

Teaching EAP Through Distance Education:
An Analysis Of An Online Writing Course

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Dedication

To the sacred memory of my mom and all people like her living and dead. To the people with cheerful smiles on their faces that brighten other people's days. To the people who are willing to help others from their hearts with nothing to gain. To the people who work all their lives in the shadows to make the lives of others better. To all those who live and die without being noticed or recognized for all the good they had done, yet die with a smile on their faces. To all those I dedicate my thesis.

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To all of you, thank you so much. People like you make a difference and make life more pleasant and less difficult in a time where kindness, support, and compassion became a rare currency.

Preface

Distance learning is a mode of education that has existed beside face-to-face education for a long time; it is a field that is vast, interesting, and promising. And unlike other topics in the field of SL/FL education, it is constantly growing and changing due to the strong links it has with technology, which continues to evolve and change. Articles discussing distance learning are interesting, as they never cease to amaze with new information. At a certain point one might feel that one has covered all aspects in the field, yet the more one searches the more one discovers that new information is available nearly on a daily basis and new venues are opened at very close intervals.

The literature review I conducted, before narrowing my focus to studying a writing program taught to English for specific purpose students (ESP) via distance, covered a lot of ground. I found that there are many universities all around the world that are dedicated to teaching via distance. One of the most important worldwide is the United Kingdom Open University (UKOU) in Britain. Most of the books and articles which discuss distance education zoom on the UKOU and discuss its history. Also, the modes and terms used in distance learning are myriad, and to understand academic discourse in that field one has to research all these modes. They include, but are not limited to, computer assisted language learning (CALL), asynchronous communication, synchronous communication, telecollaboration (TLC), and tandem learning (TNL). It is clear that the future is heading towards distance learning. Research conducted in the field is vast and will increase as technology evolves and the field develops, yet I hope that my thesis can be a modest contribution to that domain.

Abstract

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The application of advanced communication technology holds promise for distance learning in general and language distance learning in particular. Technology has allowed second and foreign language programs to be included in many distance learning programs worldwide. The purpose of this study was to provide an overall evaluation of an EAP writing course, taught via distance, and the technologies used in it as well as challenges and issues that could be accompanied by using these technologies. Data was collected for an EAP writing course and from a MBA course using the same technology for comparison. Interviews were conducted with instructors and students to get their feedback and help assess the course. Results indicated that there are other elements besides technology that have to be taken into account to assure the proper use of the available technology by the instructors and the students.

Thomas A Upton, Ph.D., Chair

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Acronyms

CALICO	Computer Assisted Language Instruction Consortium
CALL	Computer Assisted Language Learning
CALLE	Computer Assisted Language Learning Environment
EdNet	Distance Education Network.
Euro CALL	The European association of Computer Assisted Language Learning
ICALL	Intelligent Computer Assisted Language Learning
LAN	Local Area Network
PLATO	Programmed Logic of Automatic Teaching Operation
ReCALL	Re Computer Assisted Language Learning
TELL	Technology Enhanced Language Learning
TESOL	Teaching English to Speakers of Other Languages
TOEFL	Test of English as a Foreign Language

Abbreviations

ADL	Advanced Distributed Learning
ATSC	Army Training Center
AWGS	Academic Writing for Graduate Students
CHS	The Case Study Handbook
EAL	English as an Additional Language
EAP	English for Academic Purposes
EFL	English as a Foreign Language
EIL	English as an International Language
EOP	English for Occupational Purpose
ESL	English as a Second Language
ESP	English for Specific Purposes
FL	Foreign Language
CMC	Computer Mediated Communication
DE	Distance Education
DL	Distance Learning
IEA	International Association for the Evaluation of Educational Achievement
ICDE	International Council of Distance Education
ICFLE	Internet Mediated Intercultural Foreign Language Education
ICT	Information and Communicative Technology
IH	Interaction Hypothesis
IT	Institutional Technology
L1	First Language
L2	Second Language
MBA	Master in Business and Administration
NBC	National Broadcasting Company
NBL	Network Based Language Teaching
NPL	Natural Language Processing
P.P.	Powerpoint

PRI	Public Radio International
SCT	Sociocultural Theory
SL	Second Language
TL	Target Language
UKOU	United Kingdom Open University
ZPD	Zone of Proximal Development

Chapter One-Introduction

The U.S Department of Educational Research defines Distance Education (DE) as “the application of telecommunication and electric devices which enable students and learners to receive instruction from some distance location” (Bruder 1989 as cited in Casey, 2008, p.45). DE is an instructional mode which holds great promise for the future worldwide. According to Casey (2008) DE has flourished in the United States for three reasons: First, the distance between the citizens and the educational institutions they want to attend both geographically and socio-economically. Second, the thirst Americans have for knowledge in general, as reflected by the increasing enrollments in schools of higher education. And third, the rapid development of the technological field. All these factors played a role in the leaps that have taken place in DE, but technology is the major factor.

1. History of Distance Education

Early distance education programs.

The date at which the first DE program was publically announced is a point of dispute. Battenberg (1971) claims in Verduin and Clark (1991, p.15) that the first public announcement of a distance learning program was on March 20, 1728, in the *Boston Gazette*. It was a shorthand program which included neither two-way communication nor grading. Casey (2008) indicates that it is commonly acknowledged that Issac Pitman, a phonographer, was the first to actually begin teaching by correspondence. He taught a shorthand program in Bath, England, in 1840. This program attracted adults who were interested in learning shorthand but had no time to attend courses because of their work. They were asked to copy parts of the Bible in shorthand and send them to Pitman for grading using the new penny post system service.

Charles Toussaint and Gustav Langenscheidt established a modern language correspondence school in Berlin, Germany, in 1856 (Verduin & Clark, 1991). After that, according to Cruzor (1977), Skerry’s College and University Correspondence College were founded in the 1880s to prepare students for “post secondary level degree” examinations (as cited Verduin & Clark 1991, p16). Noffsinger (1926) stated that in 1894

another university was established in Berlin, Germany, to help prepare students for exams prior to entering the university (as cited Verduin & Clark 1991, p.16).

Aggasiz (1971) stated that in 1873 Anna Eliot Ticknor, “the mother” of and advocate for correspondence study in America, and the originator of the two-way exchange of grades and comments with students, established an organization entitled The Society to Encourage Studying at Home (as cited in Verduin & Clark 1991, p.16). In the United States of DE started in 1874 at Illinois Wesleyan University. Illinois Wesleyan provided both graduate and undergraduate degrees via distance format. In 1883 the Correspondence University was founded in Ithaca, New York (as cited Verduin & Clark 1991, p.16).

In 1878, there was a movement called “the Chautauqua movement”, initiated by John Vincent, among others, who created a “home reading circle for adults” (Verduin & Clark 1991, p.16). This movement intended to expand access to education to all American citizens. Vincent was one of the earliest to realize the potentials of correspondence education. Scott (1999) notes Vincent also created the Chautauqua Literacy and Scientific Circle, which offered a four-year reading course by correspondence as a supplement for the Summer school held at Lake Chautauqua (as cited in Moore & Kearsley, 2005). In 1882, William Rainey Harper developed a DE correspondence program at Chautauqua, New York. This paved the way for the State of New York’s authorization of correspondence courses, and a “Correspondence University” was established in New York in 1883 (Casey, 2008). Moore (1989) points out that Chautauqua is “the first significant DE effort in America” (as cited in Verduin & Clark 1991, p.16).

DE attained academic acknowledgement in 1892. Hanson (2001) stated that this was due to the creation of the first college-level distance learning program by the University of Chicago (as cited in Casey, 2008, p. 52). According to Hart (1974) the first elementary school by correspondence in America was established in 1906 in Baltimore, Maryland (as cited in Verduin & Clark ,1991, p.17).

After that, as stated by Wedemeyer (1983), the first DE units which used the radio as a mediator started in 1919 at Wisconsin University (as cited in Verduin & Clark 1991, p.16). Saetler (1990) maintains that with the advent of broadcasting a license for the first educational radio was issued by the federal government to the Latter Day's Saint University of Salt lake City in 1921. Later licenses were also issued to the University of Wisconsin and the University of Minnesota (as cited in Sousan, 1999, p.7).

Koenig and Hill (1967) claim the first program that used the television was at the University of Iowa between 1932 and 1937 (as cited in Verduin & Clark 1991, p.17). In 1933 the University telecasted a violin recital, a discussion, and a sketching lesson (Sousan, 1999). Another early attempt was the collaboration between the National Public Radio's (NPR) and the School of Commerce in New York to telecast lectures in 1938 (Sousan, 1999). World War II had a dramatic effect on telecasting, as it slowed down the development of educational television for nearly a decade. According to Seattler (1990), it was not until 1945 that Iowa State University got a license for educational television and started televising educational programs in 1950 (as cited in Sousan, 1999, p.7)

Impact of United States Army on distance education.

The U.S. Army also had an impact on DE. The U.S. Army's correspondence courses were implemented at the U.S. Army Training Center (ATSC), Fort Eustis, Virginia, beginning 1976 (Duncan, 2005). When technology began to mature so did the U.S. Army distance programs. By 2004 the Department of Defense was committed to distance learning. A kick-off meeting was held in 1997 in Washington, DC, to present the Advanced Distributed Learning (ADL) initiative, which was effective in 2004. This initiative moved the Army from the use of primitive technology such as paper-based and television formats to the most recent technology among which is the Internet (Duncan, 2005).

Open universities and distance education.

In the late 1960s the idea of establishing an open university emerged in Great Britain, and great attention was given to DE, resulting in the establishment of the United

Kingdom Open University (UKOU). At that time, the Labor Government developed it because higher education was very restricted and members of working class families faced many difficulties gaining access to it. The government wanted to achieve more social equity (Moore & Kearsley 2005). The UKOU opened its doors to students in 1972. However, courses included in the university's program did not yet target any students with the desire to learn either a foreign language (FL) or a second language (SL).

The terms open learning and distance learning are not synonymous. Open learning is an educational philosophy, which implies course flexibility and removal of barriers, such as time and place, which can prevent students from studying (Hodgson, 1993). Distance learning is an educational delivery system, which implies two-way communication, use of technical media, and the quasi-separation of the teacher and learner (Hodgson, 1993). We can take the UKOU as a vivid example of the use of these two terms. The UKOU was founded on the belief that communications technology could bring high quality degree level learning to people who did not have the opportunity to attend campus universities. It adopts the philosophy of open learning which can be accessed by the majority of British citizens (Hodgson, 1993).

The UKOU's style of teaching is called supported open learning; also acknowledged by the university as distance learning (www.open.ac.uk). "Open learning" implies that students will be learning on their own time by reading course material, working on course activities, writing assignments, and perhaps working with other students. "Supported" reflects the support provided by the university to the students. The university offers a variety of programs, and the degree of openness and support varies. For example, in some case face-to-face support is available in centers found throughout England, yet it is not obligatory as students could choose to contact their instructors via distance and not face-to-face. The distance learning mode has been adopted by the university as one mode to deliver the material and provide the support needed. Nevertheless, it is not the only mode adopted; other modes of support are: the face-to-face tutoring in thirteen regional centers scattered across Britain, residential

work, and student self-help groups, student service staff at regional centers, and centralized areas like libraries and student associations (Verdun & Clark, 1991).

The connection between open and distance learning emerged from combining more than one mode of material delivery in open university programs. The program can be delivered via distance, yet a few face-to-face meetings between the teacher and the students can be included. This prompted Keegan to refine the definition he had offered in 1980 in which he had stated that in DE there has to be a permanent separation between the teacher and the learner. In 1986 he changed that to a “quasi-permanent” separation (Verduin & Clark, 1993).

Distance education and second language/foreign language learning.

None of the DE programs discussed up to this point have courses dedicated to teaching SL or FL. This may be because during that period distance learning was in the second generation phase (Table 2), where distance learning mediators were limited to printed media, posted media, broadcasting, telephone, audiocassette, video cassette, and cable television. These mediators did not provide an opportunity for easy contact or interaction with the teacher, thus making language learning via distance a difficult task. There were sporadic attempts such as the establishment of the Language Learning Center of the US Air Force (Brandt, 1993) and the PLATO (Programmed Logic of Automatic Teaching Operation) program designed in the 1960s by Don Bitzer, a Professor of Electrical Engineering, to help with learning grammar and vocabulary (Warschauer, 1996 a). Later, the use of word processing helped with spelling and grammar.

The growth of the West’s economic and political power worldwide, which was first represented by the United Kingdom and is currently represented by the United States, and the materialization of that growth in the last three decades made English the Lingua Franca linking the west and the rest of the world (Crystal, 2007). Kachru (1997) provided an account of the countries using the English language: “inner circle” countries in which English is the first language (L1) (e.g. USA, UK, Australia), “outer circle” countries, which inherited English from the colonial era and still use it as a lingua franca

or as an additional language (EAL) (e.g. India, Malaysia, Nigeria), and the “expanding circle” of countries, which use English as a means of communication with other countries or as an international language (EIL) (e.g. Brazil, Germany, Japan). This classification shows how important learning English has become, especially if we consider the current growth of one of the world’s super-powers, China, and its citizens’ desire to compete on all fronts. However, the expansion of the western economy had a flip side. Americans started to be exposed to other cultures, causing some of them to pursue learning FLs during their leisure time to learn more about these cultures.

The increasing demand for English instruction coupled with the growing sophistication of the technology caused ESP, ESL, and EFL programs to move quickly into the field of DE. Language DE programs started to spread worldwide to help those in need of learning SL /FL but were unable to attend mainstream courses for various reasons whether professional, economical, social, or geographical.

The United States has been one of the pioneers in incorporating language learning programs in DE, with on-line language programs started as far back as the early 1990s (Zsiray & Stephen 1993). In England, the UKOU established the Center of Modern Languages in 1991 (Hurd , Beaven & Ortega, 2001).. The first language program started in 1995; nearly 25 years after UKOU opened its doors (Ros I Sole & Hopkins, 2007). The University started by introducing FL classes (French, German, and Spanish) (N. J. Thomas, personal communication, March 3, 2009). English as a SL was not included in distance learning program at the UKOU until 2002 (Hurd, Beaven & Ortega, 2001).

2. Distance Education Generations

First division of distance education.

Researchers have attempted to divide the history of DE efforts into different generations. Table 1 shows how Moore and Kearsley (2005) presented two of the most commonly used divisions in the DE field. They divided DE history into five generations according to the services offered during the different stages of the development of DE.

Generation	Type of courses offered	Pioneer courses
First generation: from 1880s	Correspondence/home/independent study upon which individualized instruction was based	The Chautauqua Correspondence College
Second generation: from 1934	Broadcasting programs using the radio and television which added oral and visual components to the distance learning program	The State University in Iowa
Third generation: from the late 1960s early 1970s	The start of open universities which integrated the correspondence, audio, and video components with face-to-face tutorials	Articulated Instructional Media Project at the University of Wisconsin Madison
Fourth generation: late 1970s into the 1980s	Interactive teleconferencing using audio, video and computers, which gave real time interaction	Educational Telephone Network, University of Wisconsin
Fifth generation: early 1990s	Internet based virtual classes	At University of Illinois PLATO

The first stage involved correspondence studies; mail was used to deliver material back and forth between the student and the teacher. The second generation was auditory and visual programs; radio and television were used to deliver the material. The third was when the United Kingdom Open University (UKOU) and other “open” universities that offered classes that included instruction that was not necessarily “face-to-face” were established and recognized worldwide as respectable universities, allowing thousands of students to study via distance methods. The fourth generation was that of teleconferencing programs, which used telephone and satellite systems to design programs where students could communicate with each other and with the instructor. The telephone allowed audio conferencing while the satellite allowed video conferencing (Moore & Kearsley, 2005). Yet these means of communication were difficult and expensive, and communication sometimes was not clear. The fifth and last generation, according to Moore and Kearsly (2005), included Internet and worldwide web programs; with this generation, communication became easier and available for a large number of students.

Second division of distance education.

Table 2 shows the second mostly used classification of these generations. DE is divided according to the hierarchal build up of technology. A new generation in the field of DE is marked by the spread of a new technology which is added to the previous existing technology. Passerini and Granger (2000), Boyle (1995), and Wang and Sun (2001) divided DE into generations depending mainly on the technology used; whenever new technology was used in the field of DE a new generation began. (This excluded the recognition of the establishment of Open Universities, noted above, as the services offered by these universities simply changed as the technology changed and evolved.)

Table 2 <i>Wang and Sun's (2001) Division of DE Generations</i>	
Generation	Technologies
First	Printed media and postal system; no interaction whatsoever with instructor
Second	<u>Old media</u> : printed media and postal system <u>New media</u> : broadcasting, television, radio, telephone, audiocassettes, video cassettes etc. ;audio and visual components were added
Third	<u>Old media</u> : printed media and postal system, broadcasting, television, radio, telephone, audiocassettes, video cassettes etc. <u>New media</u> : word processing, e mail, Internet, the Web etc. ; written form interaction was added through email communication
Fourth	<u>Old media</u> : printed media and postal system, broadcasting, television, radio, telephone, audiocassettes, video cassettes, word processing, e mail, Internet, the Web etc. <u>New media</u> : video conferencing, Internet telephoning, virtual reality; synchronous and asynchronous communication are used and the video conferencing adds facial interaction cues
<i>Note: Adapted from Wang and Sun (2001).</i>	

Using this approach, Boyle (1995) first divided DE into three generations. As time passed and technology moved ahead, Wang and Sun (2001) added a fourth generation which to address the new technology of video conferencing, virtual reality, and Internet telephoning. Garrison (1985) called the first generation “the correspondence generation”. This generation included the era when printed material and the postal service were used as mediators. It lasted for about a century starting from the early

1880s. Technology was almost absent as the educational material was delivered primarily by non-electronic means (Wang & Sun, 2001).

The second generation added to the mail and the printed material the technology embodied in the forms of television, broadcasting, radio, telephone, audio cassettes, and video cassettes (Wang & Sun, 2001). These mediators are still used even now to deliver educational material via distance. We all watch the ads on television that advocate learning language using CDs and computer software.

The third generation began with the addition of the word processor, multimedia packages, email, the web, and the Internet. The fourth and last generation began with the onset of Internet-based real-time technology, video conferencing, Internet telephoning and virtual reality. In the thesis I will adopt this latter generational division.

In summary, DE history in general, and language instruction in DE in particular, has evolved dramatically through the years. If you take a quick look at Tables 1 and 2 you will see that technology was a key factor that pushed DE ahead. Before technology evolved, DE moved at a very low pace, especially in the field of language learning in which face-to-face interaction and facial cues are very important. Technology in general and computers in particular helped to facilitate the use of DE in ESL and EFL programs.

Knowing this history is important, as it shows how quickly the field of DE is evolving. The challenge is to carefully consider how we can develop programs that will help students get access to the education they want and need. The demand for DE instruction in English is increasing on a daily basis because fluency in English is connected to jobs, trading, and business worldwide. With this in mind, chapter two provides an overview of key developments in the use of technology in general and distance learning in particular in the teaching of foreign languages including ESL/EFL; relevant theories of second language teaching and learning are also reviewed.

