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Students' perceptions of the use of peer-to-peer ESL text chat: An introductory study

Dale Arthur Garratt

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**STUDENTS' PERCEPTIONS OF THE USE OF PEER-TO-PEER
ESL TEXT CHAT: AN INTRODUCTORY STUDY**

By

Dale Arthur Garratt

B.S., History, Excelsior College, 1985
M.A., Teaching English as a Second Language, Hunter College, 1988

DISSERTATION

Submitted in Partial Fulfillment of the
Requirements for the Degree of

**Doctor of Philosophy
Language, Literacy and Sociocultural Studies**

The University of New Mexico
Albuquerque, New Mexico

July, 2012

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Dedication

This dissertation is dedicated to my parents, whose love and support have always meant the world to me.

Acknowledgements

First, I wish to thank the members of my dissertation committee, who have been the ideal group of people to sustain and support me through this process. The chair, Holbrook Mahn, gave guidance and wisdom that was an essential factor in completing this project. I'm truly grateful for his unfaltering encouragement and assistance. Patricia Boverie provided not only help in the editing of the chapters but also very valuable moral support. Paul Edmunds contributed important insight and aid, especially in the formulating of the method chapter. Elizabeth Noll helped give this dissertation shape with her insightful suggestions. Rosalita Mitchell also was of considerable help in this endeavor.

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ABSTRACT

Thousands of international ESL students come to the United States every year to learn English for the purpose of matriculating into an American university. Teaching these diverse students can be a challenge for educators and despite the students' significant investment of time and money, many of them are inadequately prepared for the demands of university work. Text chat has been studied by some scholars as a means of assisting ESL students to write more effectively. However, greater understanding is needed of the affective experiences and perceptions of students toward peer-to-peer ESL text chat. That is the thrust of this study, which utilized Livemocha, a free international text chat program. Several striking findings were made, two of which were that all students reported enjoyment of the text chat experience and all students reported increased confidence to write in English as a result of their participation in the research. This study draws heavily on the sociocultural theory of Lev Vygotsky, especially his theories of the zone of proximal development and *perezhivanie*. His work illuminates the

findings of this study and the study also demonstrates the vitality of Vygotsky's thought in the 21st century. In addition to providing insight into students' perspectives on peer-to-peer ESL text chat, a valuable tool to increase students' confidence to write in English has been made known.

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Chapter One

Introduction

Every year thousands of English as a second language (ESL) students come from other countries to the United States to study at English language institutes managed by colleges and universities. These students seek to develop their academic English skills before matriculating at an institution of higher learning in the United States. It is imperative that colleges and universities adequately prepare international students to be successful in their studies. Special needs exist for these linguistically and culturally diverse students. To meet those needs, it is necessary to have a deeper understanding of students' perceptions and experiences of the educational processes in which they take part.

A major goal of this study is to contribute to the understanding of international students' perceptions and experiences of peer-to-peer ESL text chat. The study concentrates on the affective experiences and perceptions of the students toward text chat with their peers in other countries. The other major goal for this study is to analyze the students' experiences and perceptions in the light of the sociocultural theories of Lev Vygotsky (1978, 1987). Another matter that will be investigated is what contribution, if any, can be made to sociocultural theory from the findings of the study.

Background of the Study

This study was originally started in 2003. The title at that time was "Japanese students using technology to learn ESL: Different culture, different perceptions?" That original study was examining students from Japan who were studying ESL in the United States. The purpose of the study was to research whether or not there were there were

cultural factors specific to Japan that influenced their perceptions of technology as it is used in teaching ESL. For example, ways of relating to other students that are characteristic of Japanese culture might affect the way they used technology to communicate through email in English. The location of the research study was an ESL institute at a private university on the East Coast. For the purpose of this study the pseudonyms “Tri-State University (TSU)” for the private university and “English for You (EFY)” for the English Institute at TSU will be used.

The present study grew out of the preliminary research conducted in 2003, especially a finding that eight students (out of a total of 10) reported feeling considerable anxiety about conversing in English. These students also had poor writing skills and were strongly attached to the “grammar-translation” method of language teaching they had experienced in Japan (Matsuura, Chiba & Hilderbrandt, 2001). Although the method of instruction at EFY was more of a communications-oriented approach, these students made a concerted effort to have perfect mechanics, including spelling, vocabulary, pronunciation and grammar. For example, these students routinely used electronic dictionaries that, in addition to vocabulary items, translated grammatical phrases and provided pronunciation of selected words.

