering for classes, applying for her Green card and passport, emailing, chatting with friends, creating photo albums and cards, and even registering for and participating in online courses. She identified very strongly with computers and felt very comfortable using them despite the fact that she had only been using the computer for three years at the time of the study! While all her classmates struggled to learn the Excel program, she found it
challenging and fun although she said she would not use it because “I’m too lazy to do budget on Excel, but I feel comfortable to do it. All you need is know good math. Sally taught us step by step. It was fun to learn.” Lana was well on her way to feeling socially included in the TL culture.

However, it is not fair to assume that one need only marry a wealthy native-speaker to be considered digitally equal with the rest of the TL society. Alan, from Russia, had come to this class an expert in information technologies specialist having been trained in his country and in this country. His previous exposure to computer education also made him an expert user. He, like Lana, was taking this course to improve his writing skills but he was also looked at as a role-model whenever the weaker students needed help. In his reflection blogs he always gave encouraging words to his classmates who often reported anxious feelings of being confused or frustrated but still wanting to learn more. For instance, when Olivia wrote in her reflection blog in the third week of classes, “I feel better than before but I still need practice and sometimes I read things in the handin paper that I have not heard it in class.” Alan gave her advice and support by writing, “Read additional material about computers could be very helpful. Try to find some books, like: How to work with MS Word or How to use the Internet. You’ll find there many interesting useful information.” Olivia never indicated or wrote back thanking him for his advice, but the fact that Alan was using the NiceNet as a means of discussion and support shows how much more advanced he was in using NiceNet as a virtual chat forum whereas the majority of the participants never quite figured out what the purpose of NiceNet was other than to log on and dutifully answer the questions that
were asked of them on a weekly basis. In another threaded conversation in the 12th week
of classes, he encouraged his fellow students to practice on the computers on campus,
writing “The best place for practise in MS Word and any other usable computer software
is Computer Lab in Pima Community College.” In another blog post, Alan asked his
classmates, “how you going to use your new knowledge?” Again, no one that he
responded to ever acknowledged him for the advice he gave.

Along with Alan, Maria also gave words of encouragement to her classmates.
Maria was a novice computer user. Nevertheless, she had a seemingly comfortable
relationship with the computer and she was able to keep up with the class syllabus. She,
like Erica, had a computer at home but her time on it was limited as she explained: “My
kids use computer all the time, so I have to work in the house, clean, cook, take kids
everywhere. So I get to practice a little at night when they go to bed…but they help me
when I have question. I want to have more time with computer, but I too busy with other
things.” When Erica wrote that “we need to practice and learning more, because now\w is
time to practice,” Maria responded by saying, “Do not be Frustrated you can get more
practice about the computer and english too.” However, Erica never responded to her
classmate’s words of encouragement nor did anyone else. Peter, the youngest participant
who remained throughout the class, could also be described as an expert user in that
frequently, he was browsing other online sites other than the ones being discussed in
class. Once I caught him looking at a site selling motorcycles, another time was a music
site with musicians, yet another time he was on Ebay. Often I would catch him chatting
with his friends in Instant Messenger or responding to email. He had mentioned that he
had used computers before in Iran in public school and he felt pretty comfortable in view of the fact that despite is limited language skills, he was multitasking while being a participant in class. On his post-survey, he mentioned that while he found Excel and PowerPoint interesting, he did not learn anything that he did not know before. In fact, his behavior in this computer-based classroom was typical behavior of young generations who tend to multitask while class is in session (Gorski, 2006).

Discussion

The findings, based on what occurred with the five-case profile students who were good representatives of those still remaining in the classroom, suggest that while most took this course to lessen the digital divide that they felt with expert, native-speaking technology users, the ways that the computer is used nowadays has far exceeded what this class could ever show them. Technology is changing so rapidly that it is even getting harder for seasoned users to keep up with all of the advances in how the Internet is being used. It is no wonder many of the participants in this study felt behind the times even though they did use it, to their credit, in practical, useful ways like banking, communicating, and consumer making decisions. In fact, since this study took place in 2006, the Web has entered a new phase, called Web 2.0 where now people are not only simply communicating, but are sharing, trading, and collaborating with each other using such interfaces as Facebook, Blogs, Wikis, and Podcasts (O’Reilly, 2009). The Web is not just a place to view information but to post and add to information already given. People can create their own personal websites, post pictures and updates about
themselves. It is used as a dating tool and a place to buy, sell, and trade material goods. It is no wonder people feel they are behind the times and this feeling is felt more among immigrants who have to deal with the language barrier on top of everything else.

The digital inequalities that the five case-profiles exhibited and did not exhibit could also analyzed through the lens of Lave & Wenger’s (1991) theory of Situated Learning. The learning dynamic is that of old-timer vs. apprentice status. Everyone in the study was a practitioner of technology in a community of practice. Out of the five case-profiles, Anna, Bob, and Gaby were still peripheral users of technology at the end of the semester. Their peripheral status in the community of practice was determined by how much time they had to practice on the computer, their unequal access to the Internet (accessing Internet via dial-up vs. DSL), various amounts of social support they received, various levels of autonomy (where and when they are logging onto the computers), and their purpose(s) for using the computer. Mario, Erica, Maria, Jacky, and Sara were emerging legitimate users of technology and they also began helping peripheral learners towards the last third of the semester. Lana, Alan, and Peter could all be seen as legitimate users of technology and relative old-timers in that they came to class with a high-degree of comfort level using the computer. They automatically incorporated the computer as part of their daily lives. Throughout the semester these students, with the exception of Peter, acted as old-timers helping the relative new-comers in the community of technology learners. Due to his immaturity and age, Peter did not participate much in helping others although he did master the art of multitasking while class was in session despite having low English proficiency levels.
Summary

This chapter addressed the ways in which computers impacted the lives of adult immigrant ESL students who have begun learning about computers for the first time. For the students who steadfastly remained in this class, learning anything about the computer, even though not perfectly, increased their self-worth and made them feel that they could participate with the larger society that seemed to use computers all the time. What was painfully evident, however, was there were overwhelming socioeconomic and sociocultural factors that led to a drastic drop-out rate. For those who successfully completed the class, only a handful seemed to have embraced the computer as something that would make their lives easier and would use the computer in such a way as to economically and socially improve their status in the TL culture.

In the next chapter, I will synthesize all of the findings presented in chapter 4 in an effort to discover what we can conclude from this research study. What were some of the limitations of the study? What are the implications of this study to ESL curriculums in the 21st century? What further research is needed in order to help teachers better understand the needs of ESL students trying to learn English and trying to become proficient in computers? These and more questions will be answered in chapter 5 as well as further questions that still need further investigation.
CHAPTER 5
CONCLUSION

Introduction:

The purpose of this study is to inform the field about how learning about computer literacy formally for the first time impacts adult immigrant learners’ lives. There are many gaps in research on this particular group of L2 students, especially in their learning about and use of technology. In addition, while there have been a plethora of studies on various L2 learner populations about how technology impacts their L2 learning, very few studies document the changes to students’ social identities as they go through the process of learning about computer literacy. By learning more about their learning process as they were exposed to computer literacy, their (un)succesful computer literacy acquisition and their evolving social identities, I hope to give more insight on this unique population of students and how best to serve their computer literacy needs. Furthermore, another goal of this study was to see how the computer enhanced their lives in terms of their being able to use it in ways that make their lives more convenient and allow them to be more integrated into the wider culture.

Unexpectedly, of the 25 participants who started, only 11 remained (plus two students who had opted not to participate in the study). This dramatic dropout rate had a profound impact on how the research questions for this study were informed in that it was an unforeseeable development that could be traced to sociocultural and socioeconomic factors. Moreover, while there were some benefits for some of the students in this classroom, such as a higher sense of self-esteem and pride and a stronger sense of identity
that they acquired some computer literacy skills, the majority of participants both those who remained and dropped out, using the computer as a means of social inclusion seemed to remain unattainable. The following section summarizes the results of the three research questions.

PART I: Summary of Findings

Research Question 1

Research question 1 dealt specifically with the sociocultural and sociopolitical factors that impacted computer literacy acquisition and an overview of the reasons why they wanted to learn about computers. The participants’ reasons for taking the computer class were quite general in the beginning. They knew that computers were an important part of the society that they lived in so they were happy just to learn about computers or learn more about computers without having any specific skill(s) they wanted to hone. Ultimately their most pressing reasons for taking this class were for social inclusion, economic prosperity, an easier life, supplementing their educational knowledge, and for improving their language skills. Their comments about feeling discriminated against and the sociopolitical pressures they were under shows that many of the participants in this study felt pressure from society that not only did they need to learn English but they also needed to be computer proficient.

As is typical of many ESL students, their reasons for taking this course were accompanied with a great deal of motivation and enthusiasm (Orem, 2000). However,
that enthusiasm and motivation soon dissipated soon after the class started with a drastic dropou
out were Norma, Cindy, Laura, Karen, Lucy, Kathy, Jorge, Jim, John, Mike, and Danielle. All these students, at one time or another had complained about not being able to follow the class or understand what was expected of them or complained that it was too confusing. These findings reinforce Warschauer’s (2005) and Egbert’s (2005) conclusions that L2 learners need sufficient literacy to begin a computer literacy class.

There were cultural factors that impacted computer literacy acquisition. Anna and Bob came from an oral tradition where they were used to receiving information aurally instead of in written form. This was particularly true of Anna who insisted on getting information about nursing classes the traditional way, i.e., talking with someone face to face, instead of using her emerging search and navigation skills on the Internet. Despite completing a number of Web-quests in this class that sought to develop their navigation skills so they could get pertinent information, Bob and Anna did not apply those skills to things that were immediately relevant and important to their lives. For instance, Anna preferred to ask me about the nursing program rather than searching the college’s website. Bob voiced a strong preference for aural instruction rather than reading the worksheets that Sally so meticulously prepared. However, since he only had aural class instruction 3 hours per week, he really did need the worksheets to help him use the various software programs they were learning for any given week. His reluctance to use the worksheets while he was at home to practice what he learned in class retarded his computer literacy acquisition.

The reasons why they came to this country could also help explain how quickly they learned about computers. Anna, Bob, Zora and Sara were all political refugees,
fleeing from persecution or involuntary immigrants, as Ogbu (1992) refers to them. Thus they had all this past baggage they had to deal with on top of getting acculturated into the culture by learning its language and customs. Anna and Bob’s experiences were documented extensively in terms of how difficult it was to keep up with the class. Zora who had to drop the class because of illness readily admitted that she had help from her children to do her homework. Sara was the only one who was able keep up with the class and keep up with the assignments, but she had had prior experiences with computers and her clerical position at a daycare also allowed her to fairly easily acquire computer skills.