Chapter Two-Literature Review

1. Terminology

Introduction.

Education and specifically SL/FL learning there are two modes of education that have existed side by side since early 1990s. These modes are the conventional, or face-to-face education, where the instructor and the students are present in the same place at the same time and can have face-to-face interactions, and DE where there is separation in place and sometimes in time and place between the instructor and the students. Besides these two types of educational modes, technology has always existed and evolved at a very quick pace to enhance instruction and make it more beneficial to learners in both modes. As technology evolved, new programs were introduced which led to the coining of new words in the SL/FL learning field to address educational methods that were not present before and were added due to the use of a new forms of technology. These forms could be used to enrich the regular setting of the language classroom as well as the virtual one created via distance. To clearly understand how DE was nudged from one generation to another by this advancing technology, we have to know how this technology developed and the terms that were introduced in the SL/FL learning field due to its development.

When computers were introduced in language classrooms, just having them into the classrooms was thrilling that the need for a pedagogical foundation for using them was often missed. Now after time passed, educators and researchers noticed that computers in themselves cannot be an answer to all their problems. They could be used as any other tool to enhance the learning process if creative approaches and proper language theories are implemented (Maiko, 2003). The same thing has to be done regarding DE programs computers in particular and technology in general have to be used within the platform of language learning theories.

Also, knowing the terms related to technology, the most important theories in the SL/FL educational field, and drawing a connection between them is crucial to be able to assess the technology used in a distance language learning program. Using the

technology to apply pedagogical theories in DE is as important as using technology and other educational tools (board, chalk etc...) to apply these theories in face-to-face language classrooms. Moreover, the studies mentioned throughout the review in relation to different language learning theory demonstrate how theory and practice if linked together can benefit the learners. Although this study focuses mainly on writing, the studies cited cover more than one language skill as all skills support and help each other. Reading helps writing, speaking helps reading, and listening helps speaking. The four skills are integrated and can never be taught separated from each other (Jing, 2006; Blanton, 1992).

Consequently, the review of the literature related to technology and language theories was crucial for the research. This study focused on an EAP writing course taught via distance. It aimed at analyzing the use of technology in the course in the light of SL/FL theories. This analysis was the basis for some recommendations which could help make better use of the technology to teach SL/FL.

Computer assisted language learning (CALL).

Work on expanding the mainframe computer underwent development in the 1930s and early 1940s. It was first used during the Second World War to direct missiles and cryptography¹ (Fotos & Browne, 2004). In the 1950s and the 1960s linguists explored uses of computers to better understand language and used them to create concordances and electronic corpora, such as the *Brown Corpus of Standard American English*, which was developed during that period (Fotos & Browne, 2004).

This period was considered the first phase of what was later named CALL. According to Chapelle (2001), using the term CALL for computer assisted language learning started in 1983. Practitioners who met at the 1983 conference for Teachers of English to Speakers of Other Languages (TESOL) unanimously agreed to use that term to refer to any research conducted on the application of the computer technology in assisting in learning languages. It is worth mentioning that the term technology enhanced language learning (TELL) was also adopted. The difference between the two

¹Cryptography: art and science of preparing coded or protected communications intended to be intelligible only to the person possessing a key.

lies in the fact that when we say CALL we are strictly referring to computers as the sole technology used, while TELL encompasses different sorts of technologies that serve learning. The acronym CALL has been the preferred over TELL because most technology has been manipulated within the computer platform.

Technology together with language theories led to drastic changes in the forms of CALL. Researchers have divided CALL into historical phases with the first phase, according to Warschauer (1996) identified as Behavioristic CALL. The reason behind that labeling is clear; this phase adopted the behaviorists' approach to learning, which was the dominant approach during that time. Behaviorists like Watson (1924), Thorndike (1932), Bloomfield (1933), and Skinner (1957) believed that learning is simply a development of a habit. Through exposure to a stimulus the learner produces a response which, if successful, should be reinforced. Repeated reinforcement transforms the response into a habit (Mitchelle & Myles, 2004).

Behavioristic CALL, which dominated the 1960s and the 1970s, saw the computer as a valuable tool for providing learners with repetitive drills and practice. This added support to the audiolingual method adopted in FL/SL classrooms during this period. The computer assumed the role of the instructor and delivered the instructional material to the students. It provided the students with the opportunity to be exposed to the same material over and over again, a role that the instructor cannot play without being bored. It also provided the students with feedback and gave them the opportunity to proceed at their own pace. The evolution of this technology coincided with the beginning of the second generation of distance learning, which used this technology to deliver instructional materials to learners via distance. This moved the distance learning material from the printed media and the postal service to a new domain. One of the most important programs created was PLATO; it included vocabulary and translation drills plus grammar explanation (Ahmed, Corbett, Rogers & Sussex, in Warschauer, 1996a).

By the end of the 1970s the behaviorist approach began to be pushed to the back of the educational platform by the communicative approach, which emerged at the

end of the 1970s and beginning of the 1980s. The communicative approach presumed that the aim of language teaching is to provide the learner with the tools necessary to achieve communication in the target language, i.e. communicative competence (Murcia, 2001). Communicative competence is a term in linguistics which refers to a language user's grammatical knowledge of syntax, morphology, phonology and the like, as well as social knowledge about how and when to use utterances appropriately. The term was coined by Hymes in 1966, reacting against Chomsky's (1965) focus on linguistic competence as well as what he saw as an inadequacy in distinguishing between *competence* and *performance*. In 1965 Chomsky defined linguistic competence as the system of linguistic knowledge possessed by native speakers of a language. It is, according to Chomsky, this system of knowledge that makes it possible for speakers to produce and understand an infinite number of sentences in their language, and to distinguish grammatical sentences from ungrammatical sentences. Linguistic competence refers to knowledge of language, rather than use of language, which Chomsky terms linguistic performance. To address Chomsky's abstract notion of competence, Hymes undertook an ethnographic exploration of communicative competence that included "communicative form and function in integral relation to each other" (Leung, 2005). The approach pioneered by Hymes is now known as the ethnography of communication. Hymes' view influenced CALL, thus Communicative CALL emerged. This generation of CALL emphasized the use of language as a communicative tool, unlike the previous generation, which focused on isolated forms and did not foster interaction in the target language.

The software created at this time was aligned with the cognitive model, which saw the learner for the first time as an active participant in the learning equation. The participant could use his/her brain to think creatively and critically to analyze the material rather than just reach the correct answer and be rewarded for it (Fotos & Browne, 2004). The computer here still assumed the role of the instructor but rather than just providing drills, the process of reaching a right answer involved some decision making, control and interaction on the part of the learner (Warschauer, 1996a). In

addition to that role, the computer played the role of a tool; examples of programs which embodied that role are: word processing, spell checkers (Pennington, 1996), and concordances. The difference between this phase and its predecessor was not a change in the role played by the computer or a change in the software used, it was rather a change in the way the teachers used the software (Warschauer, 1996a).

This phase in CALL showed how important computers could be in the SL/FL learning field, which led to the establishment of key professional organizations in the field such as: CALICO (Computer Assisted Language Instruction Consortium), EUROCALL (The European Association for Computer assisted Language Learning), and ReCALL, which is a fully-refereed journal published by Cambridge University Press on behalf of EUROCALL.

In distance learning these organizations together with the technological advances helped move the field forward and helped bring about the third generation. The new technology allowed students to perform many tasks on their own. Students could get help on various steps of the writing process starting from the generation of ideas and ending with the final draft not only from their teacher but also using the available technology. Also, they could use grammar checkers and spelling checkers to edit drafts and save them on the computer for later reflection. It could never be said that instructional technology (IT) can replace teachers in teaching L2 writing process or any other language skill, however there are many methods that teachers can implement using IT to aid in the L2 learning process.

While there are other intervening stages in the development of CALL that could be discussed (see, e.g., ICALL and CALLE in Table 3), the current generation of CALL is called integrative CALL. Integrative CALL incorporates multimedia, local area networks (LAN), internet, and hypermedia. Language programs now allow learners to read a text and access different sources of information at the same time using the internet. They can even translate the text into their mother tongue. They can also practice pronunciation, view a movie of the reading, and take a comprehension test (Fotos & Browne, 2004).

Computer mediated communication (CMC).

Computer mediated communication (CMC) is defined as any type of communication involving humans and mediated by the Internet (Fotos & Browne, 2004). CALL in the form of CMC incorporates Vygotsky's sociocultural theory (SCT), which stresses that "learning occurs when biologically determined mental-functions evolve into more complex/higher order functions through social interactions" (Lantolf & Appel, 1994; Lantolf, 2000 as quoted in Ellis, 1999, p.17). Another aspect of learning that SCT stresses and which can be implemented through CMC is that peers can help each other through interaction within the *Zone of Proximal Development (ZPD)* – that "zone" of learning where new information is only slightly beyond what learners can learn on their own. CMC can be used as a tool for mediation – the assistance of the learner in learning – as well as a medium which allows collaborative learning activities where learners have to work together to accomplish a certain task. The collaboration of peers engaged in technology-mediated learning activities can, at times, facilitate interaction in the ZPD which, according to the SCT, can result in learning (Maiko, 2003). Moreover, negotiation of meaning, which is an important part of the *interaction hypothesis (IH)* in SCT, can occur during CMC (Belz & Kinginger, 2003; Blake, 2000; Toyoda & Harrison, 2002). As a result, development of CMC allowed for the application of SCT-based pedagogical approaches as well as interaction and negotiation of meaning using computers. CMC can be in the form of written, audio, and video communication between two participants or more. Communication using a combination of any of these modes is also possible. Examples are the following:

- synchronous text communications involving chat and instant messages;
- asynchronous text communications involving emails, discussion and discussion boards, blogs; asynchronous mail involving voice mail and voice discussion boards;

- synchronous voice involving Internet, chat rooms, MOOs, MUDs, MUSHes², telephone, audio, video, audiographic conferencing, multipoint audiographic conferencing (Hubbard, 2004).

All these programs were quickly incorporated into distance learning, thus narrowing the gap between on-line and face-to-face learning. At a distance students could easily communicate with their teachers or fellow classmates and even see them at the same time. This made some researchers go as far as warning against the destruction of human relations by CMC (Fotos & Browne, 2004). The term Network Based Language Teaching (NBLT) was coined by Kern and Warschauer (2000) to include both CMC and globally linked hypertext. This extended the tool feature of the computer as it allowed access to information and data as well as to other people. NBLT was given attention by researchers as it allowed communication via distance (Belz, 2001). Telecollaboration and tandem learning, which will be discussed later, are forms of NBLT.

The third phase of CALL helped researchers in the field of SL/FL learning to integrate Vygotsky's sociocultural theory into distance learning pedagogy. In addition, the focus on SCL theory led to more attention on the cultural aspect of language as an important feature that learners must be aware of when learning a SL/FL. When looking at the cultural aspect, the spotlight was put on the FL environment. In the case of SL learning, the presence of the learner in the SL environment will help acquaint him/her with the new culture by providing the chance to connect with native speakers. In the case of FL learning it is totally different; the learner could have excellent control of the vocabulary and structures of the language yet face difficulties in communication due to his/her ignorance with the TL culture. Communicative competence is not the only skill that should be acquired to learn a FL. One can know the structure of the language, yet find oneself in awkward situations because of using the wrong word in the wrong place. Sociopragmatic failure is a common problem that learners might face if they are not

² MOOs, MUDs, and MUSHes are similar to chat in that they allow people to communicate with each other by typing messages. However, these environments are best described as textual spaces that typically use architectural metaphors to organize discussions. When you enter a room in a MOO, for instance, you can receive a detailed description of the room and its inhabitants.

acquainted with the TL culture. The learner has to possess not only grammatical and linguistic competence in the TL but also social and cultural competence to be able to communicate efficiently in the TL with native and non-native speakers (Belz, 2007; Belz & Thorne, 2006a; Belz & Thorne 2006b). CMC could provide the FL learners with the chance to communicate with native speakers, thus get acquainted with the TL culture without having to travel or even leave his/her house.

To achieve communicative intercultural competence, distance learning practitioners used the computer as a tool to create the environment for fostering communication between students learning each others' languages and cultures. This led to the emergence of ways to approach on-line instruction. While there are several permutations of these approaches (see TNL and ICFLE in Table 3), one example is what is called telecollaboration (TLC).

Telecollaboration (TLC) occurs between two classes in different national settings. Activities and exchanges are arranged between these two classes in the form of pair work, group work, or whole class exchanges. This requires a great deal of care and skill in organizing the program and even crafting it to fit both settings. Exchange takes place in both languages, which creates a rich atmosphere for communication. In contrast to telecollaboration, tandem learning (TL) occurs outside of the institutional framework. In this type of learning individuals from complementary cultures communicate in the form of dyads. This setting is less structured than the TLC. Research has been conducted to show that vast benefits of telecollaboration (Belz, 2002b; Belz, 2003b; Belz, 2003c; Belz & Mueller-Hartmann, 2003). With regard to Internet-mediated intercultural foreign language education (ICFLE), this term was coined by researchers to address three aspects that are not represented in the previous terms. First, in this term there is direct reference to the FL setting; second the word "education" encompasses acquisition, learning, and teaching; and third this term has a clear reference to intercultural competence, which is the main target of the activities carried out between students learning complementary languages (Belz & Thorne, 2006).

Conclusion.

Table 3 provides a comprehensive, succinct overview of the topics discussed above. In a face-to-face classroom setting all of these approaches could be added to the instructional time in order to enrich the learning atmosphere and provide extra support and intercultural communication to the learners. In the distance learning setting, where there is separation between the learners and the teacher, many of these approaches can be used to provide the learners with support and create the most optimum environment for communication via distance.

Research in the field of CALL primarily focused on the computer as a tutor, yet when computer technology leaped opening myriad venues for education CALL research in the last decade shifted to computer as a tool and as a medium. Research in the field of computer as a tool focused on the area of concordances and corpus analysis. Pedagogically, computer as a tool was used to raise the students' awareness of the language and to encourage them to test language hypothesis based on the corpora available (Kern, 2006). Research in the field of computer as a medium, which is the bulk of current research, focused on CMC, TLC, and electronic literacies (Kern, 2006).

Some researchers like Kern (2006) and Warschauer (1999a) are beginning to revolt against the use of these terms. They argue that as long as these terms are being used by researchers and teachers in the field this reflects that computers are still an outside instrument rather than part of the ecology of SL/FL language learning. Warschauer (1999a) says that we do not use terms like LALL (Library Assisted Language Learning) or PALL for (PEN Assisted Language Learning) or BALL for (Book Assisted Language Learning) because these components are an integral part of the language learning system, thus the use of all the previously mentioned terms, CALL, CMC, ICALL, CALLE, indicate that computers to date are still not part and parcel of the language pedagogy for all teachers in all environments.

The bottom line is the tremendously rapid evolution of technology has opened up many opportunities as well as challenges in how to best integrate the technology in pedagogically sound ways into the language learning context and process.

Table 3 <i>Terminology</i>		
Term	Acronym	Indication
Computer Assisted Language Learning 1-Behaviorist CALL 2-Communicative CALL 3-Integrative CALL	CALL	Refers to the use of computers in the field of language learning 1-Refers to CALL technology which adopted the behaviorist approach to learning a SL/FL 2-Refers to CALL technology which adopted the Communicative approach to learning a SL/FL 3-Refers to CALL technology which adopted Vygotsky's Socio-cultural theory
Technology Enhanced Language Learning	TELL	Refers to the use of any sort of technology, not necessarily computers, in the field of language learning
Intelligent Computer Assisted Language Learning	ICALL	Refers to the attempt to use natural language processing (NLP) in CALL
Computer Assisted Language Learning Environment	CALLE	Refers to the use of lexical functional grammar (LFG) in the field of CALL to help learners analyze target language (TL) texts
Telecollaboration	TLC	Refers to communication occurring between two classes studying complementary languages
Tandem Learning	TNL	Refers to communication between students in dyads studying complementary languages
Internet- Mediated Intercultural Foreign Language Education	ICFLE	Refers to communication between two groups of students in a foreign language setting for the sake of becoming acquainted with the culture of the complementary languages they are studying

2. Theoretical Background for Theories which had an Effect on Distance Education

Philosophers and academics have long offered theories that explain how learners acquire a second language, thus guiding teachers in their attempts to help learners achieve their goals. Yet not all theories have been helpful, and time has proved some to be far from comprehensive. Such theories have moved offstage, leaving space for new theories to be introduced, or have assumed a supporting role in the field.

Structural theory.

In the 1920s and up to the 1950s the structural perspective prevailed in the language teaching (Kern & Warschauer, 2000). The structural perspective was influenced by the work of Leonard Bloomfield, Charles Fries, Robert Lado, and the behaviorist psychologist B.F. Skinner, who saw language learning as habit formation. According to this theory, learners are exposed to different forms of stimuli; if the response of the learner is correct, it should be reinforced. Through repetitive reinforcement the correct response becomes a habit, and consequently learners can produce automatic correct responses to different linguistic stimuli (Mitchelle & Myles, 2004). Behaviorism affected the way SL/FL was taught in the classroom as both the grammar translation approach and the audiolingual approach prevailed in SL/FL classrooms (Murcia, 2001).

The structural method during this stage threw its shadow on distance learning; it lasted longer in distance learning programs than it did in face-to-face classroom instruction as the technology available did not allow distance learning programs to adopt the theories that were applied in face-to-face classrooms. For the first three generations, DE technology did not allow for communication to take place. Even when computers were invented they assumed the role of an evaluator. Behavioristic CALL, previously discussed in detail, was still dominant in the 1960s and the 1970s, although the behavioristic approach to learning began to be widely criticized in the early 1960s (Kern & Warschauer, 2000). The computer was used simply as a tool for providing learners with repetitive drills. The computer only delivered the instructional material to students, and they had the opportunity to repeat it as many times as needed. However,

as technology developed allowing communication between the learner and the instructor, researchers interested in DE totally abandoned the behavioristic approach.

Constructivist theory.