The teachers at the language institute strongly discouraged the use of these dictionaries during class time because they felt that the students focused too much on them. The teachers feared that over-reliance on dictionaries drew attention away from the context of interaction with native English speakers, reading authentic English materials and performing written tasks that were informed by that reading. The teachers felt that the constant use of the dictionaries interfered with the students’ acquisition of literacy in

English. However, these students were adamant about using their dictionaries, even in class, and in some cases depended on them throughout their entire academic career.

One student, Reiko, responded to an email follow-up question three years after the study. When asked what she was doing in school, she replied:

I am studying Interior Design at TSU after graduated from EFY. I had some transfer credits from Japanese university, probably I will graduate in this year.

In this email, the researcher had also asked her, “Since you graduated from EFY, are you using technology in any interesting or different way to learn English?” She replied:

I use TV, computer and electronic dictionary to learn English now. I usually watch news at morning and try to understand the point. also I do practice in repeat pronunciation after newscaster said. ...mostly I research something for homework from internet. one more thing necessary to me learning english is an electronic. I prefer an electronic dictionary than book dictionary because that is compact to carry. (Reiko)

In a second email a few days later, the researcher asked her:

Can you describe how you use your electronic dictionary these days, or maybe before when you were at the English language institute? If you could give an example, that would be very helpful.

She replied:

I always use my electronic dictionary for my assignment like looking for words which I don't know when I read books or papers. I also use it for spelling check and my dictionary has a pronunciation function and example sentences. In the

electronic dictionary has many functions such as English dictionary, Japanese-English, English-Japanese, Japanese and synonym. Those are very useful for me.
(Reiko)

This correspondence with Reiko led the researcher to question, as he had three years earlier during the period of data collection during the original study, whether the students at EFY were overly-reliant on their electronic dictionaries, and if this contributed to their sometimes limited skill in writing. He began to wonder if the highly formalized context of their language learning in Japan had led to an increased anxiety about making mistakes (Sawir, 2005). Also, the question arose whether or not experience in using English in an informal context such as text chat would help the students have more confidence in using English in different contexts.

Another student at EFY, Chizuko, said that most of her email correspondence was with other Japanese-speaking individuals. Very little of her on-line activity was conducted in English. “I read MSN and Yahoo news in Japanese. 95% of everything I do on-line is in Japanese.” (Chizuko). Most of the other students in the original program at EFY stated that their actual interaction with other people in English, outside the classroom, was fairly limited.

An interesting exception was one student (Takeshi), who was an avid blogger. At this time, in 2003, blogging wasn’t well-known to many people. Takeshi blogged every day in English, mostly on political websites. When asked how he would rate his English level, he said “Middle, because although I started to feel not that difficult in communication, I do not catch movies and native speakers’ conversation.” Takeshi was

one of only two students out of 10 who did not express significant anxiety about communicating in English.

As the researcher embarked on this current study, he thought of Takeshi and how blogging involves real interaction with other people in the target language. Blogging was important to Takeshi and may have helped him develop confidence in his ability to communicate in English. Could text chat have a similar effect on other students? Besides the fact that texting and blogging involve real communication with other people, they also share an informal context with less emphasis on correct mechanics. Also, the written nature of the communication means that pronunciation difficulties are not an issue.

The current study is entitled: “Students’ perceptions of the use of peer-to-peer ESL text chat.” The “students” in this study were post-secondary and came from countries other than the United States. They were enrolled at an ESL institute affiliated with a large, public research university in the Southwest and were studying ESL to matriculate into a four-year college program in the United States. For the purpose of the present study the pseudonyms “South West University” (SWU) and “South West University English Preparation Program” (SWU-EPP) will be used for these institutions. “Perceptions” as used here refers to how participants viewed text chat as a means of communicating with other ESL students around the world. Following Bordonaro’s (2003) distinction, perceptions were distinguished from “beliefs”, which are consistently and persistently held opinions. “Peer-to-peer” text chat refers to the fact that the students were text chatting, not with native English speakers, but with other non-native speakers around the world who were also trying to develop their ability to use English. In this sense, students were chatting with their peers. A global text chat program was utilized that has

millions of users and thus allowed participants in the study to chat with someone at any time. “Text chat” in this context refers to the synchronous computer-mediated communication (CMC), or text chat, that is done on a computer or laptop, and not the texting done on a cell phone. Synchronous CMC allows free international communication, something not available on cell phones. The students’ participation in this study was in no way connected to the regular courses they were taking at SWU-EPP.