Erica along with Jacky, Maria, and Gaby all came from cultures where men had the upper-class status, an expected behavior called “machismo.” Machismo is the idea that women had a secondary status to men and allowed every double standard to exist. They came from a cultural background where women were expected to be satisfied with what they had and not strive to better themselves through education. Erica suffered greatly from this as she divulged her personal strife with her husband who did not support her attempt to better herself through education. Jacky, Maria, and Gaby also mentioned while they were doing their PowerPoint presentations in class how machismo affected their identities as women. These ladies also came from a culture that focused on community and staying together, thus they were prone to stay in Spanish-speaking cliques in their neighborhoods, at work, at school and at church. In fact, Erica had become close friends with Jacky and Maria.

As a result, these ladies, despite the many years they were in the US did not acculturate as much or as fast as Lana who seemed to dismiss her culture and her country
of Moldova entirely to fully embrace American culture, mentioning Moldova “didn’t give me anything—no education, nothing.” Lana’s case was unique when one considers how quickly she learned not only English, but also the computer in the relatively short time she was in the United States. In addition to sociocultural and individual factors that contributed to this accelerated learning curve, Schumann’s theory of Acculturation is also relevant in her case. She had no emotional attachment to her home country and culture. Having experienced a tough childhood and early adulthood with emotionally abusive male-figures in her life, her psychological detachment distanced her and made her all the more willing to embrace her new country. Her embrace of this country and culture was evident in everything she did, from her mannerisms, her use of American slang, her preference to seek out friendships with Americans and internationals and her dislike to keep company with Russian-speakers. It is quite alarming and disturbing to think that in order for immigrants to fully integrate into society must completely dismiss their own culture. Thankfully, most immigrants “often learn to resist and develop ways of coping for survival and identity exclusive of assimilation” (Lee & Sheared, 2002, p. 31).

Predictably, there were socioeconomic factors that contributed to the acquisition of computer literacy or lack thereof. Bob, Anna, Mario, and among the dropouts, Jim, Jorge, Mike, John, Kathy, Norma and Lucy, all came from a working-class status where work as basic survival became more important than their computer class which impeded their progress in this class. Anna could not afford a computer and did not have the time to practice when she was in the proximity of a computer. Bob was also a busy man who had a full-time job and on his days off, had to take care of his three children while his
wife worked. Moreover, he had a computer that did not have a lot of memory so it was quite slow and kept breaking down; therefore, making it frustrating for him to even complete the simplest of tasks. Mario came to the class with some computer experience, but like Anna and Bob, was juggling two jobs and had no quality time with the computer he had at home. His computer was plagued by viruses that kept him from completing his assignments. At one point, his nephew had to erase his entire hard-drive but managed to save Mario’s final project from this class. However, his responsible work ethic, his 15 years living in this country, and his higher language skills allowed him to be successful in completing the requirements of this class. Erica, while educated and coming from a middle-class background, complained of not having time to practice on the computer because of her hectic work-schedule and responsibilities to her family. Finally, Lana’s upper-class status as the a white-European woman married to a successful American psychiatrist allowed her all the benefits and affordances of being able to stay home and practice as often as much time with the computer. She also had the complete support of her husband. Thus, for Lana, being on the computer all day was fun. Her higher socio-economic status also allowed her to be able to concentrate on learning the language in a relatively short amount of time. Lana, who did not finish high school in Moldova, was in the country for only three years yet she managed to obtain her GED and was in the process of getting her citizenship which she felt was going to be “a piece of cake.” Her proficiency in English was one of the highest in the class and she had no problem understanding the teacher or keeping up with the pace of the class. In contrast, Erica, who had just passed the citizenship test, felt it was the hardest thing she had to do. In
contrasting these two case-profiles, their L1 educational background seemed to play a secondary role in their success in this class. Erica had a bachelor’s degree in her country whereas Lana did not finish secondary school.

Another observation made about the participants in this class that determined whether or not they would become computer literate was their ability to “do school.”

It became increasingly apparent that students were socialized differently in their L1 culture in home, social, and school contexts that differed with what they were experiencing in their L2 culture. For instance, while many students had complaints about how the class was being conducted (most of whom dropped the class), they did not dare voice their dissatisfaction with the teacher. This is typical behavior of ESL students (Leki, 2001), particularly less proficient students who would rather show their dissatisfaction through lack of attendance rather than voicing a suggestion of how to make the course more appropriate for them. The lack of L2 voices in the classroom is related to power and equity (Norton, 1995; Bourdieu, 1977) and the right to speak. According to Bourdieu, the right to speak is established by those who have a perceived higher social status and have “the power to impose reception.” In other words, those who speak regard those who listen as worthy to listen and those who listen regard those who speak as worthy to speak.

When most L2 students identify themselves as immigrants, they may often feel like second class citizens. This creates in them an exaggerated sense of gratitude towards anyone who does teach them any new skill. With this sense of gratitude, however, comes humility which makes them reluctant to voice any discontent they may have with the
teaching methods or teacher. They tend to think that the teacher knows better than them and this keeps them from saying anything. In this class, it became evident that students did not feel comfortable telling the teacher what was and was not appropriate for them. They respected the teacher to the point where they did not feel their voices mattered and humbly accepted the challenging tasks the teacher gave them. These were inequitable relations of power that existed between the students and the teacher which affected their computer literacy acquisition. These power relations mostly affected the lower proficient students, most of whom dropped out. Tollefson (1995) argues that these subtle but present power relations are common in ESL settings. These findings support similar findings in Norton’s 2001 study of non-participation of ESL students where students non-participation manifested in their dropping out of class without telling the teacher.

Research Question 2

The second research question investigated how immigrant learners’ social identities changed because of their learning about computers. I expected to see a great amount of positive effects from students learning formally about computers for the first time and their perception of the benefits of knowing how to use the computer and Internet. In regards to the positive impact computers had in students’ lives, all of the remaining 13 participants were happy that they stayed and kept up with the class and felt that what they learned would benefit them in the long-run. All felt empowered that they were able to use various software programs, use more features on their email accounts, and navigate the Internet better. From their post-surveys and Nicenet postings, they generally agreed
that they felt more confident with using the computer and ten of the thirteen said they
would want to take more computer classes in the future. What resounded from the data
was that learning how to use the computer increased their self-esteem.

They added a vital component to their identities by being able to say they have
computer skills. Having these computer skills translated in their being more accepted in
society. For example, twelve responded that they felt they could apply for jobs that
required basic computer skills, with one saying he felt he needed more English skills and
more computer practice. In sum, the participants felt that the skills they learned in this
class would not only help them have a more equitable and similar background with
fellow native-speaking students who already knew how to use the computer to do
homework and other projects, but would also prepare them for jobs that require computer
skills. No matter how well or poorly they did in this class, participants felt that their
social standing, at least in the immediate college community, was ameliorated and that
their job perspectives had also increased because they took this class.

The mere fact that they took a computer class, practiced on the computer in a
meaningful way, and even bought flash-drives elevated their social standing in the
community from that of computer-skills deficient immigrants to immigrants with
ambition and drive to ameliorate their lives. For instance, four of the case-profile
students mentioned that their bosses, American friends, and loved ones commented on
how impressed they were at the types of things they were learning to do on the computers.
Bob had mentioned how not even his American boss knew how to send attachments with
email. So in this case, his position of power was elevated slightly because he knew
something about the computer that a native-speaker did not know how to do. Mario had proudly explained how he got what his boss was doing when he was working with Excel and was able to help his boss with adding up some figures on the program.

Nevertheless, there were a few students at the end of this class who felt they needed to learn a lot more, like Jacky, Lana, Peter, Anna, and Bob. However, Mario was the most vocal about his feelings of inadequacy. Rather than feeling empowered and good about himself that he had successfully completed the course, his social identity was compromised. In Mario’s case, he still felt inadequate compared to others whom he saw were much better equipped and well-versed in using the computer. His feelings of inadequacy were all socially constructed in that when he interacted with his friends and family members who used the computer in ways he only dreamed about, he started putting himself down and thinking he was not as intelligent as other people. He blamed it on his lack of language literacy skills which consequently led to his dis-investment in computers and re-investment in his ESL classes after the course ended. His dis-association from his imagined self, i.e., his being able to participate fully with a community of computer users, was brought on by his constant comparing of himself to the ideal model of a computer user. In reality most computer users are not as tech savvy as Mario believed them to be. Nevertheless, by comparing himself to a highly proficient user, he marginalized himself from the community of practice due to the overwhelming distance he felt between himself and the “ideal” computer user which explains his minimal use of computers after the course ended. Moreover, Mario’s intense spirituality made him socially and psychologically detached from both his country and this country.
As a result, he felt like an outsider in both countries and felt that he was not as intellectually superior as everyone else. He blamed his age for this, but to some extent, without his realizing it, his emotional detachment from the society he is living in affected his self-perception of his abilities in language and computer skills.

Research Question 3

The third research question dealt sought to investigate if in fact adult ESL learners used the computer in the same way their native speaking peers used the computer and whether or not they felt their experience in this course would set the foundation for them to feel integrated with the larger culture. While on their post-surveys, 9 students indicated that they would use email, the Internet, PowerPoint and Microsoft Word more often, they did not venture to say that they would use the computer in different ways and this is because there was no real reason or purpose for them to do so. For instance, they had learned to post messages, like a message board, through Nicenet, but they did not have a real reason to post messages in cyber space after the class ended. Many proficient users of technology in our culture seem to have embraced this capability of the Internet where they can post information about themselves and can learn and “get to know” others anonymously, for instance. This has become a cultural phenomenon, whether good or bad, it is an inherent characteristic of many avid computer users. Based on the post-class interviews with the case-profile students, all with the exception of Lana, did not use the computer or information technology as much as they had while class was in session. When I asked Bob, Mario and Erica (Anna could not afford to buy a computer) why they
were not using the computer as much, they generally responded that they lacked time and energy to use the computer in this way. Basically, life got in the way. This indicates that they had not incorporated the computer as a tool that would make their lives easier or at least enhance it, but rather, saw it as a time-consuming entity needed to be practiced, learned, and figured out. They did not see the computer as something productive, like Lana viewed it. Had they learned how to chat on-line, for example, they would not see a reason to do so outside of class.

Perhaps it was unrealistic to think that a computer class would give them a real-life purpose to use the computer in ways that could make their lives easier or in ways the target-language culture uses computers. Their purpose or lack of purpose, in this case, indicates their limited amount of integration into the wider society. Sociocultural factors such as class and status in the community and language proficiency all came into play in how purposeful a computer becomes to an individual and how they incorporate it in their lives. This was evident if one compares Anna, Bob, Mario and Erica with Lana whose sociocultural status was higher. Unfortunately, race also seemed to be a factor. Lana was the only white case-profile student. Coincidently, Peter and Alan who were also white were quite proficient with computers. Whereas Anna and Bob where Africans and Erica, Maria, Jacky, Gaby, and Mario were Latinos. This factor adds to the troubling fact that computer inequality exists among races.