While other theories of learning – especially language learning – have played important roles in informing our current understanding (e.g., Chomsky’s Universal Grammar, see Table 4), the constructivist approach in the area of SL/FL learning accompanied by evolving technology was seen as providing a strong theoretical basis for advocating for the use of technology in constructing knowledge. Kern and Warschauer (2000) use the terms cognitive and constructive interchangeably by referring to this perspective as the “cognitive/constructivist approach to learning”. Ruschoff and Ritter (2001) feel that constructivist theory is an offspring or a development of cognitive theory. I prefer separating both theories as there is a clear difference between them. Cognitive theory focuses on how learners process information and the strategies they use; in other words, the concentration is on the learner’s mind and what goes on inside it, the process of building interlanguage, and what strategies – if used – promote or hinder progress. In contrast, the constructivist approach puts the learner in a more active role. The learner is able to understand new information by using a subjective perspective which is embodied in personal background and experience. The learner uses the data he/she already has to make sense of everyday experiences and construct knowledge (Ruscuff & Ritter, 2000). The clear difference I see here between the cognitive and the constructivist approach is that the former focuses on what goes on inside the learner’s mind including cognitive and metacognitive skills. The latter goes beyond that to include all the background of the learner and his/her life experiences which help shape his linguistic knowledge. The cognitive theory stands midway between the behavioral approach and the constructivist approach. It is a step away from the total objectivity of the behavioral method and a step toward the subjective approach to language learning represented in the constructivist theory (McGroaty, 1998; Ruscuff & Ritter, 2000).

Constructivist theory is highly adopted in the field of DL research as it stresses the fact that learners have to be encouraged to tap into different resources and acquire the knowledge they need rather than just be spoon fed. This clearly is compatible with DE, which mandates that learners play a vital and active role in acquiring the target language. The technology now at the fingertips of learners can be used as a tool to execute this theoretical perspective in acquiring that target language. Moreover, the implementation of this perspective can put learners on the road to autonomy and reflection. This constructivist approach is “process based learning” (Ruscuff & Ritter, 2001). When exposed to new information, learners refine or change their understanding through interaction between old and new knowledge (Ruscuff & Ritter, 2001).

A distinction between constructivism and constructionism was made in Ruscuff and Ritter (2001). The former indicates that the learner builds his own knowledge and does not just wait passively expecting it to be supplied by the teacher, while the latter includes that and goes beyond it. Constructionism indicates that this construction of knowledge has to be external not just internal. In other words, the learner has to be repeatedly engaged in constructing or building something via computer or any other device at hand, internalizing what he has learned, and then externalizing it in a subsequent constructive task (Ruscuff & Ritter, 2001).

The constructionist approach to learning, as previously mentioned, can go hand-in-hand with DE. Many researchers used it and are still using it as a theoretical basis for their research. Murphy (2008) conducted a study to investigate how UKOU DL learning programs can provide learners with course material that will help develop their reflective and metacognitive strategies and assist in their autonomization. Murphy grounded her research by presenting a theoretical framework which emphasized the importance of reflection, first from the cognitive perspective then from the constructivist perspective. She indicated that the cognitive perspective helps learners develop their metacognitive strategies and their autonomous capacity while the constructivist perspective states that reflection should not be considered as a solitary activity; it is rather an external constructive process that requires interaction and

collaboration (Hurd, 2007). Results of the study emphasized the importance of including task based learning activities and materials that help students reflect on their learning and develop their metacognitive strategies. The study emphasized that technology is an excellent mediator that can help develop such learning qualities via distance (Hurd, 2007).

Other studies such as Kitade (2006) promoted the use of asynchronous communication in both DE and face-to-face education to provide students with the opportunity to reflect on their learning. This advantage is not available in spontaneous interaction, whether it is face-to-face or via distance format.

Interactionist theory.

The idea of constructing knowledge led to the introduction of the term “comprehensible input” in the field of SL/FL learning. This term was first introduced by Krashen (1982) in association with the input hypothesis, which states that learners understand messages when provided with comprehensible input which moves them one step beyond their level (i+1). Related to that is the affective filter hypothesis, which states that for comprehension to occur, the learners’ affective filter – that is, the sense of defensiveness and level of stress – has to be low. If it is high, in cases such as being anxious, comprehension is hindered. Yet it has to be pointed out that the primary introduction of comprehensible input did not intend to shift the focus to the social milieu and hence social interaction. It rather intended to highlight the importance of providing learners with comprehensible natural data to help them construct the grammar of interlanguage (Kern & Warschauer, 2000).

Nevertheless, it is worth noting that contemporary with the evolution of the cognitive approach, an American linguist, Dell Hymes, and a British linguist, Michael Halliday, pointed out the importance of the social milieu (sociocognitive theory) in the development of language. Language is not a solitary, private activity that takes place in the confinement of the learner’s mind; it is rather a socially built occurrence that helps construct communicative bridges between the person and the surrounding world.

In the 1980s, a debate developed around the importance of the development of the learner's cognitive structure together with his/her social structure. From this debate emerged the Sociocognitive perspective accompanied by the terms Sociolinguistic Competence, Strategic Competence, and Discourse Competence (Canale & Swain, 1980 in Kern & Warschauer, 2000). Sociolinguistic competence pointed out that you do not develop language and use it in a vacuum; it is used in a society with rules and regulation which you have to know to be able to function properly. Strategic Competence highlighted the importance of language strategies in communication as these strategies can be useful when the available sociolinguistic competence is not enough to handle the communicative situation. Discourse competence underscores the importance of being introduced to the discourse of a specific field if you intend to be part of it. For example, you can never be a part of the medical community without being acquainted with the medical discourse, hence knowing the medical jargon.

All this paved the way towards the introduction and the development of the interactionist approach. The input hypothesis proposed by Krashen was challenged by Long (1981, 1983a, 1996), who presented the interaction hypothesis, stating that for comprehensible input to occur there must be a two-way interaction. For example, the interaction between native and non-native speakers provides the opportunity for clarifications, repetitions, and comprehension checking, which helps provide the learner with comprehensible input (Mitchelle & Myles, 2004).

Swain (1995) tried to extend the interactionist theory by presenting the output hypothesis. This hypothesis highlighted the importance of output in the development of a SL/FL as it helps the learner to check understanding and give the learner the opportunity to reflect on learning. The learner can never reach the point of being competent in the information without engaging in some sort of practice, which might help in noticing some previously overlooked mistakes. This is exactly like sitting beside a driver driving to a certain place over and over to the extent that one feels that one does not need the driver anymore, yet suddenly when one is in the driver's seat he/she

makes the wrong turn and might get lost before actually reaching the intended destination.

This output hypothesis³ triggered the input processing model, which is concerned with the amount of input that is actually converted to intake⁴ and the conditions that, if available, could help in this conversion. Generally speaking, the amount of input learners take in is one of the most important factors affecting their learning. However, it must be at a level that is comprehensible to them. In his Monitor Theory, Krashen advanced the concept that language input should be at the "i+1" level, just beyond what the learner can fully understand; this input is comprehensible, but contains structures that are not yet fully understood.

Computer technology helped in incorporating interaction in distance language learning courses. Interaction is a way to help SL/FL learners learn at their own pace by knowing where they stand, thus helping them move one step at a time. This helps more comprehension as coming close to where the students are can help them convert more input into intake. Interaction via distance using the computer technology can help distance language courses in applying valuable theories used in face-to-face language classrooms.

Ellis (1999), as stated in Chapelle (2005), was the first to try to apply the widely supported interactionist theory in SLA to CALL. The interactionist theory sees interaction as an activity that arises between two or more people in face-to-face communication or in the mind of the learner in the form of an intrapersonal mental processing activity. Ellis proposed a third form of interaction which arises between the learner and the computer. This form of interaction was referred to by some people as *interactivity* to distinguish it from previous forms of interaction (Chapelle, 2005).

³ The output hypothesis claims that the act of producing language (speaking or writing) constitutes, under certain circumstances, part of the process of second language learning (Merrill Swain Ontario Institute for Studies in Education of the University of Toronto).

⁴ Learners' most direct source of information about the target language is the target language itself. When they come into direct contact with the target language, this is referred to as "input." When learners process that language in a way that can contribute to learning, this is referred to as "intake" *(Krashen, 1982, 1985)."

Chapelle (2003, 2005) pointed out the benefits suggested by the interactionist hypothesis. She argued that the three forms of interaction, stated above, yield different benefits for SL/FL learning. The interaction between people, whether it is between students or students and teachers, provides instances for negotiation of meaning⁵ which bring about conversational adjustments. Interaction between learner and computer can provide the learner with modified input when the learner stops the flow of the input to request help. This help can come from the options that the computer, backed up by the Internet, provides. The intrapersonal interaction within the mind of the learner can direct the learners' attention to specific linguistic forms in the input. The common thing among these benefits is that different forms of interaction aim at drawing the attention of the learner to the linguistic input, thus helping transform it into intake. This creates a link between the interactionist hypothesis and the "noticing hypothesis" (Schmidt, 1992; Swain & Lapkin, 1995), which highlights the value of directing the learner's attention to key linguistic features in the linguistic input during second language tasks (as cited in Chapelle, 2005).

The interactionist theory has served, and is serving, as a research hypothesis for many of the investigations conducted in the field of CALL and, consequently, in the field of DE. In DE communication via distance has two vital components: the two mutual events which require two entities or two actions and the technology which helps in establishing and accomplishing that connection (Wagner, 1994). These two components led to the separation between the two terms interaction and interactivity. The former takes place between two objects or actions and it is said to occur when these objects or events influence each other, while the latter is the description of the technology which allows for the interaction to take place (Wagner, 1997).

Many researchers took the interactionist theory with its various developments (input hypothesis, interaction hypothesis, and output hypothesis) as the theoretical

⁵ In this process, teachers and students try to convey information to one another and reach mutual comprehension through restating, clarifying, and confirming information. The teacher may help students get started or work through a stumbling block using linguistic and other approaches (Chapelle, 2003).

basis for their research. Kern (1995) conducted a study which outlined the communicative benefits that FL French students reaped by using an interchange local area computer network⁶ for communication. Students showed a high level of participation as well as the production of sophisticated language compared to oral face-to-face exchange. This interaction via computer network increased their communicative competence and motivation and reduced their anxiety. Other studies which focused on interactions via technology are: Adams (2003), Davis and Thiede (2000), Kitade (2000), Kotter (2003), Smith (2003), Sotillo (2000), and Toyoda (2002).

In summary, the CALL environment has been argued as actually being able to enhance interaction if instruction is thoughtfully and appropriately structured to take advantage of CALL features.

Sociocultural theory.

During the fourth generation of DE (see Table 2), communication in SL/FL courses via distance, whether synchronous or asynchronous, became easier. This development allowed SL/FL learners to communicate with native speakers whether in a telecollaborative or tandem learning setting. This drew the attention of researchers to the importance of mutual cultural awareness to avoid communication breakdown, which could bring the interaction to a halt thus losing an opportunity to improve the target language. All this helped researchers focus more on sociocultural competence as an additional and vital element that should be added to the list of competencies that the learner must acquire to be able to communicate in the target language. In face-to-face SL/FL learning classrooms attention was given to communicative competence much earlier. Canale and Swain wrote a position paper in 1980 examining that accepted principles of communicative approach to language pedagogy by deciding the theories of

⁶ A computer network is a group of connected nodes that are used for data communication. A computer network configuration consists of data processing devices, software, and transmission media that are linked for information interchange. Nodes are the functional units, located at the points of connection among the data circuits. A node, or end point, can be a host computer, a communication controller, a cluster controller, a video display terminal, or another peripheral device. Computer networks can be local area networks (LANs), which provide direct communication among data stations on the user's local premises, or wide area networks (WANs), which provide communication services to a geographic area larger than that served by a LAN. Typically, WANs operate at a slower rate of speed than LANs.

language they are grounded upon. This paper aimed at providing sound measures of SL communicative skills (Canale & Swain, 1980).

As researchers explored sociocultural competence⁷ attention was drawn to earlier work by Vygotsky, the Soviet psychologist who was the first to claim that humans' cognitive development relies on the social milieu in which it takes place. Sociocultural theory is built on the notion that the locus of equilibrium of the learning equation does not lie solely within the individual's mind, but rather it is also located within the social environment in the form of interaction between interlocutors. Lantolf has advocated since the 1980s for the relevance of sociocultural theory to the field of SLL (Mitchell & Myles, 2004). Lantolf has been followed by other researchers, including Belz, who pointed out the impact that computer mediated communication (including online interaction like telecollaboration) in language classes can have on pragmatic development as well as the development of intercultural competence. Belz stated that besides the linguistic benefits that could be reaped from using the L1 (see also Anton & Dicamilla, 1999), there are cultural awareness benefits as well (Belz, 2002a; Belz 2003a). Belz's work in the role and impact of technology on language learning and instruction is particularly relevant and influential; she has conducted research on, among other things, technology-enhanced foreign and second language learning and teaching, computer-mediated communication, Internet-mediated language and culture learning partnerships, and the role of computer mediation in the instruction and development of L2 pragmatic competence. Her work has been significant in establishing the ability and promise of technology-based instruction in facilitating language learning at all levels.

Sociocultural theory has been widely adopted in the field of DE. Learning a second or foreign language has come to be seen as a sociocultural activity. Students do not just learn a new language, but learn a new culture. One has to understand the culture and the genesis of the target language while acquiring the linguistic aspects of

⁷ It is based on the sociocultural theory (SCT) which is an approach established by Vygotsky which claims that interaction not only facilitates language learning but is a causative force in acquisition. Further, all of learning is seen as essentially a social process which is grounded in sociocultural settings (Saville-Troike, 2006,P.194).

that language. Also, one must become an autonomous learner by moving from lower mental functioning (e.g. problem solving) to higher mental functioning (e.g., basic awareness). According to the theory, all that has to happen within the sociocultural milieu. In the field of distance learning computers have become an important tool for providing learners a social context for learning. Computers have become important mediators which allow the learner to interact in various ways whether synchronously or asynchronously. They provide a virtual social setting for interaction via distance.

In DE computers have made it easier for researchers to base their research on sociocultural theory. Darhower (2002) conducted a study to examine the benefits of synchronous CMC. Results indicated that students used the chat room as a social setting to take control of their own learning, transforming it to a learner-centered environment where they could practice intersubjectivity and increase their autonomy. Belz (2001), Belz (2002), and Belz (2003)) conducted a study on telecollaboration between American and German learners. Results highlighted the importance of carefully choosing groups or individuals that could collaborate together. Cultural and social differences might negatively affect the activity if partners or groups were mismatched. This is an aspect that has to be considered for successful telecollaboration to take place.

In summary, CALL instruction has been shown to be fully compatible with current models of second language acquisition

3. Second Language /Foreign Language Learning and CALL

Research recently conducted in the field of SL and FL distance learning typically draws from one of the theories of learning described above. Although this may be justified because the nature of a study often directs the researcher to one theory or another, because there is much that is not mutually exclusive – and in fact much in one theory often draws on and is supportive of other theories – there is value in pursuing research that draws on the insights offered by more than one theoretical perspective. In an article by Chapelle (1997) entitled “CALL in the year 2000: Still in Search of Research Paradigms?” she advocated for the use of SLA theories in studying CALL instead of theories for diverse disciplines such as psychology, computational linguistics, and

educational technology. She also recommended grounding CALL research on the interactive theory. Moreover, to adequately address this wide and rapidly changing language-learning context, Kern (2006) advocated for the use of multiple theoretical perspectives in studying CALL. He based his argument on the current and constant changes in the social and cultural contexts of technology and the diversity of that technology in terms of devices and modes of expression and interaction. I agree, but more simply for the reason that these perspectives describe language-learning skills that any SLL should.

Table 4 shows how the most prominent theories of learning – and language learning – relate to each other in key areas. Considering these from the perspective of the “ideal” learner, a language learner has to be able to autonomously construct his own knowledge through the use of cognitive and metacognitive abilities. These abilities help him/her draw connections between the input available in the social environment and his/her knowledge. This connection can also be made through interaction and negotiation in social settings with native and non-native speakers, unconstrained by the borders of the classroom, in order to gain cultural knowledge and sociopragmatic competence. Indeed, the language learner has to possess various competencies to be successful: intercultural social competence, communicative competence, and linguistic competence. This implies that all these theories are important to SL /FL education and any successful pedagogy needs to incorporate them.

Even now, the field continues to evolve quickly. In the age of technology, multimodality, and multiliteracies other theories could be in research, reflecting the fact that we can now communicate in an audio, visual, and/or textual mode in educational distance language programs as well as outside educational institutions and across different cultural and social milieus (Kern, 2006). This type of language use takes place electronically through sites like Facebook and different blogs. Semiotic⁸ theories have

⁸ Semiotics is the theory of the production and interpretation of meaning. Its basic principle is that meaning is made by the deployment of acts and objects which function as "signs" in relation to other signs. Systems of signs are constituted by the complex meaning-relations that can exist between one sign and another, primarily relations of contrast (e.g. class/member, whole/part). Signs are deployed in space and time to produce "texts", whose meanings are construed by the mutually contextualizing relations among their signs.

been used by some researchers such as (Kress) 2000 to account for the use of visual, audio, and textual modes. Kress (2000) argued that the semiotic modes have to be used in current research, yet before that is done they have to be changed as they are language based and cannot account for the current multiliteracies and the constant changes in the technological domain.

Multimodality led to the redefinition of a literate person; a literate person in this age needs to develop electronic literacies (electronic literacy, information literacy, multimedia literacy, and CMC literacy) (Warschauer, 2003). He reinforced that in the research he conducted in Egypt which showed how available technology could be useless because of individuals using, institutional bureaucracy, and social factors. Thus, digital divide⁹ is not the only problem. Kress (2006) and Warschauer (2003) stress the importance of the individual using the technology and not just on the technology itself. All this underscores the importance of electronic literacy and the SCT. Teachers and students have to be literate in the technology they are using to be able to effectively use it for socialization.

⁹ The term digital divide refers to the gap between people with effective access to digital and information technology and those with very limited or no access at all. It includes the imbalances in physical access to technology as well as the imbalances in resources and skills needed to effectively participate as a digital citizen. In other words, it is the unequal access by some members of society to information and communication technology, and the unequal acquisition of related skills (<http://www.edutopia.org/digital-divide-where-we-are-today>).

Point of comparison	Structural	Cognitive	Constructivist	Interactionist	Sociocultural
Key Scholars	Bloomfield, Fries, Lado, Skinner	Chomsky, Krashen	McGroarty, Ruscuff, Ritter	Varonis, Gass, Swain, Chapelle	Lantolf, Belz (CMC)
How language is viewed	As an autonomous structural system	As a mentally constructed system	As a mentally constructed system backed up by personal experience	As a social phenomenon constructed through interaction	As a cultural and social system to be acquired by the learner
What it fosters in students	Mastery of prescriptive standard, imitation of modeled discourse, with minimal errors	Ongoing development of the learners' interlanguage	Development of the learners' interlanguage and self awareness	Development of the learners' interaction skills	Development of the learners' social and cultural awareness of the interlanguage
How instruction is oriented	Towards well-formed language, both spoken and written	Towards cognitive processes involved in learning and using the language	Towards cognitive processes through interaction between new information and old	Towards interaction skills involved in learning and using the language	Towards sociocultural awareness involved in learning and using the language
Where meaning is located	In utterance of texts	In the mind of the learner	In the mind of the learner and his/her personal experiences	In interaction between interlocutors	In the social and cultural milieu
Role of computers	Provide drills	Provide language input and analysis	Provide language input and analysis	Provide opportunities for interaction	Provide chances for social and cultural awareness

Note: Adapted from Kern and Warschauer (2000)

4. The Focus of Distance Education Studies

Studies conducted in the field of DE focusing on second or foreign language instruction can be divided thematically. I will discuss here the most recurrent themes in the field.