In this study, students were free to text chat as they wished. Zhao and Angelova (2010) did a study in which Japanese and Chinese ESL students text chatted and videoconferenced with each other. In that study, students obviously could not choose which country and culture they wanted to explore. In the current study, students could choose any person from any country or culture. In addition, there were no assigned tasks; students were free to converse in any way they liked with whomever they liked. In that sense, this study is a closer approximation to real life than the research of Zhao and Angelova, which assigned tasks to participants to begin each text conversation.

There were two main changes in the focus of this current study when compared to the original study. While the original study focused on Japanese students and examined how their cultural background may have influenced their perceptions of ESL technology, the current study looks at students who came to the United States from any country to study ESL. The second change is that, instead of researching students’ perceptions of all types of technology, the current study looked solely at how students perceived computer-based text chat with other ESL students around the world.

Holbrook Mahn, in his research using dialog journals (Mahn & John-Steiner, 2002), discovered that as ESL students experienced relief from an insistence on standard

form and strict, academically-oriented mechanics, they developed “the confidence to take risks with their writing” and were able to “express ideas and emotions that they might not otherwise have attempted” (p. 55). This study was similar in that the text chat did not have punctilious observation of the rules of spelling, grammar, vocabulary and other aspects of usage. I was interested to see if any effects similar to those which Mahn observed in his study took place as a result of the students’ participation in this research.

Research Questions

The main research question in this study is:

“What are the students’ affective experiences and perceptions of the use of peer-to-peer ESL text chat?”

Three research sub-questions were formulated to delve more deeply into the main research question. They are:

1. Will participants gain more confidence, through their text-chat experience, to communicate through writing in English?
2. Do participants perceive a change in their identity as an English user through text chatting with other ESL students? If so, how can Vygotsky’s theory of *perezhivanie* help analyze this development?
3. How do participants negotiate meaning with each other in their text chatting?
Can this be explained by Vygotsky’s theory of the zone of proximal development?

The theoretical frame for this study is based on Vygotsky’s thought, in particular his concepts of “*perezhivanie*” and the “zone of proximal development”. The concept of *perezhivanie* refers to the emotional experience arising from a person’s interaction with

his or her environment. Vygotsky argued that not only does the environment affect the person, but the person also changes the environment through his or her perception of it. The individual and the environment are inextricably intertwined in a give-and-take relationship in which both act upon each other. Vygotsky stated that psychologists:

...ought to be able to find the relationship which exists between the child and its environment, the child's emotional experience [perezhivanie], in other words how a child becomes aware of, interprets, [and] emotionally relates to a certain event (Vygotsky, 1994, p. 341, emphasis in original).

Dealing as it does with the emotional experience coming about through a person's interaction with the environment, *perezhivanie* is a particularly apt model to analyze not only the main research question but the first two of the research sub-questions as well.

The other major theory of Vygotsky that is used in creating the theoretical frame for this study is the "zone of proximal development", one of the best-known of Vygotsky's theories (Emihovich & Lima, 1995). In analyzing the manner in which psychological processes develop, Vygotsky emphasized that one must look at the potential for development inherent in the mental processes which are still in the process of maturing:

The psychologist must not limit his analysis to functions that have matured. He must consider those that are in the process of maturing. If he is to fully evaluate the state of the child's development, the psychologist must consider not only the actual level of development but *the zone of proximal development* (Vygotsky, 1987, pp. 208-209, emphasis in original).

These maturing psychological functions are not sufficient to allow the child to independently solve a particular problem. However, with collaboration from those in the social environment, these maturing processes will be able to take the child to the point of solving the given problem (Vygotsky, 1987). The relationship between *perezhivanie* and the zone of proximal development is clarified by Mahn and John-Steiner (2002) in the following passage:

Perezhivanie describes the affective processes through which interactions in the ZPD are individually perceived, appropriated and represented by the participants (Mahn & John-Steiner, 2002, p. 49).

Vygotsky's theory of the ZPD was used to illuminate the third and last of the research sub-questions.