The data collected from this study reaffirm the conclusions from Dimaggio & Hargittai’s (2001) study illustrating that the digital divide is not simply an issue of those who have or do not have access to technology, but is much more multifaceted. Through
the five case-profiles featured in this study, the ways in which computers are used are unequal and reflect the social divide among classes and races. Dimaggio & Hargittai identified five variables that illustrate digital inequality: 1) technical means (inequality of bandwidth); 2) autonomy (whether users log on from home or at work); 3) skill (knowledge of how to search for or download information); 4) social support (access to advice from more experienced users; and 5) purpose (whether they use technology to increase economic productivity, improvement of social capital, or consumption and entertainment, etc.).

Anna, Bob, Mario, Erica and Lana all represented different races and classes that affected the technical means, autonomy, skill, social support and purposes for using the computer. Anna, Bob and Mario were from working class backgrounds that made it difficult for them to be able to afford the best technology and best Internet access. Anna was the only one from the remaining students who did not a computer (Lucy, Mike, John, Danielle, Jorge, and Jim also had no computers, but they had dropped out early on). Maria, Gaby, Jacky, and Sara also fell in this category of students. They were all working full-time and had very little time to practice as a result. Also, they had very limited social support at home and at school, they did not have constant one-on-one attention so they had to figure things out by themselves. Finally, their purpose for using the computer were limited and remained limited even after the class ended. While they felt satisfied that they completed the course and felt they knew how to use software programs and information technology, they had not integrated the computer into their
daily lives after the class ended either because they had no-time, they were too tired, they
had no reason to use it after the class ended and/or a combination of these factors.

Erica, who was from a middle-class background and had more computers in the
home, still had problems of autonomy since her children and husband used the computer
most of the day, forcing her to use it at night when she was tired. She also lacked the
social support but was able to connect with a classmate via email whom she connected
with and who turned out to be a neighbor with. Lana, who was white and had an upper-
middle class status, had more financial capital at her disposal. Her husband provided
great social support and patience in teaching how to use computers and Lana used the
computer for a number of day-to-day activities prompting her to say “the computer is my
life.” Lana had the technical means (high-speed Internet access), unlimited autonomy
(she had her own top-of-the-line laptop), skill (patience to practice and “play” with the
computer and learn how to use various programs on her own or with support from her
husband) and purpose (she used the computer to pay bills, keep track of household
accounts, on-line classes, economic productivity and consumption, information, creative
uses-photos, paint, e-cards). With her, Alan and Peter also came into this class with a
either a high-degree of computer use knowledge and/or an ease of using the computer.
For Alan, he studied computers in Russia and was a computer technician. Peter, the
youngest member, was familiar with all the social networking and email sites and I would
catch him regularly browsing those sites while following Sally’s class.

This study confirmed Mossberger, Tolbert, & Stansbury’s (2003) and
Warschauer’s (2003b) conclusions that technical skills development has taken a backseat
to provision of computers. For instance, while Bob and Mario had computers in their home, they lacked the skills, both technical and linguistic skills to use the computers to seek and create knowledge. Before coming to this class, Anna, Bob, Mario and Erica lacked the skills they needed to take advantage of technology. What was disturbing was that even after they developed various levels of computer proficiency, they still did not take advantage of the technology the way that Lana had done once she learned how to use various Internet and software programs. There is no overarching reason why Anna, Bob, Mario and Erica did not take to the computer; however, what was evident was their literacy skills in English followed by their lack of time to practice the new skills they learned.

On the other hand, this study contradicted Mossberger et. al.’s (2003) study in that amount of education seemed to play a secondary role in how well students learned the computer. Lana, who did not have a post-secondary education thrived on computers whereas Erica, who had a bachelor’s degree, struggled at the beginning and while she became more confident and better in using the computer, her degree of expertise was not as advanced as Lana’s. Bob and Anna had technical school training after high-school and yet their computer skills remained lower than the other three students. Perhaps the reason education was a secondary factor was that cultural and identity issues took precedence over educational background in this case.

While in the short term, taking a computer class and developing their computer skills seemed to give a boost to Mario, Erica, Anna, and Bob’s social identities, their computer use remained minimal after the class ended. Since I did not track the remaining
students’ use of the computer after the class had ended, I cannot say with certainty if Jacky, Maria, Sara, and Gaby used the computer more frequently and for a wider array of purposes than the four case profile students; however, since their socioeconomic and cultural backgrounds are similar, it is not unreasonable to assume that they did not use the computer more frequently or for more purposes than before this class. As for Anna, Bob, Mario and Erica, they had an initial investment to take this computer course in order to get access to symbolic resources in the wider social context. However, their investment seemed to fade once the course ended because there still was no opportunity or reason for them to use the computer and information technology in ways that native speakers seemed to use the computer. Compared to Lana, Alan, and Peter, who were seasoned users of technology, Mario, Erica, Anna and Bob used the computer sporadically and only for informational and sometimes communicative purposes, but not in the creative and practical ways the other three used the computer.

Different uses of global information and networking technologies are developing so exponentially, that it is very difficult for even seasoned computer users to keep up. Instant messenger, for instance, is quickly becoming outdated as virtual arenas like Woo’s (Web-enhanced video-game-like chat-rooms), Wikis, podcasts, vodcasts, social bookmarking, social networking are becoming the “in-thing.” In addition, operating systems are constantly being updated every few years forcing the user to figure out new updated versions of Microsoft Word or PowerPoint, or even how different things are stored in one’s hard-drive. Therefore, it was not surprising that the participants in this study felt that they needed to learn more about computers because they were aware either
through television or from relatives or their own children that there were even more uses for the computer that they did not touch upon in this class.

**PART II: Pedagogical Implications**

Before collecting data for this research study, I had assumed that mostly positive results would come out of the study and that I would reinforce the proposition that all ESL programs require a computer literacy course. While the results for this class were dismaying given the over 50% dropout rate, it does not mean that computer literacy should not be taught since there is an increasingly high demand for these types of courses among ESL students (Zhao, 2005). ESL programs should offer language literacy courses with a computer component, but they should not use technology as curriculum as Sally had decided to do for this multilevel skills class. While structuring her class worked well for a half-dozen or so of the remaining students in the class, the rest of the remaining participants were still very much in need of language skills and depended heavily on others to help them complete the tasks for this course.

Can students with low level literacy skills afford to wait until their literacy skills become high enough to deal with the copious amounts of language flood the Internet offers? This study showed that solely focusing on computer literacy while putting off teaching language skills proved to be a disaster. ESL students already come to these kinds of classes with much enthusiasm regardless of language ability, but in order to keep that level of motivation, they need to feel that they can complete the computer tasks and
not feel that their low language proficiency prevents them from doing so. That is one of the reasons why many of those in this study dropped out. In fact, this particular course was offered in previous semesters with fairly successful rates of enrollment beginning to end according to the college’s internal class record system “Banner” (retrieved from www.mypima.edu, July, 2007). I took the initiative and contacted the previous instructor for the course and she had used materials that were specifically made to teach language literacy skills explicitly through the use of computer programs like Microsoft Word and user-friendly, pre-chosen websites provided in the textbook that did not overwhelm students with low literacy levels.

Since this was a multilevel classroom, what may have worked is making projects that were collaborative-based, pairing and/or grouping relative old-timers (more experienced computer users with higher language skills) with apprentices (those with little to no computer experience and/or low literacy levels) rather than making everyone complete individual projects and assignments. It is understandable that some students and teachers for that matter may not feel comfortable using a collaborative-model of learning, but inevitably teachers will need to deal with a multilevel language proficient class which would most likely be the norm since most ESL programs cannot afford to create individualized computer literacy courses for beginning, intermediate, and advanced level students.

It has also become apparent that after this course ended, not many of those who completed the course used the computer and Internet for much else other than how they were using it before they began this class, i.e., for information searches and email. This
was understandable given that just as it is hard making social connections face-to-face, it is equally hard to start socially networking online or what have you if one is not guided into the right direction. Today, according to Fields (2009), email and research are still the top reasons why people use the Internet, but more and more Americans are spending triple the amount of time at social networking sites like Facebook and MySpace prompting advertisers to spend 119% more on advertising on these sites (Nielsenwire, 2009). For this particular group of ESL students, one of their main reasons for wanting to learn computer literacy was for social inclusion. Email and web quests are not the ideal ways to be socially connected. Therefore, teachers should try to introduce a social networking site to help students socially connect either to one another in the classroom by using a NiceNet-type classroom management system or using ESL-based social blogging sites for outside classroom connections offered through Dave’s ESL Café, for example. Sally did use Nicenet in her classroom, but its purpose to create a community of learners soon became lost because of the various other assignments that needed to be completed for this class, but it was a step in the right direction. I realize that including such a component in one’s classroom raises concerns of whether there is enough time or whether valuable literacy activities would be overlooked. However, electronic literacy is becoming just as important as traditional literacy and ESL students, no matter the level need to be introduced to it in some form or another in order to feel connected to the outside world (Warschauer, 1999). This could be in baby steps. It does not have to be all at once.
Speaking of baby steps, another pedagogical implication of this study is that educators should introduce tasks one or a few steps at a time and encourage repetition of those same steps in order for students to master a computer skill. Repetition of task is key to help make novice students feel comfortable. Students need to have successful experiences of computer learning to spark a desire to identify with certain groups and to situate themselves in imagined communities where they can be seen as successful computer users. Another pedagogical implication is to make students’ inquiries a teachable moment by encouraging them to use information technology. What was interesting to observe from this class was that some students who asked for information from the teacher or myself did not think of using the navigation skills they learned through their various web quest assignments in class in order to get the information they needed. They wanted to get the information aurally instead of through reading. While this is understandable depending on the literacy level of the student, it is recommended that teachers make a point to have students practice the skills they learned in a way that is immediately meaningful to them. For example, when Anna wanted to know about the nursing program, instead of orally giving the information to her, I should have insisted she look on the school’s website to get the answers she needed. Another example would be if the student wanted ask another student or the teacher something, encourage them to email their request, just to get them used to using the technology as a “tool for living” rather than a “tool for doing homework.” While most of the students in this study were familiar with using email before they took this class, they did not make the connection that they could use it to contact the teacher for help with their homework assignments.
Finally, another pedagogical implication from this study shows a dire need for ESL curriculum designers at the community college level to integrate study skills objectives into their courses and to have educators clearly explain academic-level expectations of students. Many of the participants in this study were not prepared to handle ESL courses as professional students. This was not their fault since many of them have never attended a post-secondary school and/or it had been years since they attended school. Educators must keep in mind that L2 learners have been socialized much differently in their L1 culture as was apparent in this study. According to Lee & Sheared (2002), there is often a mismatch between L2 students’ learning experiences and expectations with what is expected of them in the community college classroom “resulting in a gap between the learner’s native culture and the school culture” (p. 30).