Achievement: Some studies have tried to compare learners' achievements in a conventional classroom or blended learning environment to learners' achievements in a DL learning setting. For example, Harker and Koutsantoni (2005) conducted a study to compare the effectiveness of web-based learning when used in a blended learning environment in comparison to using it in a distance learning program. The participants were EAP (English for Academic Purposes) students from an ethnic minority background. Results indicated a higher percentage of retention (completion of the course) in the blended mode than the distance learning mode. Concerning students' achievement, the results were close. The results of this study indicated low retention in the distance learning course with student motivation identified as the primary factor for the lower retention rates in distance learning. This suggests that students who do not meet with their instructor weekly need extrinsic and intrinsic factors of motivation to complete a course, especially if it is a non-degree course like the one in the study. Also, Gray (1996) compared the achievement of students learning Japanese in a traditional setting to the achievement of those learning Japanese by interactive video. The results indicated that students who are learning via distance achieved success¹⁰, as defined by Juffs (in press), equal to or even better than those learning in a traditional setting.

Technology Variables: Other studies conducted in the field focused on the technology used and how this technology facilitated distance learning, thus minimizing the differences between distance learning and conventional learning. Blake (2000) stated that synchronous communication can create a fertile ground for negotiating meaning in a manner similar to face-to-face interaction. He conducted an experiment which indicated that jigsaw activities served as an appropriate means to prompt learners to negotiate meaning in Computer Mediated Communication (CMC). Also,

¹⁰ Success is the ability to participate meaningfully in another culture (Juffs, in press p.99).

Darhower (2002) conducted a study which supported the findings of previous research on the notion that synchronous computer mediated communication has a positive effect, as shown by William (1999), on learning languages via distance.

In addition to the previous studies, Hauk and Young (2008) performed a study which underscored the importance of asynchronous blogs as students indicated that they gave them the chance to communicate with their partners and know them better. Results highlighted the importance of multimodal communicative literacy. Other studies followed this same trend of trying to shed light on important mediators which facilitate interaction via distance. Some researchers (e.g., Kern & Warschuer, 2000; Kitade, 2000) tried to present activities that if implemented could enhance the positive qualities of using computer as a mediator and minimize the negative ones.

Individual Variables: The third and last group of studies to discuss here focus on autonomy, reflection, and affective factors, mainly anxiety and motivation. The conventional classroom stressed the importance of the learners' becoming autonomous and reflective in order to become successful language learners. They also emphasized the role of anxiety and motivation as factors in the learning equation because of their effect on the amount of input that is converted to intake as well as on test results and other aspects in learning a second or foreign language. All this motivated DE researchers to focus in their studies on these same points. They tried to find out the positive and negative effects that the study of language at a distance has on autonomy, reflection, and affective factors. Hurd (2007) conducted a study to document how anxiety plays a role in DE just as it plays a role in face-to-face instruction. Results showed that CMC shares some of the sources of anxiety with face-to-face communication. These factors include, among others, fear of losing face when making errors, fear of asking questions that show ignorance or lack of knowledge, and fear of the teachers' responses. Distance and the absence of the instructor can be other factors that increase the anxiety of learners, but these are balanced by the absence of other anxiety factors present in the classroom that may arise from speaking or asking questions face-to-face or in front of peers. Hurd's study underscores the negative effect of anxiety on students' performance

in distance learning formats, thus alerting the teachers and program designers to the importance of understanding the learners' perspective and circumstances to help reduce anxiety.

Hurd, Beaven, and Ortega (2001) wrote an article addressing the importance of autonomy as a crucial element in the SLL equation. They also highlighted the importance of autonomy in the field of learning SL via distance and suggested certain strategies that if applied can help promote the learners' autonomy. The researchers addressed the dilemma of implementing a strategy that could help learners become autonomous in the highly structured SL programs at the UKOU. The paper suggested developing certain course materials that in spite of the highly structured nature of the university's programs could effectively promote autonomy. This same issue was addressed by Murphy (2008).

Hurd (2006) conducted a study focusing on the role that personality factors and motivation might play in distance learning. The study highlighted the important role that should be played by the learners on the one hand and the instructors on the other. The results of this study showed that motivation is one of the most important affective factors that influences distance learning. It also pointed out anxiety as an important factor. Also, Lamy (1999) wrote an article advocating the use of asynchronous communication via distance. He stated that it presents an ideal platform for metalanguage talk, thus helping learners become reflective and acquire the target language.

In summary, all these studies highlight that the present technology, if properly used, can enhance DE language programs. Technology provides opportunities to implement SL/FL theories in DE programs that can provide success similar to conventional face-to-face programs. Further research needs to be conducted to provide input on how to use technology in effective ways to help SL/FL students.

5. Gap

The three research areas mentioned above, achievement, teaching by variables, and individual variables, do not cover all the themes discussed in the field of DE.

Research has stretched to discuss the components of ideal programs, assessment, and the problem of the digital divide. Yet in spite of the vast amount of research there are still gaps. For example, research focusing on specific language learning skills (reading, writing, speaking, and listening) is still insufficient. These skills are usually mentioned in research as a side item while the main focus is on how the mediator in distance learning provides learners with a chance to interact and acquire the language. Research rarely focuses on a specific language skill, analyzing the teaching material and/or students' work, interviewing both teachers and students, and then suggesting means which if implemented could promote acquiring that skill. Acquiring a specific skill might entail the use of more than one mediator and necessitate mediators which help learners interact and learn about the culture of the target language. In this case, interaction and cultural learning are not an end in themselves; they are rather a means to acquire that skill.

Some of the studies I came across which focused on language skills in some way is Davis and Thiede (2000). They conducted a study to try to find the effect of interaction with native speakers on learners' writing styles via asynchronous electronic conferencing. Results indicated that there was a shift in the students' writing styles as a direct response to asynchronous conferences with native speakers. Also, Schultz (2000) conducted a study which focused on collaborative writing. Nevertheless, these studies did not go into the required depth to discuss such a vast issue as the skill of writing.

Also there are a few studies which focused on reading. For example, Hsu (2008) developed a personalized English learning system for ESL learners aimed at providing students with reading material that would suit their needs, thus increasing their motivation. Results indicated that this system increased students' motivation and desire to read. This program was not designed for distance learning students, yet it could be implemented via distance. Another study conducted by Shang (2005) examined the effect of email dialogues on L2 reading performance. Results indicated that students maintained a positive attitude towards the integration of emails into reading. Also

emails had a positive effect on reading enhancement as students practice reading in a stress free environment without sticking to rules of academic writing.

Despite the importance of writing as a skill that second and foreign language learners need to acquire, it still does not get the attention necessary in the field of SL/FL learning in the context of DE. Moreover, the writing process, which is a widely adopted practice in the field of second and foreign language learning, is still tied to a great extent to the wagon of L1 learning. Myles (2002) calls for the separation between the L1 and the SL/FL when it comes to researching the writing process¹¹. In other words, the use of the writing process should be researched in the SL classroom as the results might be different from the ones in the L1 classroom. However, while there are an increasing number of studies focusing on L2 writing, there is still little being done in SL/FL writing in DE. As Miles notes for writing studies in general, there needs to be more studies looking specifically at L2 writing in DE contexts. The field of DE can provide optimum circumstances for developing the writing process if the proper mediators (CMC, emails, chat rooms, electronic feedback) and strategies are used, thus research has to be conducted to evaluate these tools and offer recommendations for incorporating them in L2 DE writing instruction.

Computers have been used for a long time in conventional classrooms to teach L1 students the writing process. In the 1980s and the early 1990s word processing was used to improve the holistic value of students' writing as well as their revision patterns. Grejda and Hannafin (1987) conducted a study to highlight the benefits of the use of word processing. In the 1990s the Internet was used to provide learners with real audiences or to publish their work on the WWW for people to read. Mariko (2000) and Hood (1994) conducted two studies on the benefits of using the Internet as it provides learners with real audiences to address in their writings. Also, programs like *My Access* and *Criterion* grade and give feedback on ideas as well as mechanics (Attali, 2004; Chin-Fen & Wei-Yuan, 2006).

¹¹ For a detailed description for the reasons which prompted Myles to advocate for such a separation refer to Myles, J. (2002), Second language writing and research: The writing process and error analysis in student texts. *TESL. EJ* 6 (2), A-1.

Some studies were conducted on the use of computers in conventional EAP classrooms. Yoon (2008) performed a study on the effect of using a corpus for an extended period of time on the writing process of EAP students. Results indicated improvement in students' writing. They also showed the effect of using corpora to develop students' abilities to solve their writing problems as well as develop their lexicogrammar and language awareness. Warschauer (2002) examined the experience of three instructors in Hawaii who incorporated online communication into their EAP academic writing courses. Results showed that promoting students' communication with their instructors and their peers through computer-mediated interaction can help students network into academic discourse. Liu and Sadler (2003) conducted a study which advocated the use of word editing in an electronic peer review mode in addition to the face-to-face interaction in the traditional peer review mode. They found that together these modes can serve as a two step procedure for effective peer review in L2 writing classrooms. Lappanen and Kalaja (1995) reported on an experiment which examined the applicability of computer conferencing in L2 EAP classrooms. Computer conferencing was used for discussion purposes and introducing students to the writing process. Results pointed out that when comparing computer discussions with traditional classroom discussions, the former showed that students did most of the talking, assuming roles other than that of a student as they used the computer not only to answer the teacher's questions but also to disagree and challenge some ideas. Moreover, the feedback students got from their peers was beneficial.

Based on the results of the previous studies, the benefits reaped from the use of computers in conventional EAP classrooms could be transferred to the field of DE. DL programs could be designed to target teaching of the writing process. Although there is a difference between learning to write in the second language and in the L1 (Myles, 2002), studies indicate that the benefits of computers in L1 conventional classrooms could be transferred to L2 conventional classrooms, and ultimately to L2 virtual classrooms after some adjustments. Learning the writing process is crucial for EAP students. We need to know more about how the emergence of the new technology

affects the processes and the definition of reading and writing (Kern, 2006). Designing and assessing distance programs which teach the writing process to EAP students can assist them in gaining easy access to high quality courses that can help them acquire a crucial language skill.

6. Goal

Designing and implementing a program which teaches students language skills via distance is a challenge in spite of the different forms of technology currently available. Many other factors interfere with the program, preventing or at least making it difficult to use some of that technology. Also, the distance between the teacher and the students can make it difficult for the teacher to bond with the students and properly adjust the course according to their progress. To try to avoid the repetition of mistakes that might cause these difficulties, distance learning programs have to be continuously evaluated. The instructional material, students' assignments, and teachers' feedback have to be carefully examined. Also, teachers' and students' opinions must be sought out and taken into account in the overall evaluation of the course.

Case studies are the most common methodology used to evaluate DL programs. Following this precedent, I conducted an evaluative case study to examine an on-line non-credit English for academic purposes (EAP) writing course offered via computer at IUPUI to students in China via distance instruction. The broad objectives of the study are to:

(1) Document the particulars of the course, including who the students are and how the course was run; (2) collect feedback from both students and teachers on the course and the assignments; and (3) provide an overall evaluation of the technology used in the course then offer feedback and suggestions for improvement. Details on the methodology used to evaluate the course will follow in chapter three.

The students in this study are employed at businesses in China and are seeking admission into the IU Kelly School of Business to study for an MBA. Students enroll in this on-line EAP writing course either because they do not have a TOEFL score high

enough to admit them directly into the program, or they do not have a TOEFL. Success in the EAP program does not guarantee their admission into the MBA program.

A detailed description of goals of this pre-MBA EAP course, the relationship between the Kelley Direct (KD)¹² and the Indiana Center for Intercultural Communication (ICIC)¹³, and the teachers who taught the course and the students who took it will be included in the thesis. This on-line EAP writing program for Chinese pre-MBA students has been offered once before; it will be offered again beginning in February 2009. This study will be part of the evaluation process for this course. The overall purpose is to determine the level of success of this on-line EAP course in developing the academic writing skills of these Chinese students and to offer suggestions to improve future offerings of the course, in keeping with what we know about the second language access process. The level of success was based on the completion and passing of the course along with the students' comments on how the course impacted their SL writing skills.

¹² Kelley Direct (KD) was established in 1999, Kelley Direct provides high-caliber working professionals access to the highly-ranked Indiana University Kelley School of Business, no matter where they live or work.

¹³ The Indiana Center for Intercultural Communication (ICIC) is a university-based research and service organization created in 1998 to enhance links between the city of Indianapolis, the state of Indiana, and cultures/nations throughout the world. ICIC strives for excellence in language and intercultural training in academic, professional, and other occupational contexts. The center is part of the Indiana University School of Liberal Arts in the Department of English at Indiana University-Purdue University Indianapolis (IUPUI) (www.iupui.edu).

Chapter Three-Methodology and Results

1. Theoretical Foundation for Analysis

Fostering interaction has been the focus of the SL/FL learning field for a long time. When technology developed in the field allowing for interaction via distance, the SL/FL DL programs quickly embraced the possibilities.

As mentioned earlier in the literature review, Moore and Kearsley (2005) identified three types of instructional interaction: learner/learner, learner/instructor, and learner/content. In DL we can add to that the interaction that can occur between the learners and the technology they are using. The instructional definition of interaction aims at changing the learners' attitude or behavior towards a specific educational goal through an "environmental response" (Wagner, 1994). There is a growing acceptance towards the causal relationship between the instructional interaction (the interplay of people and/or actions) and the interactivity allowed by the technology, as the latter might influence the former in DL learning. Yet Wagner (1997) warns against falling in the pit of being fascinated by the technology to the extent that we overlook the broader issue of learning the SL/FL itself. There are other variables that have to be considered in the communication equation other than the technology. These variables might include, but are not limited to, learning styles, teaching styles, individuals' willingness to learn, performance expectations, instructional design, and instructional delivery.

To move communication via distance from the philosophical debate that sometimes educators engage in to a functional debate Wagner (1997) presented to us some types of interaction that we could consider when building interactional activities into a DL learning program. Wagner (1997) underscored that intentionally designed and carefully planned opportunities for collaboration have to be incorporated into distance learning courses to be most effective. Interaction of the following types should be considered when designing a DE program (Wagner, 1997):

- 1) Interaction to increase learning participation
- 2) Interaction to develop participation
- 3) Interaction to receive feedback

- 4) Interaction to support learners' control/self-regulation
- 5) Interaction to increase motivation
- 6) Interaction for negotiation and understanding
- 7) Interaction for team building
- 8) Interaction for discovery
- 9) Interaction for exploration
- 10) Interaction for clarification of understanding
- 11) Interaction to increase communication
- 12) Interaction for clarification of understanding
- 13) Interaction for closure

All these forms of interaction provide us with myriad purposes for which interaction could be used in DL learning programs. To be able to incorporate these forms of interaction, the teaching methodologies must include activities that allow these forms of interaction to be used. These activities can include, but are not limited to, role play, debate, detailed case studies, authentic problem solving, and discussion groups and presentations (Byers, 2000). The platform in which the EAP writing course (Spring 2009), analyzed in this study, is taught includes the technology needed to incorporate any of these activities in the course consequently allowing for many of the previously mentioned forms of interaction to occur. What is left is to design the course to appropriately use these technologies and include these activities.

To assess the level of interactivity of the technology used by the EAP writing course (Spring 2009) from the institutional technology made available by KD, later described in details, I will use the fram-work developed by Roblyer and Ekhaml (2000) and revised by Liu, Seung-hee, Curtis, Richard, and Shijuan (2008). The revised framework defines five levels of technology interactivity used in online courses (Liu et al, 2008):

- Level 1 (Low interactivity): one-way delivery.
- Level 2 (Minimum interactivity): Level 1 + Two-way asynchronous communications.

- Level 3 (Moderate interactivity): Level 2 + Synchronous exchange of written information.
- Level 4 (Above average interactivity): Level 3 + One-way visual and two-way voice communications.
- Level 5 (High interactivity): Level 4 + Allow synchronous voice and visual communications.

The EAP writing course that was analyzed in this study is a course offered by ICIC via distance to prospective MBA Chinese students. In the analysis section the level of interactivity of the technology used in the EAP writing course will be assessed and the interactions which occurred, whether synchronously or asynchronously, will be reviewed, using emails, teacher feedback, and live meeting, to see what forms of interaction were present and what activities were used to help them occur. It is worth mentioning that as an outside observer of the course the researcher found it impossible to measure actual learning. However, observation of interaction, a key component of learning as established in theories of SL learning, can provide an important window on behavior that supports learning.

2. Description of Institutional Technology

2a. Technology available for Kelley Direct courses to use.¹⁴

Kelley Direct was launched in 1999 in response to the growing needs of companies to provide working professionals an opportunity to earn an MBA while continuing their careers. An online system called Angel¹⁵ is used to deliver distance courses by Kelley Direct School of Business. When students log in using their password and user name they find themselves in front of the home page which includes:

- A list of the courses they registered for.
- Quick access to new course mail messages.

¹⁴ The description of the technology here is provided to make clear the technology available for any course taught within the Angel platform. A course taught via distance using Angel does not have to use all that technology. It is up to the instructor to choose. This description is crucial as some of the recommendations offered was based on the fact that these technologies are available and could be used by future instructors in teaching the EAP writing course.

¹⁵ Angel is an online course management system that combines an open and flexible architecture and a set of easy to use features.

- Current course announcements.
- Upcoming calendar events.
- Access to other Angel feature such as personal book marks, storage space, and more.

If they access one of the courses on the home page they find themselves on the welcome page of that course. This page has current announcements and calendar events for this course. This is one-way for the instructors to keep the students informed about what is happening in the course. It also has a summary of the activities in the course and students can get a quick glance at their grades. At the top of the page students have a tab style navigator to find their way through the course. These tabs are the following:

- Course: welcome page
- Calendar: To find important events: for example, assignment due dates and exam dates.
- Lessons: where most of the downloadable content of the course and the discussion forums and exams are found.
- Resources: a place where you can find the course syllabus, external resources, and quick research tools like Google and Wikipedia.
- Communication: this is an area where students can communicate with their instructor and other students. Students can find under that tab a built in email system, live chat rooms, course roster, as well as other tools.
- Report: this includes activities in the course and a list of the student's grades.

The lesson tab takes you to the lesson page. This is where the students can find the structure of the course and content. A typical course offered by Kelley Direct (KD) will run for 12 weeks. Most of the courses are organized on a weekly basis where there are specific assignments and activities for each week, while others are organized by units or lessons. What all of the courses have in common is that they are organized in a way to help the students find what they want in an easy accessible way. In a typical lesson students might find;

- Learning objectives for the lesson.
- Instructor’s notes and summary of material covered that lesson.
- Reading assignments and exercise activities.
- Additional resources and materials.