Outline of Chapters

There are five chapters in this dissertation. In the introduction the goals of the study are explained and the research questions are stated. A brief introduction to Vygotsky's theories of *perezhivanie* and the zone of proximal development are also given.

Chapter Two is the review of literature. In the beginning Vygotsky's sociocultural theory is introduced, contrasted with two prevailing models of education: the transmission and constructivist models. Special emphasis is placed on Vygotsky's theories of *perezhivanie* and the zone of proximal development, as these are central in answering the research questions of this study. Next, motivational factors in second language learning are examined, studying both Gardner and Lambert's theory (1963) and the criticism of their theory by Warschauer (1996b). The issue of the effect of anxiety on

writing is addressed. Literature on the issue of the identity of ESL students as English users and the related question of the ownership of English is discussed, this being a key issue that emerged from the analysis of data. Negotiation of meaning is also addressed. Several other studies using text chat with ESL students are reviewed, comparing the similarities and differences between those studies and the present one.

Chapter Three presents the method for this study. I explain how the data were collected in light of the Vygotskian framework of the study. The rationale for the three means of data collection that are utilized is clarified. Next, the process of selection of the participants is explained, and the participants are introduced. The procedure for data collection is described as is the method of coding the data. Finally, the process of creation of six overall themes from the codes is explained.

Chapter Four presents the data from the study and an analysis of that data. First, there is a brief introduction of each participant, given in their own words. Next, the six major themes created from the coding of the data are presented and are illustrated by quotations from the participants.

Chapter Five is a discussion about the findings of the study. The chapter begins with a summary of the study, followed by answers to each of the research questions. In the process of answering each question an analysis is made of the findings of the study in relationship to the literature, especially to Vygotsky's theories of *perezhivanie* and the zone of proximal development. How the research in this study extends sociocultural theory is also discussed. The chapter concludes with a discussion of implications of the study, its limitations and suggestions for further research.

Appendices at the end of the dissertation include such items as lists of initial and final interview questions, questions for the group chat sessions and codes identified in the method chapter.

Chapter Two

Review of Literature

Theoretical Lenses for Education

There are many different paradigms for education. Broadly speaking, however, many scholars primarily refer to two predominant educational theories (Shuell & Farber, 2001, p. 38). These are the transmission (or traditional) theory and the constructivist (or progressive) theory. The transmission model has been largely discredited by scholars and researchers for many years, but still continues to be used in many educational situations, including English as a Second Language (ESL) classrooms (Cobb, 1999; Cummins, 2000) and ESL teacher education programs (Kasi, 2010; Kumaravadivelu, 2001). This study utilizes the sociocultural theory of Lev Vygotsky (1978, 1987, 1994).

The transmission model. The transmission approach is essentially a teacher-centered form of teaching. In this model, the teacher is considered to have the knowledge required to fulfill the purpose of the educational process. The transmission approach represents:

...more traditional instruction, where the intent is the communication of knowledge... [and] it seems reasonable to break the knowledge into its components and systematically present that material to the learner (Cunningham, 1992, p. 41).

The teacher transmits this knowledge to the student, using lectures, textbooks, homework and other materials and activities to facilitate the conveyance of the knowledge. The student's responsibility is to diligently attend to, memorize and reproduce the knowledge that the teacher presents. Assessment is conducted by

attempting to ascertain to what degree the student can accurately remember and reproduce the knowledge to which he or she has been exposed.

Applying this model to second language learning, one way that students are thought to be best able to learn new vocabulary is by looking up definitions in a dictionary and then using the words in sentences. In actuality, students may be able to do this and still have no idea what the words really mean or how to use them in practical applications outside the classroom setting. They are expected to learn grammar by first receiving explanations of the correct usage, and then repeating selected patterns, making substitutions that are specified by the teacher or the textbook. This approach is sometimes referred to the “drill (and kill)” method by its critics (Ruschoff & Ritter, 2001, p. 223). Although the transmission method of teaching languages is largely discredited, it is still mandated to be used in many secondary and post-secondary settings. Many times technology can be used in teaching languages in such a way that the transmission model is reinforced (Warschauer, 1997). This was true of the university language program where I did my original study.