As explained earlier, the ESL curriculum at Pima was a bit fragmented in that the curriculum was geared towards teaching basic communication skills rather than academic skills. This circumstance manifested itself in many of the participants becoming overwhelmed by what was expected of them in this computer course. However, I do understand the pressures Pima had to deal with in its effort to accommodate a large influx of students coming from adult education contexts that do not have as rigorous standards as community college programs. As with anything worthwhile, taking the time to integrate just a few academic objectives in each required ESL course would then socialize ESL students in how to “do school” in the American educational system, so when they take electives like a computer literacy course, they will not be so overwhelmed.
PART III: Limitations of this Study and Future Research

Conducting ethnographic research in semester-long college courses may be considered by some researchers to be somewhat short for qualitative research. This short timeframe may have negatively affected the results of the study. For example, the short timeframe may not have been long enough for any significant effect or impact to have occurred. While I could keep track of the five case-profile students for a period of five months after the course ended, I could not follow up on any other of the participants due to IRB restrictions. Thus, more research is needed to understand the learning processes this particular group of students goes through while learning about technology and which pedagogical strategies are best suited to aid these learning processes in order to replicate and/or refute the findings of this study.

More research is also needed in the area of teaching English and computer literacy skills simultaneously to this particular group of students. The challenge that I found collecting this data was that most of the students in this study had very low literacy skills and that is why few qualitative studies exist with low-proficient speaking students. While I was able to collect rich data from Mario, Erica and Lana who were quite fluent, it was hard to get Anna and Bob to expand on their answers or to understand the questions I asked of them. Speaking about data collection methods, I found it at times difficult to observe the subtle identity changes taking place among the participants as they interacted with computers. I could only go by my observations, actions, and their comments to me. The electronic reflections were one way I had hoped to tap into their internal reflections about technology, but unfortunately, many of their reflection blogs petered out by the end
of the semester and those who had higher fluency skills did not write very much for me to analyze their thoughts. Most of their responses were “I learned a lot today” type responses, but nothing too more in depth than that. Most of the participants had low literacy skills which prevented them to express themselves more and/or were very slow typists.

I admire the narrative diaries that Norton (2000) used to delve into the power and identity issues her five case-profiles dealt with while learning English in and out of a classroom setting. I would have liked to use this data collection method but realized the limitations I had, as described above. I also strongly suggest that future research into the area of identity and computers use videotaping to capture specific interactions rather than videotaping the entire class, which I had done but was not usable because of poor sound quality. It is invaluable to be able to capture the original interaction for further analysis and interpretation.

The five case-profile students who volunteered to be interviewed were selected based on their willingness and not by the researcher’s preferences. It was difficult to get a larger pool of students to agree to get interviewed and therefore, I did not have a great deal of choices with whom to work with closely. Luckily, the five students who participated were from diverse enough backgrounds to make it somewhat representative of the entire class. Another limiting factor was the high number of student dropouts. While the class began with 25 students, 13 remained and of those 13, 8 came on a regular consistent basis. This makes it difficult to generalize to other populations of students. The researcher had to rely on the case-profile students’ experiences since more time was
spent with them. Only 9 of the 13 came to the last class and filled out the post-survey. Their largely positive responses could have been a result of being relieved the class was over and feeling satisfied that they completed the course where so many had dropped out.

Another limitation of the study is that the researcher was not the regular classroom teacher and actually provided help to more students who may not have received as much help if I were not there. The one-on-one attention given to them may not have been as well-met in the context of a larger group where there was only one teacher to help 20 or more students. Even with the researcher and a teaching assistant, many dropped out. The fact that so many students required my attention took me away from taking quality fieldwork observations. There were data lost because I was working with individual students which may have affected the findings had I strictly been a participant observer. In addition, my intrusive involvement with Anna in terms of me helping her finish her project also affected the findings. Had I not helped her, Anna would have most likely dropped out of the class. Her drive and ambition, despite her not having a computer, made for a unique situation which I felt needed to be explored. However, this help was at the expense of Anna not becoming as proficient as others due to the time pressure to finish all the semester-long worth of work she could not finish due to her lack of time to practice on the computer.

Finally, I would like to see future research focusing on a large-scale quantitative study comparing native-speaker and non-native speaker computer use and controlling variables such as age, language ability, and socioeconomic status to better ascertain how these two groups use computers and whether or not there is a difference and if so, why
there are such differences. This would help us better understand the digital inequities that exist among races and would serve as a sounding board to balance these inequities.

Conclusion

While this study has contributed to the body of research into how computers affect L2 learners from a social, economic, and cultural perspective, many more questions have been raised regarding how best to serve L2 students’ language and computer literacy needs simultaneously. Among the questions raised are: How essential is it for ESL students to first have a strong grasp of English before embarking on electronic literacy? Could computer literacy be successfully taught in conjunction with language literacy? Should language literacy courses have to teach L2 students academic study skills and academic expectations? If it is not the ESL teacher’s responsibility, whose responsibility is it? Can such computer literacy courses have a lasting impact on L2 students’ identities or are their positive feelings just a short-term afterglow with no real lasting effects? For all their concern that they are not keeping up with the times by being computer illiterate, why didn’t the participants in this study make the time to practice the skills they learned in class? Is it an uphill battle trying to teach adult immigrants English and computer literacy with all the other life responsibilities they need to juggle?

I realize that what I have proposed may seem impossible or unreasonable to some ESL practitioners. As a final message to educators who are wondering whether or not they should be incorporating computer literacy into their curricula at every level, I will
share my personal experience on this critical issue. I cannot imagine teaching language literacy without requiring students to use the computer to access the information they need. Just as we should not teach grammar structures out of the context they are used, reading, writing, listening and speaking skills should be taught with the expectation that students, no matter what their level, use the computer to supplement and enhance their literacy development. I have been teaching beginning and advanced ESL courses for the past ten years and most recently, I have required beginning level students to log onto the WebVista Blackboard site our school offers as a teaching platform. It only took one-hour of step-by-step instruction of how to turn on the computer, show them how to logon using a password and student ID and to navigate their class’s website. On our Blackboard site, I included web links students are required to visit and complete homework assignments on. I post all their homework on the calendar, leaving me precious time to teach other skills in class rather than giving them time to copy the homework manually in their notebooks. I have added a computer literacy component but have not made it the central focus of classroom instruction. Doing just this has raised the self-esteem of many of my beginning level students who had never even imagined that they could use the computer in this way or did not expect to use a computer in a beginning grammar class. As I mentioned, computer literacy takes time to learn depending on the literacy level one has, but with gradual integration and the pledge of fellow colleagues to also reinforce computer use in their own classrooms, computer literacy for even low-proficiency students can be attainable and is one step further to having them feel part of a larger culture that highly values computer literacy skills.
APPENDIX A

STUDENT PARTICIPANT CONSENT FORM

Research Project:
Technology’s Sociocultural and Linguistic Impact on Adult Immigrant English as a Second Language Learners.

I am being invited to participate voluntarily in the above research project because I am enrolled in the ESL 75 course entitled “Computer Technology to Develop English Skills” at the Downtown Campus of Pima Community College.

This project is being conducted by Eleni Saltourides, a doctoral student at the University of Arizona, to study how I learn to use computers and how using the computer will help me learn more English.

I will be asked to complete a 30 minute pre-and post-survey at the beginning and the end of the semester during class time, allow copies to be made of my written class assignments and projects, and allow my interactions in class to be videotaped. In addition, based on my response to the pre-survey, four to five people may be asked to provide three 45-60 minute, audiotaped interviews during the semester.

The total cost to me for participating in this study is one hour of class time for filling out the pre-and post-survey. If I am asked by Eleni to be interviewed, the additional cost will be up to but will not exceed a total of three hours of out-of-class time for the entire semester. I will not be compensated for my participation.

Please check what you would like below:

_____ I have no problem with being interviewed and tape-recorded three times in the semester if I am chosen. I understand each interview will last up to an hour and will be at whatever time is convenient for me.

_____ I have no problem with Eleni Saltourides video-taping me and my interaction with the computer and that she may quote any statements I make throughout the project in the video-taped sessions in her final dissertation project.

_____ I DO NOT wish to be interviewed and tape-recorded three times in the semester.

_____ I DO NOT wish for Eleni Saltourides to video-tape me and my interaction with the computer in this class and I DO NOT wish that she quote any statements I make throughout the project in the video-taped sessions in her final dissertation project.
I know that the results of my surveys, the video-taped observations, and/or tape-recorded interviews will use the false name I have provided below so that it can protect my privacy. I also give permission for Eleni Saltourides to publish any findings from this research project as long as my true identity is protected.

The benefits for me to participate in this study is that I will become more aware of how my life is impacted by learning how to use the computer and how empowered I will become once I learn how to use the computer on my own. The benefits of this study to the ESL teaching field will let other teachers know how best to instruct ESL learners and the value such a computer course has on ESL students’ lives.

Finally, I know that there is little to no physical, emotional, or psychological risk to me by participating in this study. I am free to decline or withdraw from the project at any time without causing bad feelings or having my grade affected for this class.

Contacts:
I can get more information from Eleni Saltourides, Ph.D. Candidate in SLAT, at (520) 621-7271, or her mentoring professor, Dr. Robert Ariew at (520) 621-7349. If I have questions about my rights as a research subject, I may call the Human Subjects Committee office at the University of Arizona at (520) 626-6721.

______________________ This is the false name I would like Eleni to use in her paper.

Student’s Signature: __________________________ Date: ______________

Researcher’s Signature: ______________________ Date: _____________
APPENDIX B

PRE-CLASS SURVEY

Background and Prior Knowledge of Computers
Paper-Based

Short Answer:

Name: ________________    Age:____________  Date:______________

Where are you from? ______________________

How long have you been in the United States? ____________________

How long have you studied English in your country? ______________

How long have you studied English in the United States? __________

List the classes you are taking THIS SEMESTER, including this one, ESL 75.

List the classes you have already taken at Pima Community College. Also, please list the final grade you received for each class.