The technologies used by KD online courses include:

- Web page.
- Downloadable documents such as word pages excel spreadsheets, Powerpoint (P.P.) slides, case or business simulation, interactive flash movies, and other audio and video formats.

An example of the use of a combination of these technologies in delivering teaching material by instructors can be seen in the P.P. presentations. In such presentations students see slides working like a video accompanied by audio in the form of commentary by the instructor on the displayed slides. This use of audio and slides is a very popular tool used by KD instructors to deliver teaching material. It is a way to simulate conventional classroom lectures. “Camtasia”¹⁶ software was used to deliver this audio/video lesson format.

There are also different technologies that can be used by students to submit their assignments. Examples of these are:

- Discussion Forums: They are assessed based on the quality of the response and participation.
- Drop Boxes and the Hand-in Tools: They are used for submitting files of different forms and content whether they are assignments or electronic handouts provided by the instructor.
- Angel Quiz Tool: It is used for online quizzes and exams. These quizzes or exams could include a combination of multiple choice, true and false, short answers, and essay questions. An alternative evaluative tool which could be used by KD online courses is an off-line testing tool.

¹⁶ Camtasia is a screen video capture program, published by TechSmith. The user defines the area of the screen or the window that is to be captured before recording begins; it is also possible to capture the entire screen area. You can also talk, and use a videocam (www.techsmith.com).

d) Synchronous and Asynchronous Means of Communication: KD offers both of these options to reap the benefits of both and to try and overcome their individual shortcomings. For example synchronous communication provides live communication between the students and the instructor, while asynchronous communication gives the students a chance to think and reflect on their writing. They are found listed under the communication tab on the Angel website and they can be summarized as follows:

- Email: the email feature is used to asynchronously communicate with the instructor and classmates. It is a typical email like that used by universities and businesses.
- Discussion forums: asynchronous discussion forums provide unrestricted access to all participants as they are not required to be active in the forum at the same time. These help students learn through answering questions posted by their professors and responding to other students' posts. Also, professors can provide feedback to students and students can reply. This could be seen as a simulation of typical classroom discussions.
- KD discussion forums: KD developed specific discussion forums tailored to fit the needs of specific courses, for example, the question and answer forum which requires you to post response to one or more question before you can respond to forums posted by other peers. Also, there is a discussion role-based forum where each participant takes on the identity of a specific role or character designed to make students think react and debate as they are faced with real life situations
- Chat rooms: these are synchronous live discussions which require the students and professor to participate at the same time. This simulates classroom discussion and provides a place for groups or dyads to meet to discuss their work. These chat rooms provide desktop sharing and white boards. The former allows instructors to broadcast what they are doing on their own computer and show examples while letting students follow along. The latter provides a space

that can be used like dry erase boards in the classroom thus allowing participants to type or draw in the main window and everyone else can see and follow.

- Breeze/Adobe: it provides the ability to broadcast live webcam video and audio so that students can see and hear their instructors. Instructors can also broadcast pre-recorded videos to the entire group. Moreover, interaction can be accompanied by desktop and file sharing. Chats can only be text based and sometimes the program could be set up for students to type only while their instructors get to choose to type, talk, or use both. Breeze can conduct polls and surveys for all participants.

e) Group Work Tools: KD provides an opportunity for group work to be integrated in their distance courses by providing tools to help facilitate group work. There is a KD team builder sign up for instructors to use if they self-select to assign students to certain groups and not let them choose. There are also private team spaces for groups to share their work. Groups can also have their own discussion forums and chat rooms which can only be accessed by team members. Finally, KD offers a tool that allows students as a team to present their final work to the entire class and their instructor. This simulates team presentations which take place in face-to-face classrooms.

2b. Technology used in the EAP writing course

All courses taught via distance through Kelley Direct are required to use Kelley's web based environment, Angel. But what they use from the available technology, previously discussed, is totally up to the instructor. The most important tool the writing course used was Breeze/Adobe. The features the instructor used from Breeze were desktop sharing and text /audio interaction. It is worth mentioning that the first time this course was taught Breeze/Adobe was not used, thus the course did not include any synchronous interaction, which was intentional. The students' assignments were submitted using drop off boxes. Responses to the assignment were sent via email. Lessons were explained using a text based P.P. presentation (in the Fall of 2009 Camtasia which included powerpoint and text and audio was used by the instructor to familiarize her students with her surroundings).The instructor sometimes used outside

sources such the P.R.I.¹⁷ website which includes texts accompanied by an audio. KD discussion forums created by KD and used by some online courses were not used (e.g. role play discussion forms). It is important to highlight that the EAP writing course was developed by instructors who had not taught on-line before and were teaching a subject – academic writing – that is a challenge to teach on-line because it is a skills-focused course.

2c. The technology used in an MBA course (C550) law and ethics in business course¹⁸

The researcher was given the opportunity to navigate through one of the MBA courses taught within the Angel platform. This was a chance to compare the use of technology in the EAP writing course to the Use of technology in this MBA course.

The roster of this course included eighty students divided into two sections of forty each. This course used the software Camtasia to deliver the lessons. The instructor wrote the lesson on P.P. slides, and this was accompanied by an audio of the instructor explaining each slide. The instructor uploaded for each lesson P.P. slides with or without audio for the students' convenience. The discussion forums used were divided into formal and informal. The formal ones used KD role play discussion forums. Students in the course signed up for their teams early in the course using the Team Builder tool provided by KD under the communication tab.

Three of the KD special informal discussion forums were used. First, *the chain reaction* in which students introduced themselves and got to know their fellow students by finding something in common with the last posted forum and then elaborating on that. The instructor was the first one to post. Second the *"coffee house"* forum was set up for students to share information such as websites, videos, book, and

¹⁷ PRI stands for Public Radio International (www.pri.org). Instructor # I used it to assign readings to the students where they get to read an article while listening to it being read by a native speaker. After that they either had to join in a discussion forum about the article or do other type of writing activity based on the PRI article.

¹⁸ The description of this MBA course is not included to evaluate or analyze the MBA course; it is included as a tool to assist in analyzing the EAP writing course as both were taught using the same platform (Angel).

recommendations with their fellow students seven days a week. The third forum was the *frequently asked questions (FAQ)* discussion forum. In it students got to ask questions about the course content and procedures. When a student wanted to ask a question about a concept contained in the reading assignments he/she posted the question on the *FAQ forum* and then alerted the instructor to that by email that he/she has done so. The instructor then answered the question by posting the answers on the *FAQ forum*. The forum was intended to allow students who have similar questions to see the answers. All questions and answers were available throughout the course for students to refer to. The books for the course were available electronically for students to buy using the following website <https://ebooks.primisonline.com/eBookstore>.

Students in this course use the KD hand-in system to submit their assignment. The instructor used "Track Changes"¹⁹ to grade their papers, she also provides a rubric for each assignment.

3. Students.

This course is not offered to the public in China. It is only offered to Chinese employees of at certain companies who want to study an MBA course via distance. The tuition for the course is paid by these companies and not by the students.

The course included twenty-three students. Some of them posted their picture on the roster while others did not. These students worked in at least three different companies. They had full-time jobs and some of them had families. They all had aspirations to join the MBA program to improve their professional and economic status. Their ages ranged from the late twenties up to the late thirties. Their first discussion forum was designed to make each student introduce him/herself, which was really helpful to get students acquainted with each other.

¹⁹ Track Changes in Word allows you to do electronically what you used to do manually. No more red marks on a printed document; no more circled text with arrows indicating moves. Track Changes is composed of two parts. The first is viewing edits in a document as you make changes and the second is comparing two documents, frequently called "redlining." (<http://www.addbalance.com>). See (Appendix E) for a sample paper with track changes ("Sample Track changes", 2008).

Originally I designed the study to include at least six students who would be required to chat with the researcher using the chat room on the Angel website and agree to submit their assignments and the teacher's feedback for analysis. All the students were contacted by me and the writing instructor several times to ask them to participate. At the beginning it seemed that I would have more than the number of students I had in mind because many students volunteered. But when it came to actual participation only two students did live chats using Angel and another two answered the questions via email. It is worth mentioning that students who participated in the course were sent via email a description of the study, the questions, and the consent form prior to being interviewed. They were asked to take as much time to review the material before deciding whether to participate in the study or not. Students who participated responded within seven to fifteen days.

4. Writing Instructor for Spring 2009.

The instructor of this course has a BA-English, and a MA-English from IUPUI. Her master's degree focused on the need for the development of "bridge" courses which could be the missing link between high school and college for freshmen students with Hispanic descent. The thesis focused particularly on those interested in majoring in Computer Science (CSCI) at IUPUI. The instructor worked as an ESL writing course instructor at IUPUI. This is her first writing course she teaches on line via distance.

5. EAP Writing Course

5a. Description.

The course in this study is a non-credit English for MBA writing course taught to prospective MBA students via distance. This course was offered to fulfill a request by KD. KD asked the EAP program at Indiana University Purdue University Indianapolis (IUPUI) to design a writing and reading course offered via distance for Chinese students who want to join the MBA distance learning program offered by KD. This course would substitute for the TOEFL test which is required to start studying the MBA. Many students prefer to take a course rather than go through the TOEFL which might ruin their chances in continuing their studies. The EAP contacted ICIC and they ended up

offering the course through a joint effort. Spring 2009, the EAP writing course, which is the focus of this study, was designed to help students explore different rhetorical strategies used in MBA discourse. These include textbooks, case studies, case analysis, and case responses. Students in this course were expected to develop their skills in comprehending, interpreting, analyzing, and synthesizing the MBA material they read. To develop these skills students were asked to apply them in their writing. In applying these skills students examined the various stages of the writing process which require d them to consider the purpose of their writing projects as well as the needs of their audiences as they decide what content will be included in their writing. By the end of this course they were expected to:

- Analyze and read different MBA text critically
- Write sound argumentative essays supported by information
- Participate in conversations about writing
- Be able to address their purpose and audience while writing
- Use different writing grammatical structures and punctuation correctly²⁰

This course was divided into twelve lessons corresponding with the twelve week duration of the term. Each week students were expected to log onto Angel, Kelley's web-based course environment, and see their assignments. Students were expected to finish three writing projects and a final portfolio. They were given a span of several weeks for each project. Each week students were assigned readings and drafts and some exercises that they were required to do for the following week. Sometimes to decrease the work load the same readings were assigned for both the EAP writing and EAP reading course, which was taught by another instructor conjunctly with the EAP writing course but each course did something different with the text. Students were expected to contact the teacher via email during each writing project as a type of conferencing. According to the course description the teacher had hoped to schedule live office hours every week where the students could contact her synchronously, but

²⁰ This information about the course was obtained from the course overview electronically provided to the students at the beginning of the course.

this was never brought into effect. Conferencing and feedback was provided via email. There were three live meetings on Angel with both the reading and writing teachers at the same time, but attending these meetings was not obligatory. Students were given the choice to decide whether they wanted to attend these meetings and ask questions or not. It was not a course requirement. During those meetings students had to correspond with the teachers in writing, but the teachers could use the written mode, the oral mode or both to correspond with to their students.

At the beginning of the course students were sent a handout describing the course load and the amount of work expected from them plus a tentative schedule of each week's readings and assignments. The course started with an introductory video in which the reading and writing teachers introduced themselves and wished the students good luck. After that, weekly lessons were posted on Angel. They included P.P.s, detailed explanation of assignments, and links to websites that helped students with their projects or other readings they might be doing. Students submitted their projects via emails and had a drop off box for discussion forums. In these forums they were expected to participate in a discussion about a given topic and respond to at least the writing of at least two other students. The readings that the students did were assigned on occasion from Internet websites but mostly from the following text books:

- *Academic Writing for Graduate Students (AWGS): Essential Tasks and Skills, Second Edition*, by Swales and Feak
 - *The Case Study Handbook (CSH)* by Ellet
 - *SF Writer, 4th Edition*, by Ruskiewicz, Seward, and Hairston
 - *Reading for English MBA*, which is a collection of articles focusing on MBA topics
- The books were provided by KD School of Business, which means that students were not allowed to write in their books to keep them in a good condition for future use.

5b. Implemented schedule.

The course was divided into twelve weeks according to the academic calendar. The assignments given each week were given on Monday and were due the following Monday. The instructor was flexible at the beginning concerning deadlines because this

was the first distance language course for all of the students, but as weeks passed she became rigid about assignment deadlines. Table 5 gives a brief description of the material covered during that time.

Weeks	Date	Topics covered	Technology	Focus of Readings	Assignments
Week 1	February 9-14	-introductory video by instructor -introductory P.P. to course -guidelines to first project (writing different paragraphs) -grading rubric	-video -text P.P.	Chapters 1-6 and 12 (SF writer textbook) - choosing a writing topic, audience, and genre. - Plagiarism -shaping a paragraph -drafting ,revising ,editing and proof reading	-writing a journal -discussion forum
Week 2	February 16-21	-P.P. focusing on academic writing with special focus on process and definition paragraphs -handout on transitional devices -P.P. showing a day in the instructor's life as an example	-text P.P.	Chapter one in (AWGS) focused on academic writing (audiences, purpose, strategy, organization, style, and flow)	-draft (definition and process paragraph) -a journal describing a day in the student's life
Week 3	February 23-28	-P.P. describing compare and contrast paragraphs	-text P.P.	Chapter three in AWGS -focused on problem and solution texts	-two tasks in AWGS book -discussion forum about work hours and draft(compare/contrast Paragraphs)
Week 4	March 2-7	-P.P. on revision and editing	-PRI website	Chapter 5 in AWGS -focused on writing	-write a discussion forum about the article

			-P.P. text	summaries -plagiarism Text/audio article from PRI -focused on community development in rural China	-revise the four paragraphs they wrote after the teacher's feedback
Week 5	March 9-14	-P.P. on the art if summary -guidelines for project 2 (write a summary) -sample summary	-P.P. text	-read article entitled (Climbing the Great Ladder of China)	-Write a draft for project 2 (summarize the article) -discussion forum about goals for promotion at work
Week 6	March 16-21	-general and specific text	-PRI website	Chapter two in AWGS -focused on how to write general-specific (GS) text -audio/text article on the PRI website	-write a journal about the PRI article -revise project 2 based on teacher's feedback
Week 7	March 23-28	--P.P. focusing on position statements -guidelines for project 3 (write an essay stating their position on an article from the CHs book)	-P.P. text	Case Study Handbook(CHS) -read an example of position statements	-discussion forum about relations between US and China -write a draft (project 3)
Week 8	March 30-April 4	-P.P. continuing on position statements	-P.P. text	Chapter 9 CHS -focused on persuasive essays Chapter 4 in AWGS	-write a draft for project 3 -exercises chapter 4 from AWGS

				-focused on how to discuss and analyze data	
Week 9	April 6-11	-P.P. on the clarity, cohesion, redundancy, and repetition in position statements	-P.P. text	Chapter 6 AWGS -focused on writing critiques	-write a journal on the poor -review project 3 based on the teacher's feedback
Week 10	April 13-18	-guidelines for portfolio ((students review two of their projects) -P.P. on how to put a portfolio together	-P.P. text -PRI website	- audio/text article form PRI website	-write a journal about the PRI article
Week 11	April 20-25	-P.P. on how to get the highest score on the portfolio	P.P. text	None	-discussion forum investment in Chin-work on their portfolio
Week 12	April 27-May 2	-wrap up	None	None	-submit final portfolio -write a journal on their experience with the EAP distance writing course

5c) Live meetings.

Three live on-line meetings took place during the course. These live meetings took place within the framework of Breeze technology offered by KD. The features used were a combination of text-based chats, audio live chats and desktop sharing. Students could interact with their instructors by typing while their instructors could both speak and type. The desktop sharing allowed the instructors to show students what they were doing on their desktops accompanying that by audio explanation. To accomplish this, Camtasia software was used. Both the reading and the writing instructors were present during those meetings, thus the students' questions were related to both the writing and reading course. These meetings were not obligatory for students to attend. A total of 14 students out of 23 attended the three meetings. They were recorded for all students to listen to again at their convenience. The reading course is not the focus of this thesis. The highlights of these meetings are:

Live meeting 1 / 3-13-09.

Eight students total attended this live meeting. Six of them participated while the rest just listened. A portion of this meeting was dedicated to familiarizing the students with how the meetings were conducted. The students' questions focused on problems they faced in working on case studies which are a part of their reading course. Plus they were interested in getting acquainted with means they could use to improve their English pronunciation for oral conversation and grammar for their writing. The instructors used the desktop sharing feature to guide them to websites and other means that could help them achieve their goals. The meeting extended to the instructors' and the students' personal lives. When a student asked a question, other students offered assistance. There were some side conversations between the students. Only one question went unanswered.

Live meeting 2 / 4-3-09.

This meeting was not recorded from the beginning. The voice quality of this meeting was poor. A mild echo accompanied the recording which made it difficult for students who might listen to the recording afterwards to follow the meeting. The voice

recording was wavy, and it was sometimes interrupted. Six students total attended this meeting, and all participated. Students in this meeting seemed to be worried about joining the MBA program as they asked questions related to that. They also asked how to access business journals and requested the reading and writing courses focus on the financial crisis as well as other business related topics. As for writing, some students were worried about their writing being boring and having “string sentences”. They asked about their final reading quiz and final writing portfolio. The instructors suggested ways to help students practice to improve their writing skills. Students’ questions showed that reading is an easier skill to acquire than writing in the second language. This was reinforced by their instructors who encouraged them to practice. Also, their questions showed that there was some sort of group work integrated in the reading course, which was not the case in the writing course. Some students inquired about movies with subtitles they could watch in English to help improve their language. They focused on business movies and were especially interested in watching a movie they saw a portion of in their reading course. The recording was sometimes wavy and interrupted.

Live meeting 3/ 4-21-09.

A total of ten students attended this meeting. Seven of them participated and asked questions. Some questions focused on the final case analysis in the reading course. They again asked questions about the final test and evaluation and getting admitted to the MBA course. They asked about practicing grammar, writing summaries, and how to support their ideas in writing. Instructor number 2 shared with the students a picture of her son which added a little spirit to the conversation about courses and material being studied.