When the transmission model is applied to computer-based instruction, technology often takes the place of a human teacher, but the paradigm is still the transmission model in that the technology is providing the content which is passively absorbed by the student. Taylor referred to this as the “computer as tutor” paradigm (Taylor, 1980). In this model, the computer is a tireless instructor that can track every single part of the student’s output, correct every mistake and can, if properly programmed, provide detailed feedback on the student’s progress to the student as well as to the supervising teacher. One example of the transmission model applied through the

use of technology is English Central accessed June 27, 2011), a web-based program that teaches pronunciation by having users repeat phrases that are presented and then scoring them on how close they come to the “correct” pronunciation. This program also demonstrates a potential problem with technology-driven, transmission-based instruction. When trying English Central, a friend and I, both native speakers, were unable to pass the pronunciation portion of the assessment. A technology-based form of instruction at the current level of programming can make mistakes, as it did in that instance, which would probably not be made by a live person.

Another example, and a more sophisticated use of the technology-driven transmission model, can be found in Computer-Assisted Language Learning (CALL) programs like *Rosetta Stone* (accessed August 14, 2011). The initial phase of the program consists of interactive lessons utilizing a range of multimedia tools – images, voice and text. All this takes place in the target language of the user. However, the environment is not chosen or manipulated by the user; it is determined by the software driving the program. Therefore, this type of technology can be said to represent the transmission model, a teacher-centered use of language-learning technology.

The constructivist model. In the constructivist paradigm, the learner constructs his or her own learning experience. Knowledge is thus actively created by the individual student, instead of being passively absorbed, as in the transmission paradigm. Instead of being teacher-centered, as is the transmission model, constructivism (also known as the progressive approach) is a:

...very much learner-centered paradigm for learning. Learning is seen as a self-structured and self-motivated process of knowledge construction and the learner is

regarded as a self-governed creator of knowledge (Ruschoff & Ritter, 2001, p. 231).

Constructivist theory argues that knowledge learners appropriate for themselves will be much more effective, helpful and transferable than knowledge that is appropriated by others and then transmitted to the learners (Cobb, 1999).

One major characteristic of the transmission model is the concept of a universal, standard and essential body of knowledge that students are to remember and be able to recall for assessment (Bednar, Cunningham, Duffy, & Perry, 1992). The standardized tests given to K-12 students throughout the United States are based on the transmission model. In contrast to this, the objective of the *constructivist* approach is to “improve the ability to use the content domain in authentic tasks” (Brown, Collins, & Duguid, 1989, as cited in Duffy & Jonassen, 1992, p. 29). Jonassen claims that one way the constructivist paradigm is superior to the transmission model is that it trains students in such a way that they can learn to be effective problem solvers (Jonassen, 2004). Properly used, the constructivist model can help students become more independent and self-reliant in their studies and in later life. Instead of depending on a teacher to instruct them on what they should do, they are able to initiate the learning process on their own and also decide, to a large extent, how to go about that process.

The role of the teacher in the constructivist model is to facilitate students’ construction of their own learning “through the stage management of appropriate learning experiences” (Gibbons, P., 2009, p. 14). The teacher’s responsibility is to provide students with learning tasks and also with the tools they need to develop skills that will enable them to solve these tasks. Instead of giving the students information as if they

were blank slates to be written on, teachers using the constructivist model will present information in a way that allows students to ask their own questions and come up with their own answers.

When coupled with technology, the constructivist model can be seen as a “computer as tool” paradigm (Taylor, 1980). The technology is not determining what the student or user does, but the user is accomplishing a certain task that he or she wants to complete, using the computer as a tool or as a means of accomplishing that. As Mark Warschauer puts it:

Computer-mediated communication (CMC) [e.g. text chat], like word processing, also involves the use of the computer as a tool, rather than as a deliverer of instructional material. Some scholars claim that CMC is the most revolutionary development in computer-assisted language learning [CALL], since it is the only one which involves direct human-to-human communication rather than human-to-machine (Warschauer, 1996b, p. 30).

An example of the computer as tool approach in using technology is distributing photos using *Facebook*. The user wants to share a collection of photographs with family and friends, and uses *Facebook* as a tool to accomplish that purpose.

Vygotsky’s Thought

As effective a paradigm as the constructivist view is, it nevertheless has its limitations. Instead of seeing the student as taking a role in a social interaction, constructivist theory sees the student fundamentally as an individual constructing learning within him or herself. Vygotsky’s view of learning is fundamentally different

from *both* the transmission and the constructivist paradigms. Pauline Gibbons brings this insightful analysis:

While these common ideologies [the transmission and the constructivist models] appear to be very different, they are alike in that they both view learning as essentially an individualistic activity and the learner as independent of others and self-contained. In contrast, a Vygotskian view of learning sees it as essentially a collaborative activity, occurring within a particular sociocultural setting (Gibbons, 2009, p. 15).