Class: ___________________________    Grade: ______________
Computer Literacy:
1. I like to use computers.      Yes  No
2. I use a computer at home.      Yes  No
3. I need help to use the computer.      Yes  No
4. I know what a mouse is.      Yes  No
5. I know what a web page is.      Yes  No
6. I know what the Internet is.      Yes  No
7. I know what a chat room is.      Yes  No
8. I know what surfing the Internet is.      Yes  No
9. I think computers are useful in school.      Yes  No
10. I think computers are useful for work.      Yes  No

Circle the things you have done with computers:
typed a paper  send email  used a blog program
use software  used the Internet  used PowerPoint
used clip art  used a chat program  used a draw/paint program

Frequency of Computer Application Use:
How often have you done the following things on the computer? Put an “X” where appropriate. If you do NOT know what something is, do not answer.

Rarely  Sometimes  Often  Daily
1. Type a paper
2. Use software
3. Use clip art
4. Use email
5. Use the Internet
6. Use a chat room
7. Use a blog program
8. Use PowerPoint
9. Use a draw/paint program
Language Skills:
Please rate your English by circling your response:

1. My writing skills are:
   Poor  fair  good  very good  excellent

2. My reading skills are:
   Poor  fair  good  very good  excellent

3. My speaking skills are:
   Poor  fair  good  very good  excellent

4. My listening skills are:
   Poor  fair  good  very good  excellent

Open-Ended Questions:

1. Do you think computers can be useful in language class? Yes  No  Why or why not?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2. Do you think knowing how to use computers is important? Why or why not?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3. Why are you taking this class?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4. Do you feel you are at a disadvantage because you do not know how to use a computer? Yes  No  Why or why not?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
5. What are your goals for this class? What do you really want to learn from this class?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

6. Do you like to read in English? Why or why not?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7. Do you like to write in English? Yes  No  Why or why not?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

8. If you use the computer at home, work, or school, for what kinds of things do you use the computer for? (Do not answer if you never used a computer before, please indicate that you never used a computer before below)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPENDIX C

POST-CLASS SURVEY
(Computer Based)

Part A. Computer Literacy:
1. I like to use computers.      Yes  No
2. I use my computer more at home now.    Yes  No
   I don’t have a computer._____ (mark with X)
3. I still need help using the computer.                Yes  No
4. I know what a mouse is.      Yes  No
5. I know what a web page is.     Yes  No
6. I know what the Internet is.     Yes  No
7. I know what a chat room is.     Yes  No
8. I know what surfing the Internet is.    Yes  No
9. I will take more computer classes.               Yes  No
10. I will use computers on most days.         Yes  No
11. I will buy a computer because of this class.       Yes  No
   I already have a computer. _____ (mark with X)

Part B. Circle the things you know how to do on computers:
- type a paper
- send email
- use software
- use the Internet
- use clip art
- use a chat program
- save a paper/project
- use PowerPoint
- use a draw/paint program

Part C. Future Frequency of Computer Application Use:
How often do you plan on doing the following things on the computer? Put an “X” where appropriate. If you do NOT know what something is, do not answer.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Rarely</th>
<th>Sometimes</th>
<th>Often</th>
<th>Daily</th>
</tr>
</thead>
</table>
1. Use email       |
2. Use the Internet|
3. Use PowerPoint  |
4. Use Microsoft Word |
5. Use Excel       |
6. List other applications |
Open-Ended Questions:

1. Explain your experience with computers before taking this class, including which programs you were already familiar with.

2. What is your job now?

3. Do you like your job? Why or why not?

4. If you don’t like the job you have now, what kind of job would you like to get?

5. Look at item number TWO in Part A. If you answered “YES” to this question, please explain why you think you use the computer more?

6. Do you think you will use the computer more often now as a result of taking this class? Why or why not?

7. For what kinds of things will you use the computer after this class? Why?

8. How confident do you feel about your computer knowledge after taking ESL 75? (Use a percentage %. Explain.

9. Has your attitude about computers changed after taking this course? How and why?

10. Explain which language skills, that is, reading, writing, listening, speaking, have or haven’t improved? Why do you think so?

11. Do you feel comfortable taking a computer class with native English-speaking students as a result of this class? Why or why not?

12. What did you find easy to learn in this class? Why?

13. What did you find hard to learn in this class? Why?

14. Did you accomplish your goals for this class? Why or why not? Explain what you want to learn more about computers.

15. Why did you continue with this class after the first few weeks of hardship and chaos?

16. Do you feel comfortable applying for a job that requires computer experience? Why or why not?

17. Will you be registering for courses in the Fall 2006?
18. Would you feel comfortable registering for your fall semester courses or any future courses on-line? Why or why not?

19. Could you share any story or experience that happened to you (in or outside of class) during this semester that made you feel confident and proud about your computer skills and knowledge?
APPENDIX D

QUESTIONNAIRES ON CASE-PROFILE STUDENTS

PRE-INTERVIEW

Name: ____________________  Age: _____________        Date: _________

1. Tell me about yourself, your family and your friends.

2. What brought you to the United States?

3. How long have you been studying English in this country?

4. What courses have you taken up until now?

5. Did you study English in your country?  If yes, how long and in what context?


7. What do you like about the United States? Why?

8. What don’t you like about the United States? Why?

9. Do you feel homesick for your native country? Why or why not?

10. Do you feel comfortable living, working, and going to school with Americans? Why or why not? Give examples.

11. Do you work?  What is your job? How long have you been at this job? Do you like it? Why or why not?

12. Do you work with Americans? Describe how you feel working with Americans.

13. Do you take classes with native-speaking Americans at this campus or another campus? If yes, how do you like that? Do you interact with Americans in these classes? How is that going for you?

14. Tell me how you feel about computers.

15. Describe your experience with computers up until this point. What did you use them for?
16. Do you have a computer at home? When did you buy it? Why did you buy it?

17. If you answered yes to #16, why do you feel it was necessary for you to have a computer?

18. If you answered yes to #16, do you get help using the computer? What kind of help? Why do you ask for help?

19. If you answered yes to #16, for what kinds of things do you use the computer for?

20. Did you have a computer in your country? If no, why not? Could you live without having a computer in your country?

21. Do you think learning how to use the computer is important? Why or why not?

22. Do you feel that Americans use computers more than in your country? Why or why not?

23. Why are you taking this class?

24. Do you feel you are in this course because of socioeconomic pressures from American society? Would you have ever taken a course in your country if it was offered? Why or why not?

25. What do you hope to learn from this class this semester? What are your goals for this semester?

26. Do you think this class will help you improve your English?
APPENDIX E

MID-TERM INTERVIEW

Name:______________  Age: _________  Date:______________

1. How’ve you been? What’s going on with you?

2. How’s this class going?

3. Describe to me what you have been learning?


5. Describe your relationship with using the computer at this point.

6. Do you feel your language ability interferes with how successful you are with using computers?

7. Do you feel you are accomplishing your goals thus far?
8. Have you noticed any social or economic benefits (outside the classroom setting) from being able to use the computer?

9. Has learning to use the computer affected your work in your other classes? Explain.

10. If you have a computer at home, do you still get help from others? What kind of help?

11. Do you think you can figure out how to do things on your own at this point without the help of anyone from your family?

12. Do you still feel you need to know a lot more about how to use the computer? If yes, what do you feel are your major strengths with computers at this point? What are your major weaknesses? Do you think you can fix your weaknesses by the time this course finishes?

13. How are you doing in the class tests? Do you feel you understand all the computer terms you learned thus far?

14. Are you still motivated to learn all there is to know about using computers? Explain.
APPENDIX F

EXIT-INTERVIEW

Name:_____________________           Age:_______________    Date:______________

1. How’ve you been? How are you doing today?

2. How do you feel about computers now? How have your feelings about computers changed from January until now?

3. How do you feel about the class? Did you accomplish all the goals you wanted to?

4. If not, what do you feel you still need to learn about computers and why is it important for you to learn these things?

5. Do you feel this course improved your English-language skills? Explain in what ways.

6. Have you noticed any social or economic benefits (outside the classroom setting) from being able to use the computer?

7. What are your future English language plans?

8. What do you plan to do with the computer skills you have learned from this class?

9. For what kinds of things will you use computers for from now on?

10. Do you plan to take additional computer courses? If yes, do you feel comfortable taking courses with native-speakers? Why or why not?

11. What did you especially like learning about computers this semester? Why?

12. What activity or skill on the computer did you feel was not worth learning or was a waste of time? Why?

13. Can you use the computer all by yourself at home without the help of anyone? If no, why do you feel you still need help?

14. Do you feel you now have a strong background in computers?

15. Do you think you will at some point in the future apply for a job where computer skills are necessary? If so, when do you plan to do this?
16. What computer skills do you feel were the most important learned in this class and why? How will you use this skill outside of this class?

17. If the teacher were to ask you to be her teaching assistant next semester to help teach this course, would you feel comfortable doing this? Why or why not?

18. How has this course help prepare you for academic life?

19. How has this course help prepare you for a future career?

20. Is there anything else you feel you want to tell me about your experiences with this class and especially with learning how to use computers?
Course name and number: ESL 075
Section code (CRN): 26038
Class Meeting Days/Times: Saturday 11:10am-1:50pm
Class Location: Library Building 155 - Language Lab (LB155)
Instructor: XXXXX
Office hours/availability: before and after class and by appointment
Phone/voicemail: 520.390.4780
Email address: XXXXXX
Class website: XXXXXXX
First day of class: 01/21/06
Add date: 01/23/06
Drop/Refund date: 01/30/06
Withdrawal deadline: 04/10/06
Final exam date: 05/13/06
Last day of class: 05/13/06
Campus police: 206-7087

Course Description
Instruction and practice using computer technology to enhance English skill development. Includes computer operation and applications, oral and written English communication skills, and application of technological skills to enhance personal English development. Also includes utilizing ESL software, ESL websites and the World Wide Web.

Performance Objectives:
1. Demonstrate basic computer operation and applications.
2. Apply oral and written English communication skills.
3. Apply technological skills to enhance English development.
Course Outline:

I. Computer Operation and Applications
   A. Computer basics (Computer components; Loading/accessing software; Software applications such as ESL and word processing)
   B. Electronic messaging (Establishing an e-mail account; Accessing electronic messages; Composing/editing electronic messages friendly letter/note format - proof-reading - attachments)
   C. Surfing the internet (Search engines; Initiating and narrowing web searches)
   D. ESL websites and chat rooms

II. Oral and Written English Communication Skills
   A. Contextualized vocabulary (Computer components; The language of the Web)
   B. Oral and written communication activities (Skimming/scanning websites for information; Written responses to website prompts; Student critiques of website quality; Interactive listening activities on the Web; Critical literacy skill development - analyzing the veracity of accessed information)

III. Application of Technological Skills to Enhance Personal English Development
   A. Creating multi-media supported presentations using technology
   B. Giving multi-media presentations

Required Text Book(s)
None.