6. Method

Using an evaluative case study approach data was gathered from different sources to give the results greater reliability. According to Yin (1994 as cited in Liu, Lee, Bonk, Magjuka, and Liu, 2008), the case study is the most appropriate approach to understand a complicated phenomenon. Zooming in on one course can help answer

many “how” or “what” questions related to the course. This is why I chose a case study approach to find out how current technologies were used and how they were implemented for interactional purposes. Also, I tried to show how the use of technology in teaching writing could be used in teaching writing. Following the advice of Ortega (1997) I tried to diversify my data sources as much as possible. Ortega (1997) urged researchers to use multiple data sources like: classroom and school observations, interviews, self-reported data from questionnaires, computer-collected data, and observed behavior and linguistic performance. I collected my data from the following sources:

Interviews: Semi-structured interviews were conducted via distance with two the students using the chat room on Angel Two other students answered the researcher’s questions via email. Semi-structured interviews were also conducted with instructors. It is worth noting that I used my personal experience in communicating synchronously with two students via Angel and asynchronously with two other students via e-mail to compare the pros and cons of these two forms of communication via distance. Four instructors participated in the study. The first two were the two writing instructors who taught the course consecutively in Fall 2008 and Spring 2009, and they were both interviewed face-to-face. The second two were Master in Business and Administration (MBA) instructors. The first instructor has a master’s degree and a Ph.D. in business. Her professional interest lies in Internet law, contract law, and punitive damages. She has been teaching her business course via distance for five semesters. She was interviewed by cell phone. She gave me access to navigate through the course she teaches (MBA C550).The second instructor has been teaching MBA courses via distance through KD for a long period of time. He has a master’s degree and a Ph.D.; he has been teaching at KD for 9 years. His professional interest lies in Enterprise systems, applications, emerging technologies, decision support systems and computer simulation. He was not verbally interviewed. He preferred to respond to the researcher’s questions via email. Also, comments offered by the two MBA instructors to Kelley Direct Television (KDTV) about

interacting with professors were transcribed and used with the permission of the chair of Kelley Direct Public Programs.

Content Analysis: Data were collected from the EAP writing lessons (Spring 2009). The three live meetings that took place throughout the course using the Breeze/Adobe technology were transcribe and analyzed. Also, a sample of the discussion forums, assignments and the writing instructor's feedback were included to help analyze the writing course.

One MBA course (MBA C550) was navigated through with the permission of the instructor teaching the course to look at how KD technology was used in it. This was done to assist in analyzing the EAP writing course as both were taught using the same platform (Angel). The instructor who taught (MBA C550) was one of the two MBA instructors interviewed. Feedback from students sent to the EAP writing instructor (Spring 2009) was analyzed.

Also, the feedback provided by the MBA students to KD research department about the technology used in all the MBA courses taught in: Winter 2007, Fall 2008, Spring 2007, Summer 2007, Winter 2007, Summer 2008, and Spring 2008 were obtained from the appropriate personal at KD with the Chair's permission and analyzed. The analysis of any data related to the MBA courses and the interviews conducted with two MBA instructors was not conducted to compare the EAP writing course to MBA courses or to give any recommendations related to them; it was rather conducted to help in evaluating and analyzing the technology and activities used in the EAP writing course (Spring 2009) as the EAP course was taught within the same platform and had the same technology available for the MBA courses to use.

7. Research Questions

Results from these sources were examined to answer the following research questions:

- 1) How did the use of technology in teaching an online writing EAP course impact the teaching of writing?
- 2) How were the technologies provided by KD used in the online EAP writing course?

3) How did the online EAP writing course facilitate teacher-student and student-student interaction?

- a) What was the interactivity level in terms of technology use?
- b) What were the most common interactive technologies (i.e. emails, asynchronous discussion forums, asynchronous text-based chat, online video/audio clips, etc)?
- c) What were the advantages, problems, and issues of these tools as perceived by instructors and students?

4) What are the emerging issues and trends related to the use of different technologies in the online EAP writing program?

The results of the study were analyzed and summarized into three categories: (1) use of technology in an EAP online course, (2) interactivity level of the technology used in the course, using the framework developed by Roblyer and Ekhaml (2000) to evaluate the interactivity level of the EAP writing online course, and (3) the positive impact that technologies have on teaching writing. Results are used to give recommendations concerning various changes that if implemented could help improve the course. These recommendations are based on the results of the study as well as results of previous research conducted in the field. This study seeks to help EAP instructors in designing courses via distance to more successfully teach the academic writing process via distance learning modes.

8. Data Analysis (Results and Discussion).

8a. Research question one.

1) How did the use of technology in teaching an online writing EAP course impact the teaching of writing?

Results.

Computer Programs: Upon examining the sample assignments provided by the instructor who taught the course Spring 2009, it became clear that the students made use of word processing. Their assignment did not contain many typos or spelling errors, and the grammatical mistakes were also limited in number. Because students wrote

their assignments on the computer, they had access to spell checkers, grammar checkers, concordances, dictionaries, and thesauruses.

The use of word processing can also be helpful as it helps students build on their previous writing skills by adding new information that the computer programs may provide. Moreover, in the interviews conducted with the students who took the EAP writing course; they highlighted the importance of word processing in helping them recall information especially vocabulary. Word processing allows students to build on their previous knowledge by providing them with new information that they can add to their interlanguage, consequently constructing new knowledge (constructivist theory).

Discussion.

Students benefited from having access to the support tools that come with the word processing programs they used, and it is clear that student writing can be enhanced by using technology and computer programs. Other writing technology-driven writing tools are available that are designed to help students in acquiring their writing skills. Some of these programs are used in conventional classrooms like Criterion and My Access. Criterion is a web-based service developed by Educational Testing Services (ETS) to assess students' essays, provide an instantaneous score and give them feedback. It contains two applications that are based on natural language processing (NLP) methods, the critique application and the scoring application. My Access is a grading tool and a writing tool in an EFL college writing classes developed by Vantage point. Attali (2004) and Chin-Fen and Wei-Yuan (2006) conducted studies on the effectiveness of these programs; results indicated that the students were able to understand most of the feedback the system provided, and reduce their error by a quarter. If these programs are help students in conventional classrooms who can get face-to-face feedback they can definitely help students learning via distance to help enhance their learning and guide them.

Also, Shaalan (2005) conducted a study in which an ICALL system in the form of a NLP technique was used to help students learn to write Arabic as a second language. The system used encouraged the students to produce sentences without restraints in

various situations and contexts and then they were guided to recognize on their own their mistakes. The program also issued feedback to the students. Results indicated that there was learner-system interaction and that the feedback the system provided the learners helped them better understand their knowledge gap. These studies include programs that were used to enhance students writing in their second language. DL writing programs ideally will use all sorts of computer programs that can help students master their writing skills. These programs can help apply the constructivist theory in DL EAP writing programs, thus help students in constructing new knowledge about the interlanguage.

Results.

*Information and Communicative Technology (ICT)*²¹: The writing course used the PRI²² website which provided students with a text and audio mode and allowed them to listen to the text as many times as possible and use the playback feature to access the portions they need to repeat. Also, the Breeze sessions which included both audio and text were recorded and made available on Angel for students to access and listen to when they want whether they attended the sessions or not.

In the interviews conducted with the students they expressed satisfaction with the PRI website as it presented the text in an audio and written mode which allowed them to follow the audio closely and playback the portions they missed (multimodality). Also, the Breeze sessions which included both audio and video gave the students a chance to ask questions and interact with their teachers in a live mode, thus allowing them to have interactions with their teachers in a social setting. Some of the live meetings extended to conversations about the teachers' and the students' families.

²¹ICT allow users to participate in a rapidly changing world in which work and other activities are increasingly transformed by access to varied and developing technologies. ICT tools can be used to find, explore, analyze, exchange and present information responsibly and without discrimination. ICT can be employed to give users quick access to ideas and experiences from a wide range of people, communities and culture.

²² PRI stands for Public Radio International. Sally the instructor used it to assign readings to the students were they get to read an article while listening to it being read by a native speaker. After that they either had to join in a discussion form about the article or do other type of writing activity.

One of the students whom I interviewed in the EAP writing course expressed their satisfaction with these sessions. He said, "I think the live meetings are the live meetings (Breeze sessions) are the best way to keep in touch with the instructor when I do have any confusion. I do suggest if possible having more than 3 live meetings."

Discussion.

The students' satisfaction with the PRI website and the Breeze sessions shows how the use of ICT is important in SL distance programs. The use of ICT in SL/FL courses whether they are reading, listening, speaking, or writing can help provide the students with the chance to be exposed to linguistic and cultural material. According to Zhao (2003) this can be achieved by three means. First, using multimedia (text, audio, and video) to expose learners to learning material can be more effective than using just one medium because it helps create stronger memory links and allows students to use the playback feature to access any specific segment they want to easily. Second, using video and Internet, the former helps bring rich context and culturally related material while the latter allows learners to access news and literature in the target language. Third, increasing comprehension by using learner control and multimedia annotations, using captions, and slowing down the speech can increase comprehensible input which is necessary for language learning to occur (Krashen, 1985).

In the writing/reading Breeze sessions the students' need for the use of ICT was evident in two portions. First, a student from the EAP writing course asked the instructors to direct him to how to access movies with subtitles or captions to help improve his English. At a first glance one might think that this is not related to writing, but if one remembers that all language skills help each other. Watching movies with subtitles can enhance the students' vocabulary thus help them in their writing. This is clear in:

Student # 2: I want to learn by movie with English screen. How can I?

Instructor # 1: Are you talking about watching movies with subtitles?

Student # 2: pardon

Instructor # 1: Are you watching American movies? We don't understand what you are asking.

Student # 2: ok

Student # 2: American movie is welcomed

Instructor # 1: Are you wanting to watch American movies that have subtitles or sentences down at the bottom in English, is that what you are asking?

Student # 12: how can we watch movie with English words? Can you recommend movies easy to understand for us?

Student # 2: normally there is no English word in the movie

Instructor # 1: We're thinking hold on just a minute. What we were thinking of is probably the children's movies or Disney movies. Only because they are going to use language that is more appropriate for someone who does not have as many words in their vocabulary. Yet it is not academic language; it is not academic language, it is not business language or anything like that. You have to be careful while watching these movies that you are not picking up sentences or phrases that might not be appropriate for use in the academic world. Children's movies might be a better idea because they might not say things that would be appropriate to say in the classroom.

Student # 12: I have watch kid video, I'd prefer business movie.

Second, another student in the EAP writing course inquired about means to improve their pronunciation in English. The instructor suggested mimicry and posted a website under resources to help the students. Improving the pronunciation can help EAP students spell words correctly especially if they are writing and not typing on the computer, thus not using word processing. This conversation went as follows,

Student # 9: How can I pronounce like a native speaker?

Instructor # 2: *Pronunciation practice is good I think. I can recommend trying to mimic. One thing we do in American English is we keep our mouth and jaw more relaxed. I will post a website for pronunciation under resources.*

Student # 10: can you recommend some?

All this highlights the importance of incorporating more ICT in DL courses; both researchers and students assert that. They allow many language theories to be put to use; interactionist theory, multimodality, and SCT.

Results.

Feedback: The feedback in this course was provided via email. The feedback was general and did not refer to any specific points. I was not given the opportunity to look at all the assignments and feedback provided by the instructor to the students to be able to

assess the effectiveness of email feedback in general. Also, the samples provided by the instructor who taught the course in Spring 2008 did not provide the second draft written by the students to see whether the feedback helped them in improving their writing and correcting their mistakes or not.

Discussion.

The current technology provides instructors with the opportunity to correct papers electronically just like correcting them manually. They can write notes pointing to specific sections of the paper. "Track Changes"²³ is a program which gives the instructor the opportunity to correct electronic documents the same way they correct hard copies.

By analyzing both the data which was supplied by the research department in KD and presented MBA students' evaluation of the technology used in more than 30 MBA courses and the interviews of the two MBA instructors, the importance of using track changes or any other similar program was emphasized. One of the MBA instructors as she said, "The problem with writing emails; you will not be able to refer to a specific part of the paper. Track changes allow you to refer to a specific chunk of the paper." It was also pointed to by one of the MBA students who said, "The feedback I got on my assignments was far better than face-to-face courses. The teacher took the time to read my papers and write computerized notes in the margins. This helped me know what I needed to work on to get better."

Hyland (2001) and Ros i Sole and Truman (2005) stressed the fact that the individual nature of students' expectations and wants when it comes to feedback. That is why Hyland (2001) indicated in his study that students' input on the feedback they expect from their instructors in language courses is crucial. This could be emphasized if we know that the feedback provided by the instructors in DL courses is mostly affected

²³ Track Changes in Word allows you to do electronically what you used to do manually. No more red marks on a printed document; no more circled text with arrows indicating moves. Track Changes is composed of two parts. The first is viewing edits in a document as you make changes and the second is comparing two documents, frequently called "redlining." (<http://www.addbalance.com>)

by their own language learning experience (Ros i Sole & Truman 2005) and their previous teaching experience in conventional face-to-face language classrooms. According to Hyland (2001) input on feedback could be obtained from students in two-ways:

1. A cover sheet could be provided with the students' first assignment in which they could write down some of the things they require in the feedback that will be provided by their instructors.

2. A reflective writing assignment at the beginning of the course in which students can outline their feedback needs and expectations.

The individual nature of feedback is an indicator that it could be provided by different means. Using "Track Changes" along with programs like Criterion and My Access can be beneficial. The latter can help students edit and self-correct while the former can simulate the paper-pencil correction in face-to-face classrooms. Emails, chatting, and phone-calls, if available, could be added to that to simulate classroom feedback discussions. Programs like Skype²⁴ could be used for audio communication to minimize the cost of international phone calls. To preserve the effort that instructors exert in building up a feedback mechanism a guide to teachers on how to provide feedback and a guide to students on how to use it similar to the *Language Learner's Good Study Guide* developed by the Center of Modern Languages at the Open University (Center of Modern Languages, 1995) could be developed and refined on a regular basis to be a guide to DL students and teachers. Using different modes is crucial in EAP writing courses and it is supported by SL learning theories, yet further studies have to be conducted to assess whether such feedback helps learning or not and if yes to what extent.

8b. Research question two.

2) How were the technologies provided by KD used in the online EAP writing course?

²⁴ Skype is a software application that allows users to make voice calls over the Internet. Calls to other users of the service and, in some countries, to free-of-charge numbers, are free, while calls to other landlines and mobile phones can be made for a fee. Additional features include instant messaging, file transfer and video conferencing.

Results.

The EAP writing course used the Angel platform. This is not an option as all courses taught through KD have to be taught within that platform. This comes with the use of the Angel email system. All instructors teaching online courses at KD have to send and receive emails through the KD email system. The choice comes in the use of the technology found within that platform; instructors have the option to choose whatever technology they see appropriate and useful in teaching their course.

Powerpoint (P.P.): The instructor used P.P. slide to provide students with a succinct explanation of the material the students read. The P.P. slides were clear and at the students' level. In their interviews the EAP writing course students expressed their satisfaction with the P.P. slides and indicated that they helped them with their readings and consequently with their writings which were based on their readings.

Discussion.

The P.P. slides were not accompanied by an audio of the instructor explaining the material. Using Camtasia software to deliver slides with audio is a very popular means used by KD professors to deliver the instructional material. That allows students to see the slides working like a video and the instructor commenting on them. This combination of audio and slides closely simulates the classroom lecture. We could say that it simulates a teacher fronted classroom lecture as it lacks the student participation component. Yet, this is the closest P.P. slides instruction could get to face-to-face classroom instruction, especially if we acknowledge that teacher fronted classrooms still exist as some teachers are still concerned about losing control over their classroom by allowing students to manipulate their own learning experience. The first time this course was taught the instructor used the Camtasia software to record videos accompanied with an explanatory audio of her office, house, and community. This was a means to bridge the social and cultural gap between her and her students and help create an online community.

Many MBA students in their comments on the technology used in more than 30 MBA courses spoke positively about the use of P.P. slides with audio to help explain the material of the course. They said:

“Outstanding use of narrated P.P. slides, the best I've seen in the entire KD program.”

“It was nice that the professor used the audio recordings to introduce each lesson. It made it like a real lecture²⁵, and was helpful in interpreting the slides, rather than just getting the slides themselves.”

“I enjoyed the combination of recorded video, P.P. slides and text documents.”

“I think that additional recorded lectures would be beneficial.”

“The narrated P.P. slides were a good substitute for lecture. They were very helpful in learning the material and seeing real-world examples.”

“The narrated P.P.s were a big help.”

“Also, I appreciated the teacher taking time to put together narrated P.P. presentations. I feel that he used the technology better than any of my other Kelley Direct professors. “

“Excellent the presentations with audio files were extremely useful and much appreciated.”

“Professor had lectures available with her audio overlaid with P.P. presentations. That was an excellent study aid and I hope that other professors can do the same.”

The audio adds a lot to the slide and clarifies many points that can never be included in a P.P. alone. Moreover, it helps bridge the distance gap between the students and their instructor by keeping them connected, thus help create an online community. In addition to that the audio accompanying the P.P. slide will help address more than one learning style as it can address auditory learners and visual learners at the same time.

Results.

Discussion forums: The writing course included some discussion forums. These discussion forums were assigned roughly on a weekly basis. The discussion forums were like the discussions used in face-to-face classrooms. A topic was posted and students responded to the topic and to postings by two of their colleagues. The discussion forums

²⁵ Students who register for online courses are those who have full time jobs or are live far away from the learning institutions, which make online courses their best option.

tailored by KD²⁶ to be used by the DL programs taught within the Angel platform were not used.

Discussion.

It is vital to consider the EAP writing course in the context of the other courses in the KD MBA program. This is to get a better sense of the experience the students have. If we look at the EAP writing course in the context of the MBA course C550, the following observation can be made:

If we compare the home page of the MBA course C 550 and the home page of the EAP writing course on the Angel website you can get a sense that the MBA course resembles a classroom where there is activity and student participation going on, while the writing course resembles a classroom that is quiet, all the students in their places and the teacher at the front of the classroom explaining the lesson.

The first special KD forum tool used by the MBA course is the *chain reaction forum*. The MBA instructor used it to get students to know each other and create a sense of community. It is highly creative and more interesting than the regular discussion forums used in most courses where the students just introduce themselves by posting separate forums. The MBA instructor of C550 talked about these forums and how she uses them in my interview with her she said:

It is an introduction forum and I call it a chain reaction forum. I first post an introduction of myself and the next person who posts (choose) what they have in common with me and they introduce themselves, and so on it is like a chain. I usually print out that forum and actually make note cards. I put each students' response on a note card and I put them in order so that when I hear from a student via email I can look at the note card and see where he lives and so on. I can respond to them and say, "Have you had your baby or how is your wife doing?"

It is clear that the MBA instructor uses this form to know her students better. This might be a good way to overcome what the problem that the EAP writing instructor of Spring 2009 mentioned when she said:

²⁶ Refer to the description of the institutional technology made available by KD for online courses p.51.

It was difficult to keep them all straight. You do not have that face to face interaction; I do not know what their voices sound like. Some of them put pictures out, but not all of them did that. You sort of have an entity out there unknown. I missed that because I really like seeing my students and interacting with them.

The second special KD forum tool used by MBA C550 was the *frequently asked questions (FAQ) forum*. This is a forum that all students have access to. Any of them can ask a question and then the instructor answers it. The instructor then sends an alert email telling students to check the FAQ forum. This simulates classroom interaction where one student asks a question and all the students get to hear the answer. Also, it helps keep all the questions and answers handy for students to refer to whenever they want to. This is better than the email system used in the writing course. The instructor when getting a repeated question, used to send a collective email to all the students answering that question. This was stated by the writing instructor when she said:

Usually they were confused about the same elements so it was easy for me to say ok instead of writing separate emails I would put all this together so that it is there for everyone to see.