For Vygotsky, all human learning and development takes place in collaboration with and in interaction with others, within the social and cultural environment we live in and act upon (Vygotsky, 1987). To stress the essentially collaborative nature of the learning and teaching process as seen through a Vygotskian lens, Holbrook Mahn and Vera John-Steiner (2002) emphasize that teacher support for students should not be seen as only a one-way, teacher-to-student process, but as fundamentally “dignified, *collaborative*, caring support” (p. 48, emphasis added). In a truly collaborative classroom, it is not just the teacher or the “advanced” students who drive the educational process. Rather, each student can make a significant contribution to the teaching and learning process. Although the teacher presumably knows more about the subject at hand than the students, the teacher also learns from the students as the process of collaborative interaction takes place. In this model, rather than having a hierarchical order in the classroom, anyone, student or teacher, can initiate the collaborative process (John-Steiner & Mahn, 1996).

Vygotsky’s theory is often referred to as *sociocultural* theory. It emphasizes that language learning doesn’t take place only within the individual, but involves a

sociocultural context (Chung, Graves, Wesche, & Barfurth, 2005). Teaching and learning take place within that context. For instance, reading and writing are not visualized, in sociocultural theory, as taking place on a purely individual level, but in a collaborative community in which these skills are co-constructed (John-Steiner & Mahn, 1996). Literacy skills are difficult to achieve for students who are marginalized by being part of a minority cultural group. This is true especially for ESL students who are struggling to learn a second language. In the light of sociocultural theory, the model used to teach English to ESL students should incorporate bilingual education as much as possible, to both maximize the learning opportunities for minority students and to respect the cultural and socioeconomic diversity they represent (Mahn, 2003).

Vygotsky used a dialectical method to examine all psychological facts. The thought of Marx and Engels served as the ideological underpinning for Vygotsky's theory. A good illustration of Vygotsky's use of the dialectical method can be seen in his emphasis on the dynamic, interrelated and constantly changing nature of all things, expressed in his treatment of the environment to which a child relates. Instead of seeing the environment as fixed or static, he stressed that "one should always approach environment from the point of view of the relationship which exists between the child and its environment at a given stage of his development" (Vygotsky, 1994, p. 338). He gives an example of this phenomenon, looking at a child at the ages of six months, 18 months and three and a half years. Even if the speech that this child hears from adults is exactly the same at these different ages, clearly the meaning to the child is fundamentally different. In that sense, the "same" environment does indeed change in relation to the child (Vygotsky, 1994). The environment is actually changed by the child's perception of

it. To explain more precisely the processes through which the individual and the environment are interrelated, Vygotsky developed his theory of *perezhivanie*, or emotional experience.

Perezhivanie. *Perezhivanie* is one of the least-understood of Vygotsky's theories. Suh, Couchman and Park (2003) define *perezhivanie* as the "emotional or affective aspect of social actions." However, there is more to the concept than this. Vygotsky defines *perezhivanie* as the "emotional *experience* arising from any situation or from any aspect of [the child's environment]" (Vygotsky, 1994, p. 339, emphasis added). Vygotsky states that psychologists:

...ought to be able to find the relationship which exists between the child and its environment, the child's emotional experience [perezhivanie], in other words how a child becomes aware of, interprets, [and] emotionally relates to a certain event (Vygotsky, 1994, p. 341, emphasis in original).

Mahn and John-Steiner (2002) state that "perezhivanie describes the ways in which the participants perceive, experience and process the emotional aspects of social interaction" (p. 49). So the factors in the environment which affect the child are "refracted through the prism of the child's emotional experience [*perezhivanie*]" (Vygotsky, 1994, p. 340).

Vygotsky (1994) gives a striking example of this theory in describing the emotional experience (*perezhivanie*) of three boys that were brought to his clinic. The mother of these boys was an alcoholic, and physically abused all three of them when she was drunk. However, these same home circumstances resulted in a completely different *perezhivanie* for each of the three boys.