YOU WILL NEED A FLOPPY OR A JUMP DRIVE IN CLASS EVERY TIME!!!!!

ADA Compliance Statement
Pima Community College is an equal opportunity, affirmative action employer and educational institution committed to excellence through diversity. Reasonable accommodations, including materials in an alternative format, will be made for individuals with disabilities when a minimum of five working days advance notice is given. For the general public, please contact the PCC information line at 206-4500 (TTY 206-4530); for PCC students, contact the Downtown Campus Disabled Student Resources Office at (520) 206-7286.

Class Preparation and Policies

Preparation for Class:

In order to adequately prepare for class you must
- do your homework and all other assignments before class
- bring all required materials
- actively participate in class

Philosophical Principles and Expectations of Student Conduct:
• In order to maximize your learning, it is expected that you and your class members use English at all times in the classroom. You should also find as many opportunities as possible to practice English outside of the classroom.

• Risk-taking is essential in language learning. Do not be afraid to make mistakes. It is a natural part of the learning process.

• Language learning takes several years. Be patient with your progress.

• Everyone has something to contribute, and each person’s opinions and ideas are valid. When someone else is talking, all others must listen quietly.

• Use group work (authorized by the instructor) and class discussions as opportunities to learn from, as well as help one another. If you wish to learn something in particular, or if you have any general suggestions, I will be happy to incorporate them into our course.

• During quizzes or tests, students are not allowed to communicate with each other in any language. During a quiz or test, students CANNOT use the course textbook, the course workbook, class notes, dictionaries, or translators.

• Students must do their own work. Cheating and plagiarism will result in the awarding of an “F” to all people involved for the assignment or test in question. Academic dishonesty, including cheating and plagiarism is a violation of the Student Code of Conduct. You can find the Student Code of Conduct in the Student Handbook, (available at the Information Desk in the CC Building). Students are expected to help maintain a classroom environment that is conducive to learning. Ringing cell phones are disruptive to the learning process. They must be turned OFF or on VIBRATE during class. Troublesome behavior will not be tolerated (chattering, sleeping, making offensive comments, excessive talking out of turn). Should it be necessary, disruptive students will be asked to leave the class. Further action will be taken in cases of repeated violations.

Class Attendance
I will record attendance for every class session. For more information see Assignments section.

Assignments
Attendance and Class Participation:
Attendance and class participation are mandatory. Together they are worth 20% or 200 points of your final grade.

• I believe that if you miss a class, you have a good reason. However,
(1) you will need to find out what you missed and complete any homework that was assigned by the next class session. Also, the homework that was due on the date of your absence is due at the beginning of the next class session. THERE WILL BE NO MAKE-UP EXAMS, so please take this into account if you will be absent on an exam date.
(2) After 3 absences, your attendance and participation grade will be reduced by two percentage points for each additional absence. Your overall course grade may also suffer.
It is impolite to arrive late to class. If you do so on a regular basis, your grade will be negatively affected. If you arrive late, you are responsible for speaking to a fellow classmate about any announcements, homework, or other information that you missed. The same policies apply to leaving class early.

In-class assignments will be graded and reviewed and given a participation grade.

Homework:
Homework will include exercises provided to you by the instructor. Homework will require the use of a computer. Homework will be collected and graded at least once a week. Homework will be evaluated based on completion. We will go over homework together as a class or an answer key will be provided by the instructor. You are expected to have completed the work before coming to class. Homework needs to be turned in electronically. Homework is worth 20%, i.e. 200 points, of your course grade.

Reflections:
After each class session, you will write a reflection on nicenet.org. Follow the instructions in nicenet for the specific reflection questions. You should write at least 100 words. After you post your own message, you are also required to respond to three other classmates. The postings are worth 20% or 200 points of your final grade.

Project:
During the course of the semester, you will complete a project presentation about your home country. This project will consist of subcomponents to be completed each week in different formats. These subcomponents are worth 20% of your grade, for a total of 200 points. During the last few weeks of the semester, you will present your country to the rest of the class using the computer and you will provide your classmates with a handout, and your teacher with the Notes Pages. This presentation is worth 20% or 200 points of your final grade.

Grading Procedures and Policy
Participation, Attendance and In-Class Activities - 20% -- 200 points
Homework Assignments - 20% -- 200 points
Web Reflections - 20% -- 200 points
Project - 40% -- 400 points

for further information consult: http://www.pima.edu/%7Ecoadmissions/gradpol.htm

Student Withdrawal "W" Grades
Students may withdraw from class without instructor permission and without incurring any grade penalty until April 6, 2006. This grade may be requested by the student only during the first two-thirds of any session and may be given by the instructor on or before the official census reporting date to students who have ceased attending class before that date. Students
who stop attending class after this date may receive a grade of "F."

**Incomplete “I” Grades**
You may request a grade of "I" only if all of the following conditions are met: you have earned at least 70% of the available points at the time of your request, your request is made in writing to the instructor and is received by the instructor on or before April 30, 2006, and the instructor gives permission to do so.

**Instructor Withdrawal after the College Withdrawal Deadline “Y” Grades**
You may request a grade of "Y" only if all of the following conditions are met: extenuating circumstances made it impossible for you to finish the course, your request is made in writing to the instructor and is received by the instructor on or before April 30, 2006, and the instructor gives permission to do so.

**“AU” Audit Grades**
Auditing a PCC class means that you enroll, attend and do work for the class but do not expect to receive credit or a grade. To audit the class, you need the instructor’s permission and signature on an audit request form from any campus admissions office. This form and appropriate payment must be returned to the admissions office for admission. An audit registration cannot be completed until the first day of class. You must complete your audit registration by the end of the add period for the class you wish to audit. The instructor is not required to grade assignments submitted by students who are auditing the class.

**Final Grades**
For privacy and security reasons, instructors are advised NOT to give grades over the telephone or via email unless the student signs the exception box on the acknowledgment page of this syllabus. Students who wish to check grades may call MAX 2000 at 206-4880 or may access grades online using Banner Online at [http://bannerweb.pima.edu](http://bannerweb.pima.edu)

**Class Calendar**
Important university events can be found at the link below:
[http://www.pima.edu/keydates/spring06.shtml](http://www.pima.edu/keydates/spring06.shtml)

**Disclaimer:**
The instructor reserves the right to make changes to the syllabus and will notify students of those changes in class.

I am looking forward to a fun semester with you!!!!!
<table>
<thead>
<tr>
<th>Day</th>
<th>Skill</th>
<th>In-Class Activity</th>
<th>Homework</th>
<th>Project</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>01/21/06</td>
<td>Turning on computer</td>
<td>Create an Email account</td>
<td>Send an email to class introducing yourself</td>
<td>Your country’s geography and climate: find information online and summarize it in an email</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Opening programs</td>
<td>Create a CMS account</td>
<td>Buy a saving device</td>
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<td></td>
<td>Program names</td>
<td>Opening Email account</td>
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<td></td>
<td>Opening</td>
<td>Sending an Email account</td>
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<td></td>
<td>Making group lists</td>
<td>Making a CMS account</td>
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<td>Using CMS</td>
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<td>Searching the internet</td>
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<td>01/28/06</td>
<td>Discussion on Message Board</td>
<td>Discussion Board</td>
<td>Write a report about the United States, include pictures using internet image search</td>
<td>Research information about the people in your country, type it up, state where you agree and where you disagree and why</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Searching Internet</td>
<td>“why are you taking this class?”</td>
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<td></td>
<td>Using Word</td>
<td>First Web Quest</td>
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<td></td>
<td>Typing in Word</td>
<td>Researching the United States, include</td>
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<td></td>
<td>Changing Font, size, color, alignment,</td>
<td>pictures using internet image search</td>
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<td></td>
<td>and format</td>
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<td></td>
<td>Insert pictures</td>
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<td></td>
<td>Finding pictures online</td>
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<tr>
<td>02/04/06</td>
<td>Sending Emails with attachments</td>
<td>Discuss what skills should be taught in this class</td>
<td>WebQuest 2: Pima Community College</td>
<td>Research information about religion and ethnicities in your country;</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Replying to others on the Message Board</td>
<td>Email the report about your country to your peer-reviewer</td>
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<td></td>
<td>Track</td>
<td>Peer-review using</td>
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<tr>
<td>Date</td>
<td>Task Description</td>
<td>Assignment Description</td>
<td>Notes</td>
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</tbody>
</table>
| 02/11/06   | Accepting and deleting changes                                                   | Accept and delete the changes suggested by your partner  
Email your report to your peer reviewer  
Check the facts online in your partner’s report | Web Quest 3: The University of Arizona  
Research the political system and the current political situation in your country and write a report: give your opinion on the political issues |
| 02/18/06   | Power Point slide formatting and design Inserting pictures into Power Point Chatting | Pick a university you would like to study at or a company you would like to work for  
Research important information about the university/company  
Make a power point presentation | Power Point about university/company – prepare to present in class  
Research the economic situation in your country and write a summary report; discuss the currency, the economic system, the economic system |

The Pima website track changes, also make comments on information you thought was new or interesting  
Email back the report  
write a report including pictures, also describe how the living of these people together works on a daily basis.
<table>
<thead>
<tr>
<th>Date</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>02/25/06</td>
<td>Turn your Power Point into a written report in Word and identify a reason to send an e-card</td>
</tr>
<tr>
<td>03/04/06</td>
<td>Plan a move and make a table with all the expenses</td>
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<tr>
<td>Date</td>
<td>Activity</td>
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<tr>
<td>03/11/06</td>
<td>Using excel to store data</td>
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<tr>
<td>03/18/06</td>
<td>SPRING BREAK</td>
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<tr>
<td>03/25/06</td>
<td>Using excel to calculate things</td>
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<tr>
<td>Date</td>
<td>Topic</td>
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<tr>
<td>04/01/06</td>
<td>Effective Presentations</td>
</tr>
<tr>
<td>04/08/06</td>
<td>Printing</td>
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<tr>
<td>04/15/06</td>
<td>Making Handouts</td>
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<tr>
<td>04/22/06</td>
<td>Reviewing the skills</td>
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<tr>
<td>04/29/06</td>
<td>Peer-Review of Presentations</td>
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<tr>
<td>05/06/06</td>
<td>Presentations</td>
</tr>
<tr>
<td>05/13/06</td>
<td>Presentations</td>
</tr>
</tbody>
</table>
APPENDIX H
CLASS HANDOUTS

The Computer

This semester we will work with PC platform computers and Microsoft software packages.