A third special KD forum tool used by the MBA course C550 was the *coffee house* forum where students could share whatever they want with their classmates and instructor. They could share information connected to the course as well as personal, cultural, social or any other kind of information. This is a very important tool that if used in an online course can keep students connected and help create a sense of community.

The fourth and last special KD forum tool used by the MBA course was the *role play discussion forum*. This is a non-traditional discussion forum created by KD, and it helps bring life to the monotonous traditional discussion forum which results in enjoyment on the part of the students. One of the MBA students commented on that saying, "The simulation and role plays were very helpful as a learning tool. I think that was the most beneficial part of the course."

All of the forums mentioned above gave the MBA course's front page the appearance of an interactive classroom where students have handy more than one means to communicate asynchronously and share information. These different types of

asynchronous communication help students reflect on their work (cognitive their) and interact with other students and their teachers in a stress free environment (SCT). It is worth mentioning that the researcher as an outside observer did not have the chance to look at the students' work prior to the course and after the course, yet the application of these theories indicated that learning occurred especially that most of the students passed the course.

Results.

Other KD Tools: The hand-in system, used to submit assignments, designed by KD was not used by the EAP writing course. The instructor preferred to use drop off boxes. The team builder function was not used by the EAP writing course as it did not include any team or group work. It is worth mentioning that the course used the Breeze/Adobe technology made available by KD for synchronous communication. A discussion of the Breeze technology used for asynchronous communication in the writing course will be included in the answer to research question three. Lastly, the electronic book (e-book) system (www.ebooks.primisonline.com)²⁷ was not used by the students.

Discussion.

The students in the writing course did not use the electronic book system although an e-text version of the *SF Writer* was available through My Comp Lab²⁸ in writing courses, Fall 2008 and Spring 2009. In my interview with the students it was clear that they were overwhelmed by all the new things they were introduced to in the DL writing course. This was also clear in the Breeze sessions. Students asked many questions about assignments and how to use My Comp Lab; one of them did not even know how to access My Comp Lab. For students that are taking an online course, the availability of the tool is not enough for students to use it. It would have been helpful if

²⁷ McGraw-Hill Higher Education's eBooks are identical to printed textbooks but cost about half as much. Students can search, highlight, bookmark, annotate, and print eBook and study as they never have before! McGraw-Hill Higher Education's eBooks can be viewed online on any computer with an Internet connection or downloaded to an individual's computer

²⁸ My Comp Lab (WWW.mycomplab.com) is a tool that could be used to empower student writers and facilitates writing instruction by uniquely integrating a composing space and e-portfolios with proven resources and tools. In this revolutionary application, students have writing, grammar, and research help at their fingertips as they draft and revise.

the writing instructors drew their attention to the availability of the e-book system on My Comp Lab and directed them on how to use it. In the MBA course C550 the instructor included a link to the e-book system in the presentation of the first lesson and directed them on how to access it and gave recommendations on the options available on the e-book website. The students taking the EAP writing course were only given books by KD to use during the course, but these books had to be returned by the end of the courser. The instructor who taught the course the first time, Fall 2008, expressed concern about that when she said:

Another problem is sharing books. Kelley made a decision to buy a set of books at each of the sights were students are so students do not get to keep them because Kelley was paying for them rather than the students. The problem was especially in the reading course as the students could not mark anything in the books.

Also, one of the students I interviewed from the EAP writing course expressed regret that she could not keep the books. She said, "I also liked the SF Writer book and the Academic Writing for Graduate Students (AWGS). It is a pity I have to return them in a few weeks."

The e-book system can be used side by side with the books provided by KD to provide the students with more options when it comes to accessing the academic material. Some MBA students in their comments on the technology used in more than 30 MBA courses underscored that they liked the e-book system. This is clear in:

I liked the option of using the e-text rather than a paper book.
I think we would benefit from having full access to the e-Book format.

Others complained about it. One of them said:

Some of the text material we were asked to read did not print out very clearly. Also, we were given several long chapters to read (on the order of 50-60 pages) Not everybody has access to fast, high capacity printers. I would almost rather buy a book.

These opinions indicate that students have different preferences when it comes to choosing the way to access the academic books. Using both the e-book as well as providing the students with the chance to have their own hard copy of

the book would seem to have advantages. It could help in addressing different learning styles, thus making the students more comfortable in dealing with the material they study. Making the students comfortable helps reduce their anxiety level this lowering the affective filter consequently more input could be transferred intake. Plus, anxiety occupies a part of the cognitive space available for learning; if it is reduced more most of the students' cognitive abilities will be directed towards the learning process. Theory indicated that this leads to more learning by the students whether in the writing EAP course analyzed or any other EAP course.

8c. Research Question three.

3) How did the online EAP Writing Course facilitate teacher-students and student-teacher interaction?

Results.

The Interactivity Level of the course: Table 6 shows that the EAP writing course used the following tools for asynchronous communication: Emails, discussion forums, self introduction video clip. And it used the Breeze/Adobe technology for text based audio synchronous communication.

If we compare that to the Roblyer and Ekhaml (2000) revised framework (see chapter three, section 1, p.43/44) we can deduce that the interactivity level of that course lies somewhere between level three and level four. It included one-way delivery in the form of the text based P.P.s, the use of information and communication technology (ICT) in the form of the PRI website which included articles that had an audio which accompanied the text, and the introductory video. It also included two-way asynchronous communications in the form of emails and discussion forums. It also included two-way audio communications in the form of the three Breeze sessions that took place during the course. Yet it did not include one-way visual which makes it fall a little short of being categorized as a level four interactivity course, but it is a few steps ahead of the level three interactivity level as it includes two-way audio asynchronous

communication. Consequently, we can categorize this course as a moderate interactivity course based on that model.

Discussion.

A study conducted by Liu et al. (2008) on the level of interactivity of the MBA courses taught through KD used the same model. Results indicated that most of the courses scored as a level two or a level three interactivity course. This puts them in the low and moderate interactivity level like the EAP writing course.

Yet, this does not mean that all these courses really have the same level of interactivity as another very important factor comes in play. The level of interactivity is not only related to the types of technologies used but it is also connected to how they are used. Each type of technology has its advantages and disadvantages. To be able to use these technologies to achieve the desired level of interactivity those advantages and disadvantages have to be kept in mind so that the teachers can increase these tools effectiveness and minimize their constraints. Table 6 summarizes the technologies that were used in the EAP writing course.

Table 6 <i>Technologies Used in the writing Course</i>			
Types of technology	Types of uses	Perceived Advantages	Issues
Emails	To deliver instructions To respond to the students' questions To turn in H.W	Easy to use Flexible Private Immediate	24-hour/ 7-day access Repetitive questions asked
Asynchronous discussion forum	Class discussions (Note other uses not utilized in the writing course)	Flexible Information sharing Cognitive discourse Social interaction Allows reflection time. Effective way to avoid repetitive emails	Lack of facilitation skills by instructors Student dominance Information overload Non-responsive messages
Synchronous text based chat/one-way audio	Class discussions(Breeze)	A sense of presence Immediate attention Just in time feedback Good for building a sense of community Develops grammatical competence (Pellettieri, 2000)	Lack of facilitation skills (typing speed) Audio quality Difficult to schedule Difficult to moderate Poor technology Not understanding how to use the technology
Audio clips Video clips	PRI website (text audio articles Introductory video	Media richness Effect of dual coding More personal touch	Development cost Quality of audio and video
<i>Note: Adapted from Liu et al. (2008)</i>			

Results.

The asynchronous interactive technologies used in the course:

Emails: In this course emails were used as a major communicative tool. First, emails were used to send out important notes, assignment directions, task clarifications, and due date reminders. Second, they were used by students to ask questions or simply

share an idea with the instructor. The instructor who taught the course Spring 2009 made this clear when she said,

Yes, some more than others. I can say that I received emails from the same group throughout. Sometimes it was not specifically a question, they would want to work through something in their own mind so they write me and tell me here is where I started and here are the changes I made and I feel it is much better. They were not asking me a question they just wanted me to know that they had worked through the writing process.

Plus, students were encouraged by the instructor to send emails and use them to always keep in touch and ask questions. This could be clear in, "I enjoyed talking to all of you. If you have any more questions email me." This statement was said by the instructors at the end of the Breeze sessions to encourage students to keep in contact. Third, the instructor used emails to provide assignment feedback. It seems that emails were a convenient tool for both students and the instructor to achieve asynchronous communication given the 12 hour difference in time zone between the United States and China. The study conducted by Liu et al. in (2008) also indicted that emails were the most preferred online tool to interact with their students because it is convenient and easy to use. The MBA instructor who taught C550 confirmed that when she said:

In online courses there is the opportunity for regular feedback in a way that you often do not have in an in person course because students go home after an hour. In KD students are there around the clock and you have an opportunity to interact with them.

Discussion Forums: Other than using the discussion forums as a means to get students to introduce themselves, the writing course only used the conventional discussion forums that are used in face-to-face classroom settings. These forums can enhance the students' writing and can create some sort of community especially if the topics referred to their cultural background. The EAP writing instructor of Spring 2009 used many discussion forum topics that were related to Chinese culture; this helped connect the students with topics relevant to their environment, thus help in bridging the gap between the students and their instructor.

Discussion.

Studies have been conducted to assess the use of emails on online DL courses and results underscored the positive impact of emails. Shang (2005) conducted a study on the impact of using asynchronous email dialogue journaling on SLL's writing performance. The results showed that students had a positive attitude towards the potential outcome of the use of email to enhance their L2 reading. Also the study indicated that emails help create a peer collaborative environment which I believe is a vital component in creating a sense of online communities. According to Liu, Magjuka, Bonk, and Lee (2007) there are positive relationships between the sense of learning community and recognized online engagement.

Lapp (2000) also conducted a study which examined email communications which occurred between ESL graduate students in an introductory level English communication course. Results showed that emails encouraged students to share ideas, exchange cultural information, and compose creative and detailed messages. All this resulted in improving the students' literacy and helped create a sense of community. Moreover, Kitade, (2006) conducted a study which highlighted how email task based exchanges if well planned and executed can help students negotiate language problems which can lead to improvement in their language skills. Finally O'Dowd (2003) highlighted the positive effect that emails have on building learners' intercultural competence.

Yet it has to be pointed out that there are some issues that might emerge with the use of emails. Some MBA students in their comments on the technology used in more than 30 MBA courses indicated their frustration for different reasons. They said:

The email forward method is inadequate. Going into Angel to check email is cumbersome and the forwards do not include attachments.

Professor very unresponsive on email

The communication tools (i.e. course email) are clumsy and hard to manipulate. I found it the communication postings and emails were completely unreliable, all my postings were gone and the instructor almost graded me zero points for having no postings, luckily I was able to retrieve copies of my postings and email them through yahoo easier to use personal email to communicate than through the online system.

It seems from these comments that students complain either from the email system itself, which is the technology used, or from the instructor's use of the technology. This highlights the importance of using the proper technology properly to achieve the desired results. Also, Liu et al. (2008) pointed out that the flexibility of 24 hour/7 days a week access to email is a challenge for online instructors as they cannot be available to answer emails 24 hours a day 7 days a week.

Also, when we look at discussion forums we can find that they could be used in other ways. In Liu et al. (2008) other uses for discussion forums were highlighted: discussion forums can be used as a "common playground" for students to post their questions and share them, they could be used for interaction purposes (ex: social cafes), and they can be used for group discussions using "virtual teaming". These uses made discussion forums another preferred asynchronous communicative tool by instructors. The MBA instructor who taught MBA C550 stressed that in her interview. She said:

I think there is value in asynchronous communication. It gives a chance for students to think, reflect, and polish their ideas, especially for non English speakers. They always need more time to reflect, although asynchronous communication takes more time from me.

MBA students also expressed a positive opinion toward the use of discussion forums as they said:

The discussion forums were a great tool to interact with classmates and dive further into the material.
The use of discussion forums was extensive and helped to promote extensive class interaction and team work.

Studies like Lamy and Goodfellow(1999), Sotillo (2000), and Abrams (2003) concluded that asynchronous communication gives students a chance to practice conscious reflection, promotes more sustained interaction and complex writing structure, and helps produce complex text.

Yet other comments by students on the technology used in more than 30 MBA courses highlighted the importance of the human factor. Again the tool has to be utilized properly to yield the desired results. This could be clear in the following comments:

The discussion forums have the potential to be the greatest asset of this course, but rules need to be put into place to limit the number of posts by some individuals. Too many posts had little or no constructive value and were clearly made in an effort to increase the number of students' posts.

The discussion forums were a great tool to use in order to interact with peers and dive deeper into the material.

Liu et al. (2008) pointed out other shortcomings that might be associated with the use of discussion forums, like: the use of non-interactive postings by instructors and students' dominance. It has been noticed by some MBA instructors that students who start the postings dominate the discussion. Liu et al. (2007) suggests that instructors must tailor and provide good operational guidelines that can help foster students' equity and enhance the interactivity of the forums.

Results.

C) The synchronous interactivity tools used in the course: Breeze technology was used in the writing course in the form of text based chat accompanied by a one-way audio. This provided the students with a chance to communicate live with their instructors and get to know them better. The two students I interviewed and the other two who sent me written responses stressed the positive impact the Breeze sessions had on their online learning experience and recommended including more than three the next time this course is taught.

Discussion.

There are other Breeze options that were not included in the EAP writing course like one-way video. Some instructors in the MBA courses used it to deliver instruction and interact with students at the same time. The importance of Breeze synchronous technology is embodied in the MBA students' responses. The word Breeze was mentioned more than 1000 times by them, in their comments on the technology used in more than 30 courses in 7 semesters, almost always in a positive way. Also, the students interviewed from the writing course recommended using more than three Breeze sessions.

Also, the Angel chat room, which was not used in the EAP writing course, is another form of synchronous communication provided by KD. I used the Angel chat room to conduct meetings with two writing students. I faced some problems like: being cut off without a reason, and the slow speed of the students which made me wonder if we were disconnected at times. Yet the value of the connection I felt during these communications cannot be compared to the written asynchronous responses I got from the other two students via email. The sense of connection I felt with these two students just from one chat was amazing. If I compare that to the dry emails which lack any vividness in them the value of synchronous communication becomes lucid. I got to know the students better with whom I communicated with synchronously; there was a sense of closeness I never got to feel with the students who responded to my questions via email. During the Breeze meetings it was clear that some students chatted using the MSN chat rooms. If such conversations are put in the proper context like group work they could be more beneficial to students.

Blake (2000) conducted a study which showed that synchronous communication can create a fertile ground for negotiating meaning just as face-to-face communication. Kitade (2000) also conducted a study which showed synchronous communication helped the learners deploy strategies like self-correction and collaboration to utilize linguistic and interactional features of online chatting. Plus Lee (2008) carried on a study which showed that synchronous CMC creates conditions which foster meaning oriented communication as well as chances to reflect and focus on form, which helps develop the learners' language competence. Findings also indicated that text chat helps focus on form, but it also underscores that experts need some guidance to avoid over intervening. Finally, Pellettieri's (2000) study showed that the importance of synchronous communication in fostering negotiation, pushing learners to focus on linguistic modification of language forms, providing learners with corrective feedback through their peers or teachers, and facilitating mutual comprehension. These studies are just an example the field is flooded with studies on the value of synchronous communication in DL programs.

Yet despite all this there are some problems that have to be highlighted when dealing with synchronous communication like Breeze sessions, virtual office hours, and chat rooms. These problems include (a) scheduling a time that can fit students and instructors in different time zones, and (b) the lack of instructors' experience in using the technology. These live sessions can also be difficult to moderate and some instructors might lack experience using the technology and so avoid using it (Liu, 2008).

8d. Research Question Four.

4) What were the emerging issues and trends related to the use of different technologies in the online EAP writing program?

Results.

Several ideas for developing the online tools used by the EAP writing course can be identified in the following points:

Tools for promoting social presence and online community: The EAP writing course relied heavily on asynchronous communication. The only synchronous communication tool used was Breeze and as noted before it was only used in a limited way. Also, it was clear that the Breeze sessions lacked clear structure. Although the instructors tried to help the students as much as they could, the lack of a clear focus or structure did not allow for the most efficient use of time during the Breeze sessions. The instructors answered the students' questions which covered variety of topics without trying to focus the questions on a certain topic each time. The students' questions appeared random, and there were periods of silence where nothing was said. Having an unstructured session might help the students get acquainted with their instructors and break the ice, yet structured sessions can help the students and the instructors focus more and make an excellent use of the session's time.

Standard assessment and grading tools: A grading rubric was provided by the writing instructor for the three writing projects included in the course. Feedback, as mentioned earlier, was provided via email. The grade book was used to show the students their grades in comparison to the class average. This could be a very helpful tool if students look at it in a positive way and feel motivated instead of de-motivated.

Various uses of synchronous conferencing tools: As mentioned above the only synchronous tool used was the Breeze/text one-way audio sessions.

Discussion.

Concerning the Breeze sessions the most productive sessions were those that were planned carefully, used on a regular basis, and structured to discuss a certain topic. The EAP instructors for both the reading and writing courses conducted the Breeze sessions jointly; however, there may be advantages if separate Breeze sessions were conducted for each course. These advantages include, but are not limited to: (a) more focused questions, (b) the whole hour would be dedicated to either reading or writing, (c) students facing trouble on one course more than the other can have the opportunity to choose the sessions they need the most, and (d) each instructor can choose the technology she/he is comfortable with the most.

The EAP writing course may be able to provide more support in the DL environment if other synchronous communication tools were incorporated in the future. For example, videoconferencing, which is part of the Breeze technology, might be incorporated into the course. Some MBA students in their comments on the MBA courses noted that it was very exciting to see their instructors again after the introductory video. This feature could be used in conferences as well as to deliver lectures. Also, two-way audio conferencing could be used and there are features that were used in the Lyceum²⁹ KD program to allow students to take turns and organize the meetings. Moreover, the chat rooms could be used for individual writing conferences. Face-to-face instructors conference with their students one every writing project this could be easily transferred to the chat room; and from the number of students who attended the Breeze sessions enthusiasm about the use of synchronous technology is

²⁹ Lyceum is a synchronous audiographic groupware system developed within the UK Open University, designed to facilitate distance tutorials. It is an Internet-based real-time audio-graphic conferencing system, which allows for synchronous voice communication over the Internet, have been available since the 1990s. Lyceum is an example of this technology. It was developed within the UKOU, and piloted since 1998, moved into the core activity of the Languages department of the University in 2001, where it was used to support the teaching of an intermediate course in German with a population of almost 300 students, the Lyceum system is now rolled out to students of Beginners' French, Spanish and German (Lamy, 2003, p. 6).

evident. Finally, there could be advantages if group work was incorporated into the EAP writing course, as is typical in the face-to-face courses offered by on the IUPUI campus. This could be particularly advantageous for classes where all the students are in the same time-zone – and even workplace, as those in the class in this study were.

Concerning assessment using track changes constantly besides the grade book, grading rubric, and emails which were used in the EAP writing course could be helpful as it could help provide the students with specific comments and more guidance.

9. Conclusion.

The results and discussion of this research indicate that the use of technology can help provide SL learners' with helpful instruction and feedback. Plus, it is possible to use technology in distance learning L2 contexts in ways that support key features of current SL theories, discussed in the literature review (chapter two), consequently increasing the chance for learning to occur in any EAP course taught via distance. Using synchronous and asynchronous communication helps students interact with their instructors (Interactionist theory/ SCT). Using computer programs and ICT technology allows the use of different modes of education (multimodality), mainly the audio visual modes. This helps in addressing different learning styles, consequently maximizing the opportunity of learning. Also these tools helps the students use their cognitive abilities and construct new knowledge by adding new information their previous understandings. Moreover, using technology to provide feedback to students in different ways and to make them access the learning material easier can help reduce their anxiety, thus increase chances for learning to occur. Current technology makes available tools that if used appropriately in the right place to address the right students can help in integrating the SL theories thus helping students learn in a more relaxed environment. Further research could be conducted to assess the effect of applying those theories on students' learning through pretests and posttests or any other research method.

Chapter Four-Conclusion

1. General Comments

a) The difference in the instructors' level when it comes to technological literacy represents a major problem in distance language courses. Su, Bonk, Magjuka, Liu, and Lee (2005) showed that instructors tend to use technologies and instructional activities that they are familiar with and have used before in their traditional classrooms, as they tend to have various competencies in new technologies and techniques. Thomas, Carswell, Price, and Petre (1998) indicated that college faculty members at UKOU translate more than transfer when it comes to DE. This is clear in the responses of the MBA students to the MBA courses' assessment; the same tools were praised by students in one course while criticized in another, and usually the praise or the criticism was associated with the way the instructor used the tool. Moreover, one of the MBA instructors interviewed asserted that the choice of what technology to use is totally up to the instructor and she added that she knows colleagues that do not use the available technology at all.

Also, the EAP writing instructor who taught the course in Fall 2008 used Camtasia software to get students acquainted with her surroundings. She said in her interview that she did the same thing in her regular writing classroom. So she transferred what she did and was successful in her writing classroom to the distance writing classroom. Yet, the Camtasia software was only used in the Breeze sessions by the instructor who taught the course in Spring 2009.

b) The writing course was designed by the writing instructor who first taught the course. She said in her interview that she had no prior experience in teaching via distance. She added that she did a needs analysis by asking those interested in teaching the course about what they need, reading articles online, and talking to previous instructors who taught online courses. Moreover, she included in her analysis the feedback of Chinese who took EAP courses before. Unfortunately, at the time of the needs analysis, the instructor did not have access to a vital element – the students who had previously taken courses via distance using the Angel platform. Hurd (2006) stressed that the

distance practitioners should try to build their distance courses on insights from the learners' themselves. The reference here is to previous learners who took prior distance courses. In the case of the EAP writing course there were many MBA students who studied courses using the same platform and the same technologies available for the writing course. In the future if KD made available to the EAP writing and reading instructors the MBA students' course evaluations related to the use of Angel and the available technology; this information could be valuable and helpful in designing any EAP distance course.

I think if this data was made available to the writing instructor the course could have included some of the technology applauded by the MBA students' evaluations of the MBA courses taught throughout seven semesters. The first time, the course did not include any synchronous communication using Breeze/Adobe technology. The word Breeze was mentioned more than 1000 times in a positive way by MBA students in their evaluations of more than 30 MBA courses seven times in seven different semesters. Students are thirsty for synchronous communication. MBA courses used Breeze despite the fact that these courses sometimes include 80 students divided to two sections 40 each, and the students come from various parts of the United States as well as other parts of the world. If we compare that to the EAP writing course which had about 20 students all from China, synchronous communication could be easier to schedule and more students can participate. The second time the course was taught KD advised the instructor to include synchronous communication in the course. The students I included in my study liked the Breeze sessions very much and asked for more, plus attendance was really good.

The MBA students applauded the use of slides accompanied by audio; this was not used either time the EAP writing course was taught. Also, the simulation programs like CapSim³⁰ were praised by them. They said, "CapSim tool is neat and fun to work with; the CapSim simulation is awesome." Maybe CapSim is a simulation program

³⁰ Capsim (Capture and *Simulate*) has been developed by XCad Corp. The predecessor and original model of CAPSIM was BLOSIM. BLOSIM is a signal processing simulation program, originally developed at the University of California, Berkeley, 1985. The primary authors were D. G. Messerschmitt and D. J. Hait.

related to business but I think language simulation programs depicting real life situations could be found and possibly incorporated in the future. Finally, the audio and video components that were referred to by MBA students a lot were scarcely used in the EAP writing program. Making such information available in the future and on a yearly basis would help display the students regarding the technology; this can really help in designing and reforming EAP distance programs.

The MBA students' evaluation of the technology used in MBA course included a score on a scale from one to seven given to each course. I calculated the means for the courses taught throughout seven consecutive semesters. The result did not show consistent improvement of the technology used in the courses based on the students' feedback. Table 7 provides the means for end of semester evaluation survey provided by MBA students for: Winter 2007, Fall 2008, Spring 2007, Summer 2007, Winter 2007, Summer 2008, and Spring 2008. This Table shows that improvement is not steady and fluctuates up and down. Many reasons could be behind this unsteady improvement. I think KD could conduct research to find out the reasons behind such fluctuation and work on fixing them. I believe such a topic could be a good one for future research conducted regularly by KD.

Semester	Mean
Winter 2007	5.60
Fall 2008	5.45
Spring 2008	5.64
Summer 2008	5.70
Winter 2008	5.57
Spring 2009	5.50
Summer 2009	5.50

c) In the EAP Program at IUPUI there are many learners from different parts of the world; this sets the ground for an opportunity to incorporate tandem learning in the DL programs. Students from the DL course could be grouped with students on campus learning complementary languages. All language skills feed each other, to write you

have to read and to read you have to speak and to speak you have to listen. Using tandem learning to chat with native speakers can help build grammatical competence (Pellettieri, 2000), negotiation of meaning and codeswitching (Katter, 2003), and intercultural competence (Belz, 2003).

d) What is clear from the data is that online courses require an incredible amount of time, resources, and technical support. The EAP courses were successful because of the support KD provided. KD support is vital to achieve these goals, although human resources are crucial in DE yet humans need a lot of support to be able work and reach their goals. Humans need physical resources (access to computers and telecommunication connections), social resources (institutional resources), and digital resources (digital material available online). Both the effort exerted by the EAP Program at IUPUI and the continuous support and commitment of KD to EAP distance programs can help the EAP courses continue and improve.

2. Advantages of online EAP courses

a) In online SL/FL programs, students can converse with each other while simultaneously keying in messages in a text chat window, as well as clicking hotspots or 'smileys' on their screens; using these non-linguistic semiotic systems can help students communicate meaning and express different feelings. There are aspects of the virtual classroom environment which can inhibit or distort the production of certain types of discourse which forces users to use other types of discourse. This makes the online classrooms an environment for multimodal learners' interaction. These possibilities to communicate meaning in online classroom environments can be a challenge for researchers as they have to try to describe the online interactional behavior, which do not take place in face-to-face classrooms, accurately (Lamy, 2006).

b) Online EAP courses give students a chance to communicate in a text-based mode whether synchronously or asynchronously in a stress-free environment far from writing rules and restrictions which inhibit their writing talent from flourishing due to stress and worries about their grades. Asynchronous communication via distance can increase the students' competence in SL skills in general and their SL writing skill in particular.

c) Students are not necessarily bound to interacting with their teachers and classmates only during classes; they can post messages 24 hours a day, seven days a week to their teachers and classmates to negotiate meaning and discuss different topics, and teachers and classmates can respond when they are available. The MBA writing instructor referred to this advantage when she said in her KDTV recording, “There is the opportunity for regular feedback in a way that you often do not have in an in person course because students go home after an hour. In KD students are there around the clock and you have a lot of opportunity to interact with them.”

d) If tandem learning is used in online courses there is a chance for codeswitching which enriches the vocabulary of SL learners and consequently their SL skills. Communication among learners learning the same language or complementary languages sets the ground for intersubjectivity within the Zone of Proximal Development (ZPD). Adults going through the same learning experience can usually help each other as they are able to understand the problems their classmate are facing, especially if they are at different stages of learning the TL.

e) Online learning allows learners to work on their learning material at any time of day. They can access it any time and from anywhere they have access to a computer with an internet connection. This is especially beneficial for SL learners because repetitive exposure to the learning material can help reinforce the material they are learning.

f) Second language learners can be exposed to authentic learning material in a flexible, easy way. Using authentic material in face-to-face classrooms is an approach that has always been sought by teachers to bridge the gap between the classroom and the real world outside the class boundaries. This approach is easy and accessible to distance education programs. Plus, students like it; this was evident in my study as the EAP students I interviewed praised that PRI website and the closeness of the articles they read to their culture and professional world.

g) The online learning programs can include many modes of education that can address various learning styles, catering to individual needs. The programs could be easily designed to address cognitive, auditory, and visual learners. Maybe the only learning

style that is left out is the kinesthetic learner. But we have to bear in mind that language as a skill is mainly developed by the other three. As to kinesthetic learners they could get up and move around as they please to get back to the mood of learning as there are no classroom restrictions. Addressing various learning styles is crucial in learning a second language as some learners can attain their vocabulary by listening to it, looking at it, or using it. Moreover, using images on the screen can help instructors in expressing some abstract concepts and cognitions.

h) SL learning anxiety-usually associated with having to speak in front of a whole class in a language the student is yet far from being competent in-is reduced dramatically in distance learning programs. Anxiety, when present, occupies a part of the cognitive space the learner has, thus reducing the language input and consequently the comprehension and learning. The typically lowered anxiety levels in on-line instruction allows the learners to focus more on the learning material, thus learn faster and build their confidence and self esteem gradually.

i) Students learning online are given the optimum opportunity to develop their own learning strategies, which is a significant step towards autonomy. Autonomy is a building block in acquiring any language; SL competence is achieved when the learner can communicate in the SL, whether in an oral or written mode, without feeling self-conscious. The learning strategies that distance learners acquire can make them problem solvers by helping them in developing more than one way to express what they want in the TL. This is directly reflected in their writing as their voice and confidence become evident in every paper they write.

j) Computer programs like *My Access* and *Criterion* can be used in online programs to capture, analyze, and present data related to the SL learners' performance during the learning process. Observing and checking the students' progress is vital; it helps the instructors tailor feedback that addresses each student's needs. Also, it could guide them in coming up with the appropriate course material that can address the students' weaknesses.

k) Warschauer (1996 b) pointed out that an advantage of online SL learning programs is that they allow access to the full realm of the internet, which could help break the linear flow of instruction. This helps learners make their own connections and choose what to explore thus develop and refine their own learning strategies and skills.

l) Computer technology together with the internet can be a good environment for students to get the human experience they need to succeed in their academic life. This learning environment can also guide students to enter the “global community”, thus help them connect to the real world and learn to live in it. Students using technology and the internet have the opportunity to become creators not just receivers of knowledge (Lee, 2000). This is highly important in the SL learning field as learning a SL is all about communicating with other cultures and bridging the gap between people living in different parts of the world. This is underscored by cognitive theorists and humanists who stress the importance of practice and experience in learning a SL, as well as experiential theory educators and constructivists who stress the importance of making sense of information, extracting meaning while relating information to everyday life, and understanding the world through interpreting knowledge in learning a SL (Ormrod, 1999).

3. Disadvantages of online EAP courses

a) Educators, teachers and administrators are overwhelmed by options when it comes to choosing which technology to use.

b) Lack of equipments or knowledge about using them either on the side of the instructor, the student, or both.

c) Students and teachers require training during class meetings, which uses instruction time and requires extra effort. This was clear during the three live meetings in the EAP writing course analyzed in the study. Time was wasted during those meeting to fix some computer glitches or to get students acquainted with how to use the technology.

- d) Some teachers might lack the experience to promote online interaction, which is a crucial part of learning any language.
- e) Two-way video communication is rarely used thus teachers cannot see students' reaction, which is often crucial in checking understanding. Also, writing conferences, which are a very important part of the writing process, are sometimes absent due to technology choices by the instructors, lack of the technology itself, or the knowledge about using it.
- f) Sometimes artificial intelligence programs like *Criterion* and *My Access* cannot handle unexpected problems or responses by the students..
- g) Network breakdown, which I experienced during my chats with the EAP students. We were cut-off without any reason more than once during our chat. If students are not persistent and lack the needed motivation they could give up on using the technology.
- h) Scheduling live meetings can be difficult, due to different time zones in EAP programs where we sometimes have students from different parts of the world.
- i) The problem of the "digital divide," as there is often a lack of equal access to the technology necessary to access or use the assigned material or activities.
- j) Westernization of the internet. The internet was born in the United States which gave it a western birth and upbringing. In EAP courses where students come from different parts of the world this could represent a problem. To solve this problem we have two options: students could be nudged to simply accept the western nature of the internet, or some kind of balance between the western culture and other cultures in the world could be brought to the internet platform. I think both choices are difficult. Maybe in time a middle ground could be found.

4. Recommendations

With major advancements in computer technology and communication, the possibilities for DE are now more on par with those for face-to-face education; both modes have their advantages and disadvantages. Table 8 shows that if we compare both modes neither of them will emerge as the definite winner. This leaves us room to try

and work on improving DE as it is a highly promising field which deserves the investment of time, effort and money to improve it.

a) The field of SL/FL draws on many pedagogical theories that need to be considered and integrated to help the SL/FL learners acquire the L2. Murphy and Coffin (2003) claim that the choice of the pedagogical activities implemented in a DL course play an important role in the effective use of the tool. Program designers and instructors have to be aware of the foundations of the SLA theories; the former to design programs that fit the instructional needs and pedagogical activities, and the latter to be able to execute them.

b) Instructors have to be literate in various technologies to be able to use them efficiently. Rogerson-Ravell (2007) stressed the need to bridge the gap between pedagogical and technical expertise in building online language learning resources. To do this people in the educational field have to be educated in different forms of technology and those in the technical field related to education have to be aware of the pedagogical theories.

c) Instructors they also have to be aware of all the terminology used in the field and how it came to exist and what it refers to. Table 3 shows a succinct summary of the terminology in the field and what it refers to. The instructors and the researchers have to work hand in hand to benefit the learners. Studies showed that the malfunction of some of the technologies is due to the instructors using them. Zhao (2003) stressed that a specific technology may hold a lot of potentials, but until it is used properly, its positive impact on learning may be put on hold. Thus, when assessing the effectiveness of a certain type of technology, we should not only assess the technology itself but also how it is used. Blake (2007) underscored that research conducted on the effectiveness of technology increasingly finds that the instructors play a crucial role in how effectively the technology is used. Some instructors are not literate in the recent technologies which make them unable to use them in an effective way. All of that highlights that the instructors are a vital component in the distance learning equation. It also underscores the importance of providing teachers with appropriate levels of support and training

instructors cannot simply be told to put a class on line and then blamed when they have trouble using the technology if they have not been given assistance in learning it!! They are one of the most important variables that mediate the effectiveness of the education approach. Thus, educating them properly has to be one of the primary concerns in the field. Warschauer (2003) conducted a study in Egypt. Educators in Egypt clarified to him that the problem they face in DE is due to deficiency in “human ware” and not “soft ware”.

d) Starting with the elementary schools, educators need to prepare students for a technical world requiring “self-initiative” in learning and the ability to read on-line information from an analytical perspective. Strategies like problem solving are essential. It has to be stressed over memorization of facts. This can help prepare students for DL programs which are increasing every day, besides helping them become better students even in face-to-face programs.

e) Researchers and educators in DE have to reflect on the effective practices in DE and avoid the ineffective ones and at the same time keep updated with the most recent technologies in order to incorporate them into DE programs.

To help achieve the above recommendations, courses which acquaint teachers with the most important technologies that are used in DE could be incorporated in teacher education programs. For those who are current teachers, professional development workshops focusing on DE technology need to be regularly offered. Also, centers like the Center for Teaching and Learning at IUPUI could be really useful in educating teachers in the necessary technology; they can also help in bridging the gap between technicians and educators. Teachers interested in teaching via distance can use such centers to become technically literate. Also these centers could be their resource to get constantly updated on DE technology, which evolves on nearly a daily basis, and to find solutions to any problems they face.

<i>Table 8 Advantages and Disadvantages of Online Learning and Face-to-Face Education</i>		
Category descriptor	Advantages	Disadvantages
Communication	DL: Spend more time on difficult concepts F2F: Nonverbal communication	DL: ● Easy to be misunderstood F2F:■ Not confident asking questions
Course Content	DL: ● Reinforcement of information F2F:■ Supplement to face-to-face course	DL: ● Teach self new information F2F:■ Content more demanding
Feedback	DL: ● Ask questions 24/7 F2F:■ Immediate response to questions	DL: ● Delayed response to questions F2F:■ Limited time to ask questions
Flexibility	DL: ● Work at own pace F2F:■ Specified time to learn	DL: ● Time consuming F2F:■ Time is not flexible
Motivation	DL: ● Require more discipline F2F:■ Require less discipline	DL: ● Emphasis on self-learning F2F:■ Location of class
Relationships	DL :● Global networking F2F:■ Professor/student support	DL: ● Difficult forming relationships F2F:■ Teacher/student personality conflict
Travel	DL: ● Don't have to leave home F2F:■ Forced to leave home	DL: ● Retrieving materials not online F2F:■ Inconvenient to get to class
<i>Notes: (1) DL●: Online learning environment; (2) F2F ■: Face-to-face learning environment (Jefferson and Arnold, 2009)</i>		

There is much to be considered when developing a distance second/foreign language program for a specific group of students. The technology available is vast and not all of it can be implemented in all DL learning programs. When designing a program many things should be considered. If the program is addressing students who live in a different country the level of technology there should be considered, also as much information as possible should be collected about the students to try to address their specific needs. Also, the electronic literacy of the students and the teachers should be

assessed to see whether it is compatible with the technology deployed in the course; if not necessary steps should be taken to achieve that. Moreover, all distance learning programs should be evaluated to try and improve them by avoiding the weaknesses in it and reinforcing the strengths.

The literature needs more research to be conducted on evaluating distance programs that teach specific language skills; therefore, further research in this area would be of great value. Although we can never reach a formula that could make DE a successful method that would fit the needs of all students and make them benefit as much as students in conventional classrooms, yet assessing language DE programs taught every year will make us move steps forward towards and help researchers provide a solid foundation to build a DL learning program.

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