Computer:
- There are two different operating systems: Apple and PC
- Computers are either desktops or laptops
- Computer components: screen/monitor, mouse, keyboard, hard drive, floppy drive, CD/DVD drive, USB port, speakers.
- You can save files on your computer, on floppies, on CDs, DVDs, or on jump drives.
- You can connect to the internet using a dial-up connection, broadband/cable connection, or a high-speed connection. Some computers can connect to the internet using a wireless network.

Software:
- Word processing software: Microsoft Word
- Presentation software: Microsoft Power Point
- Spread Sheet: Microsoft Excel
- Web browser: Internet Explorer

Using the computer:
- To turn on your computer, click on the on button of the computer; make sure the monitor is also turned on.
- Computers that are used by multiple users often require you to log in. In the lab, the log in name is “language lab” and the password is “Lb155”
- Click on the start menu to see a selection of all available programs. Click on the program you would like to use to open it.
- When you want to save something, click on file, then say save as, choose the appropriate destination (floppy, removable drive,…) and give it a name.
The Internet: Searching the Internet

The internet, or the world wide web, is electronic information that is searchable.

Web Site:
- A virtual place that holds information that is accessible for other people through the world wide web.
- Every web site has a web address, i.e. a url. You must type this url into the address field and then hit enter to go to a web site.
- Some larger web sites such as for example the University of Arizona’s web site, have their own search engine, i.e. a feature where you can search for information within that web site.
- The Url of a web site often gives you information about what kind of web site you are dealing with: edu = education; gov = government; org = non-profit institution;
- The url also gives you information about the location of the web site, e.g. de = Germany; ca = Canada; fr = France; UK = Great Britain.

Search Engines
- To locate information on the internet, you can use a search engine.
- The two main search engines that we will be using in this class are: yahoo.com and google.com
- You can either look information, by simply entering a key word in the search field and then hitting enter.
- The more specific your search term, the better your chances of finding what you are looking for.
- You can combine search terms with (AND) and the engine will look for both words.
- You can also look for pictures by clicking on Imagine and then entering a search term.
- You can also look for audio files by clicking on Audio and then entering a search term.

The Internet for Communication:
- There are various forms of communication that you can use online:
  - Chats
  - Instant Messenging (Yahoo, MSN, AOL, ICQ, Trillian, …)
  - E-Cards
  - Message Boards
  - Course Management Software (Web Ct, Blackboard, D2l, …)
Email

E-mail or electronic mail is a form of writing letters using the world wide web. It is a fast, global form of communication.

Internet/Email provider
- There are different email providers, i.e. companies that give you an email address. Some of these are free such as hotmail.com, msn.com, yahoo.com, ….
- You need an internet provider in order to get even access to the free email providers. If you would like to have internet at home, you can use one of these companies: AOL, Qwest, Cox, Earthlink, …

Email account
- Once you have an internet and an email provider, you can set up an email account, i.e. your personal mail box and address.
- Go to yahoo.com
- Click on Mail.
- Click on “Sign Up for Yahoo”
- Fill out the form and click to agree
- Make sure you write down the Yahoo ID you selected.
- My Yahoo ID is: ________________________________
- Your email address will be youryahooid@yahoo.com; i.e. JohnPaul@yahoo.com
- Make sure you write down the password.
- My yahoo password is: ________________________________
- The next time, you want to log into your account: go to yahoo.com, click on mail, put in your yahoo ID and your password and click sign in.
- Always remember to log/sign out at the end of your session.

Email address
- Your email address is your login + @+ the name of the provider, i.e. JohnPaul@yahoo.com
- My email address is: ________________________________

Sending emails
- To send an email click on send or compose
- In the To line type the address of the person you would like to send a message to
• If you would like to send a message to more than one person, you can put the address after each other using a comma and a space between addresses
• You can also use the cc (copy) and Bcc (blind copy) lines for additional addresses, if there is a primary and secondary recipient
• In the Subject line write the key issue that you will be discussing in your email
• Type the message in the text box
• Click send when you are done
• If you want to spell check the message before sending it, you can click the ABC button

Receiving and responding to emails
• To read emails click on mail, and then click on the message, you would like to read.
• To reply to the sender, click on reply, type your message, and then click send.
• To reply to all senders, click reply all, type your message, and then click send.

Organizing your email
• You can save emails
• You can delete emails
• You can create an address book in which you save all the email addresses of your friends
• You can create folders, so that you can organize your saved emails

Attachments:
• Sometimes you want to send files to yourself or to others
• To send a file, follow the same procedures as if you are just sending an email
• Click on Attach files
• Click browse and find the file you need, click to open
• Click to attach files
• Then click send
• To open an attachment, click on the attachment and then either say save or open – if you save it, you will be able to look at it again later, if you just open it, it will be gone once you close it.
NICENET INSTRUCTIONS

What is Nicenet?
During the course of the semester we will be using Nicenet.org as our course management software. On this web site I will post important information and you will discuss issues.

How to set up Nicenet:
- Open up your Internet browser (i.e. Internet Explorer, Firefox Mozilla, Safari, Netscape,…)
- Put the following url into the address bar: www.nicenet.org and hit enter.
- On the right side there is a section called New Users Start Here. Click on “Students -> Join a Class”
- **Step 1: Enter the Class Key: 6Z535Z2EZ9, i.e. type the class key in the box and then hit enter.**
- Create a Username for yourself. I recommend using the same as for your email. Type your username in the box and also write it on this piece of paper in exactly the same spelling you used online. My Username is: _______________________________
- Then create a Password for yourself. I recommend using the same password as for your email. Type your password in the box and also write it on this piece of paper in exactly the same spelling as you used online. My Password is: ___________________________
- In the box for your email address, enter your email address.
- Under email confirmation, type your email address one more time.
- Type your first name in the first name box.
- Type your last name in the last name box.
- Hit enter.
- Click on Finish Registration

Logging onto Nicenet:
- Open up your Internet browser and go to www.nicenet.org
- On the right side there is a section called Current Users Log In
- Type in your Username (see your notes above) and type in your Password (see your notes above)
- Click log in

Conferencing:
- To join in on any of the discussions, click on conferencing and then on the appropriate topic.
- **To Post a Message**
  - Read the prompt your teacher provided
  - Select the text
  - Copy the text
Click Post New Message
Paste the text into your new message
Type your response
In the Subject line write your name and the topic of your post
When you are done, click on post message

To Reply to a Message
Open up the Message
Click Reply
Enter your text in the reply field
Click Post New Message

To Read other People’s Messages:
Simply click on the messages

Link Sharing
Here we can share links to helpful web sites.

To add a topic
The links are organized by topic. If you feel that there is a topic missing, you can add a topic, by clicking on “Add a Link Topic”
Then type the name of the topic and hit enter.

To enter a link
Click “Add a link”
Choose one of the topics on the pull down menu
Give the link a name
Type in the url
Give a brief description of the web site.
Then Click on add link

To follow a link
Simply click on the link, you would like to see.

Documents:
Here we can share documents with each other.

Accessing Documents:
To access documents that have been posted online, click on documents.
And then click on the document you would like to view.

Posting Documents:
To post documents, click on documents.
Click on “Add Document”
Give your document a title
Copy and paste the information into the text box
Click Add Document

Class Schedule:
Here you can see a list of the important events of this class.

Classmates:
To find a list of your classmates, click on classmates. You can see their email addresses here.
**Personal Messages:**
This software also allows you to send private messages to your classmates.

- To read a personal message:
  - Click on View Personal Message
  - You can then read the message, delete it, reply to it, forward, or save/archive it

- To send a personal message:
  - Click on Send Personal Message:
  - Check the name of the person(s) you would like to send the message to
  - Enter the topic of your message in the subject line
  - Enter the text of your message in the text box
  - When you are done, click send Message

**Log out:**
When you are done with your Nicenet session, don’t forget to sign out of the program by clicking log out

    Good luck with using Nicenet!!!!!!
Using Microsoft Word

Opening a Document
- Go to the Start Menu
- Go to Microsoft Word
- Go to File
- Go to Open Document
- Select a Document to open
- When you are done with it, go to file and either choose exit if you are done working with the program or close if you wish to continue working with the program.

Starting a New Document
- Go to Start Menu
- Go to Microsoft Word
- Go to File
- Go to New (or click Ctrl + N)
- Choose Blank Document
- Make sure you save the document as you are working on it.

Saving a Document
- Go to File
- Go to Save (or click ctrl + S), or Save As
- Choose a destination for your file; for a floppy choose my computer, and then floppy; for jump drive choose my computer and then removable drive
- Click on Save
- Make sure you save often while you type
- Make sure you remember where you saved it to!!!

Typing in Word
- Simply click where you want to start typing
- And type away
- Do erase something click on it, and then say delete or click on backspace.
- For a new line, hit enter
- To make an indent click on tab
- To make a space hit the space bar.

Changing Font
- The most neutral font is Times New Roman.
• If you want to be more exciting, change the font.
• Highlight the text that you wish to change
• Go to Format
• Go to Font
• Select a Font you like

**Changing Font Size**
• The most neutral font size is 11 or 12 point
• If you want to be more exciting, change the font size.
• Highlight the text that you wish to change
• Go to Format
• Go to Font
• Select a Font size you like – the higher the number the bigger

**Changing Font Color/Style**
• The most neutral font is black and normal.
• If you want to be more exciting, change the font color and style.
• Highlight the text that you wish to change
• Go to Format
• Go to Font
• Select a Font Style and Color you like
• Short cut keys: italics = ctrl + I; bold = ctrl + b

**Changing Alignment**
• The most neutral alignment is left aligned or justified. For titles it is centered.
• If you want to be more exciting, change the alignment.
• Highlight the text that you wish to change
• Go to Format
• Go to Alignment
• Select an Alignment you like

**Changing Paragraph Format**
• The most neutral paragraph format is single spaced. Many term papers have to be double-spaced.
• Highlight the text that you wish to change
• Go to Format
• Go to Paragraph
• Select a Line Spacing you like

**Changing Page Set Up**
• The most neutral page set up are margins between 1 and 1.25 with the orientation as a portrait.
• If you want to be more exciting, change the page set up.
• Go to File
• Go to Page Set Up
• Change the Margins
• Change the Orientation

**Insert pictures**
• To insert a picture from the internet:
• Right Click on the picture
• Say Copy (ctrl + C)
• Go to your word document, click where you want to have the picture
• Right click and say paste (ctrl + V)

• To insert a picture from Clip Art:
  o Go to Insert
  o Go to Picture
  o Go to Clip Art
  o Search for a picture
  o Double click on it to insert it

**Homework**

- Post your new reflection on Nicenet
- Your country's geography and climate: find information online and summarize it in an email to SentaG@u.arizona.edu
- Write a report in Microsoft Word about the United States, include pictures using internet image search.
- Research information about the people in your country, type it up in Microsoft Word, state where you agree and where you disagree and why. You may want to include pictures.
ESL 75: February 4, 2006

Today’s Plan

• Review
• Sending Emails with attachments
• Replying to others on the Message Board
• Right-click for spell check
• Important short cut keys
• Track changes in Microsoft Word
• The Pima Website

What you Should Have Done So Far:

• Emailed the class an email introducing yourself
• Emailed me a report of the geography and climate of your country
• Written a report in Word about the people in your country which included some pictures
• Posted your journal entry 1 and 2
• Responded to 3 classmates on journal entry 1 AND journal entry 2
• Written a report about the US including pictures

Skills So Far

• Turning on the computer
• Opening programs
• Program names
• Opening Email account
• Sending an Email
• Making group lists
• Using Nicenet
• Reading on the message board
• Searching the internet
• Using Word
• Typing in Word
• Changing Font, size, color, alignment, and format
• Insert pictures
• Finding pictures online
Daily Procedures
- Turn on your computer – make sure both monitor AND computer are turned on; then Log on
- Open two windows in Internet Explorer
- Open Microsoft Office Word
- Go into your Email account
- Go into your Nicenet account
- Read the emails you received from your classmates
- Read the postings on Nicenet (Post your message if you have not posted it; Post your replies if you have not posted them)

Review Activity
- Put in your savings device following the instructions on the Savings Device sheet
- Open your Word document about the United States
- Search for two more pictures on yahoo image search
- Change the font to Comic Sans & Change the font color in the titles to blue
- Change the alignment of titles and subtitles to centered and everything else justified
- Make the paragraph formatting double spaced
- Save your document

Sending Emails with Attachments
- Everybody write your email address on a piece of paper.
- You will now receive the email address from another person – if you get your own, let me know.
- Go into your email and email your essay as an attachment (follow the instructions on the Email sheet) about the United States to the email address provided on the piece of paper.
- Open the attachment you received and save it on your savings device under the name of the person who sent it to you.

Track Changes in Microsoft Word
- Microsoft Word has a wonderful editing function to help people work on assignments together.
- Open your partner’s report and give your partner feedback on the language and content of his/her writing using the editing function in Word.
- Use the instruction sheet “Track Changes in Word” to help you.

While you are Making Changes
- There are some useful short cut keys and tools that can help you:
  - If something is underlined in red, you can right-click for spell check
  - If something is underlined in green, you can right-click for grammar check
  - For a list of short cut keys, see the sheet “Keys and Tricks”

Email the Assignment Back
- Save the document with all the changes you made on your savings device.
- Go into your email again and email the document as an attachment to the email address provided.
- Open your original report and save it on your savings device as “YournameUSreportwithfeedback”

Accept and Reject Changes
- Now open your report.
- Go through the changes made by your partner and accept and reject the changes, as you see fit.
- Respond to the comments and questions posed by your peer reviewer.
Turn in the Assignment

• Now turn in the assignment, by emailing the file to me as an attachment at SentaG@u.arizona.edu

Pima Community College Web Site: http://www.pima.edu

• Look up information (contact information, hours, course descriptions)
• Find classes to take
• Register online
• Look up your grades

Web Quest

• Look at the Web Quest sheet provided to you by the instructor.
• Complete the assignment.
• Type the answers in a Word Document.
• When you are done, email the document to the instructor at SentaG@u.arizona.edu

Reflection

• Go to Nicenet.org
• Open the Journal Entry 3
• Respond to the prompt (Select the text written by your instructor; Click Ctrl + C; Click post new message; Click Ctrl + V; Type your name in the subject line; Type your answers in the text box; Click Post message when you are done)
• Reply to three of your classmates (Read your classmates’ postings; Click reply to respond to one of your classmates.)

For Next Time

• Complete the Pima Community College Web Quest
• Complete the postings on Nicenet.org
• Research information about religion and ethnicities in your country; write a report including pictures, also describe how the living of these people together works on a daily basis. – Complete in Microsoft Word and email to your instructor

Before you Go

• Log out of your email
• Log out of Nicenet
• Save all documents
• Close all documents and windows
• Eject your savings device safely
• Shut down the computer

WHEN YOU HAVE QUESTIONS – REFER TO YOUR SHEETS AND/OR ASK US FOR HELP
Keys and Tricks

Right-Clicking
- On your mouse, you have a clickable portion on the right and on the left.
- Normally we use the left click function.
- Sometimes you can use the right-click function.
- To copy or cut: highlight a section, right-click, and say copy or cut
- To paste: click in the area you want the section to go, then right-click and select paste.
- When you see something underlined in red, the computer does not recognize the spelling, right-click on it, and it will provide you with a list of correct spellings.
- When you see something underlined in green, the computer is detecting a possible grammar error, right-click and the computer will make suggestions.

Spell and Grammar Check
- In your tool bar, you have a check mark and an ABC above it, you can click on it for spell check.
- For individual words underlined in red, you can use the right-click function.
- Under Tools, you can select the spell and grammar check and work through an entire document, accepting and rejecting the recommendations. You can also change the settings of the spell and grammar check.
- You can also go to Tools and then AutoCorrect Options, to set your computers setting for things the computer should automatically correct, without asking you.

Search Function
- When you are looking for a word in your text, you can search for it.
- Go to Edit, then go to Find, and type the word you are looking for.

Thesaurus
- When you are looking for another word, type the word you can think of, highlight it; go to tools, go to language, and then go to Thesaurus.
- This is a nice way of learning new words, and learning to use new words.

Word Count
- Some instructors will ask you to write assignments of a certain length.
- To know how long your document is, simply highlight the text, go to tools and then go to word count, and the computer will tell you.
Short Cut Keys
- Some functions, we use a lot, and it makes sense to learn a faster way of doing things, here is a list of commonly used short cut keys:
  - Ctrl + S = save
  - Ctrl + I = italics
  - Ctrl + B = bold
  - Ctrl + C = copy
  - Ctrl + V = paste
  - Ctrl + M = new slide in Power Point
  - Ctrl + N = new window, or new document
  - Ctrl + O = open document or window
  - Ctrl + P = print
  - Ctrl + A = select all
  - Ctrl + F = Find
  - F7 = spell check
  - Ctrl + shift + E = Track changes
  - Shift + any letter = capitalized letter
  - Shift + any number = the top symbol

Characters from other languages
- Some of you may have to use characters from your language.
  - Go to Insert, Go to Symbol
  - Find the letter your are looking for, click on it, click insert and it will be inserted.
  - If you want to, you can select the letter, then click Shortcut Key and then program a short cut key.
  - You can also learn the character code, by looking it up, and you can then insert the letter, by pressing alt and then entering the character code.

Footnotes
- For many assignments, you will have to list your references.
  - To insert a footnote, go to insert, then reference, then footnote, and it will insert a small number next to the word that needs a reference.
  - Then type the bibliographical information on the bottom of the page next to the number.
Saving Devices

Floppies

- Floppies used to be a very traditional saving device
- Today many laptop computers do not have floppy drive, i.e. you cannot use them anymore
- Floppies do not hold much information and break easily
- The floppy fits into the A drive, i.e. when you open or save a file, you have to select the A drive under my computer
- The actual A drive is located on the computer, usually underneath the CD drive – simply push the floppy in; to get it out, hit the button underneath the drive and it will come out.
- When you save a file, make sure that you have selected the A drive.

Jump Drives

- Jump Drives are the new form of saving devices
- They can plug into any computer with a USB port
- They come in different sizes and usually hold a lot of information
- Depending on what USB ports are already occupied by other devices the jump drive will be labeled differently. It will always say removable drive and is usually assigned drive E, F, G, or H.
- They are easy to lose, so take good care of them.
- To start using the jump drive, you plug it into the USB port – on the lab computers it is located above the on/off button. It looks like a phone jag.
- To open a file from the jump drive or to save a file onto the jump drive, you have to select the removable drive under my computer.
- Before you unplug the jump drive, you must click on the little green error on the bottom task bar and select “Safely remove hardware” when the computer gives you the okay, you can remove it.

CD-Roms/DVDs

- CDs or DVDs are a good way to back up your data, but are not so useful for everyday use. They come in R or RW formats. R means that you can only save information on the CD/DVD once and never make changes, and RW means that you can make changes.
- Not all computers have a CD and DVD drive. Furthermore, many computers do not have the capability of burning CDs and DVDs, i.e. they cannot save information on CDS or DVDs.
- Cds can be used on any platform, as long as there is a CD drive.
- The CD or DVD drive is often assigned different letters. Sometimes it is D and sometimes E, but it will always say either Cd or DVD drive.
- To start using a CD, simply open the CD drive like a CD player, insert the CD and close it.
- To open a file from the CD, you have to select the CD/DVD drive under my computer.
Using Microsoft Excel

General:
- Most commands are identical to the commands you have used in Microsoft Word and Power Point.
- You can also use track changes here.

Opening a Document
- Go to the Start Menu
- Go to Microsoft Office Excel
- Go to File
- Go to Open Document
- Select a Document to open
- When you are done with it, go to file and either choose exit if you are done working with the program or close if you wish to continue working with the program.

Starting a New Document
- Go to Start Menu
- Go to Microsoft Excel
- Go to File
- Go to New (or click Ctrl + N)
- Choose Blank Document
- Make sure you save the document as you are working on it.

Saving a Document
- Go to File
- Go to Save (or click ctrl + S), or Save As
- Choose a destination for your file; for a floppy choose my computer, and then floppy; for jump drive choose my computer and then removable drive
- Click on Save
- Make sure you save often while you type
- Make sure you remember where you saved it to!!!!

**Typing in Excel**
- To type in Excel, click in the cell you would like to write in – hit enter when you are done.
- If you want to change the name of a worksheet, click on the tab on the bottom and wait until you see the cursor, then type the new name.

**Changing Font, Alignment, Font Size,...**
- Go to Format
- Go to Style
- Go to Modify
- Make the appropriate selections
- Make sure that you highlighted the text, before you start this process.

**Changing Cells, Rows, Columns, and Sheets**
- To make changes to any of these, go to Format
- Then go to cell/row/column/sheet
- You can now make the choices in height, width, etc.

**Inserting/Deleting Lines, Cells, Rows, Columns, Worksheets**
- Go to Insert
- Select what you would like to insert
- OR: right-click where you would like to insert or delete a column/row/cell/sheet and select the appropriate command.

**Sorting data**
- You can sort the data,
- Highlight the data
- Go to data
- Go to sort
- Select how you would like to sort.

**Mathematical Commands**
- =AVERAGE(AB1:AB2)
- =SUM(AB1:AB2)
- =A2+A3
- =(A2+A3)/100
- =(A2+A3)*100
- =Sheet2!K2
REFERENCES