The youngest boy was in a state of terror, “simply overwhelmed by the horror of what is happening to him” (p. 3). He was severely depressed and exhibited serious neurotic symptoms. He stammered and sometimes couldn’t speak at all. The second boy showed signs of a deep inner conflict. On the one hand, he hated and feared his mother, and on the other he felt a strong attachment to her. These contradictory and powerful emotions were expressed in contradictory behavior as well. “He asked to be sent home immediately, but expressed terror when the subject of his going home was brought up” (p. 4). The eldest boy’s emotional experience (*perezhivanie*) was completely different from the two younger ones. He was old enough to realize that his mother was sick and he felt pity for her. He also took upon himself the responsibility to try his best to take care of his younger brothers, protecting them as much as possible from the mother and comforting them when they were hurt by her. He would do whatever he could to calm her down and defuse her anger. His personality was abnormally serious for a boy of his age.

Each of the boys had a markedly different emotional experience – *perezhivanie* – in regards to the same home environment. Their different attitudes toward the situation resulted in them experiencing it in different ways. The youngest experienced it as an unbelievable horror which he could do nothing about. The second child experienced a severe conflict between his attachment for his mother and his equally strong feelings of dread and detestation. The third boy experienced the situation as a calamity that had happened to the family, and something he had to try and attenuate as much as possible:

So it appears that, depending on the fact that the same situation had been experienced by the three children in three different ways, the influence which this

situation exerted on their development also turns out to be different (Vygotsky, 1994, p. 341).

One of the main points Vygotsky is making here is that the environment should not be considered separately from the individual. In an especially apt turn of phrase, Vygotsky stated that one should “approach environment, not with an absolute, but a relative yardstick”; in other words, “...give up absolute indicators reflecting the environment in favor of relative ones, i.e. the very same ones, but viewed in relation to the child” (1994, p. 338). Vygotsky goes on to further elucidate this crucial relationship:

...all the personal characteristics and all the environmental characteristics are represented in an emotional experience [*perezhivanie*]; everything selected from the environment and all the factors which are related to our personality and are selected from the personality, all the features of its character, its constitutional elements, which are related to the event in question. *So, in an emotional experience [perezhivanie] we are always dealing with an indivisible unity of personal characteristics and situational characteristics, which are represented in the emotional experience [perezhivanie]* (Vygotsky, 1994, p. 342, emphasis in original).

Vygotsky also points out that understanding “the emotional experience [*perezhivanie*] also helps us select those characteristics which played a role in determining the attitude to the given situation.” One example is to differentiate between people who are “...excitable, sociable, lively and active and others who are more emotionally slack, inhibited and dull” (1994, p. 342).

A deeper understanding of the concept of *perezhivanie* can enable teachers to be much more effective and can have a real impact in the concrete learning and teaching environment of a classroom:

A teacher's awareness of students' ways of perceiving, processing and reacting to classroom interactions – their *petrezhivaniya* [“emotional experiences”, plural of *perezhivanie*] – contributes significantly to the teacher's ability to engage the students in meaningful, engaging education (Mahn & John-Steiner, 2002, p. 53).

Zone of proximal development. The zone of proximal development (ZPD) is one of the best-known of Vygotsky's theories (Emihovich & Lima, 1995). However, the ZPD has become synonymous in some educators' minds simply with the practice of “scaffolding” or other forms of teaching and learning. Scaffolding refers to support that teachers give students to help them learn, understand and achieve what they cannot currently accomplish. Some scholars feel, however, that the term zone of proximal development is used too broadly today, and consequently has an unclear meaning (Pea, 2004). Vygotsky drew a clear distinction between learning and development, while at the same time acknowledging and clarifying the relationship between them:

...learning is not development; however, properly organized learning results in mental development and sets in motion a variety of developmental processes that would be impossible apart from learning (Vygotsky, 1978, p. 90).

Vygotsky begins his articulation of the ZPD with the metaphor of a gardener who is asked to evaluate the state of his orchard. The gardener foolishly does this by only considering the matured trees, not including the ones that are in the process of maturing. Avoiding this mistake:

The psychologist must not limit his analysis to functions that have matured. He must consider those that are in the process of maturing. If he is to fully evaluate the state of the child's development, the psychologist must consider not only the actual level of development but *the zone of proximal development* (Vygotsky, 1987, pp. 208-209) (emphasis in original).

These maturing psychological functions are not sufficient to allow the child to independently solve, say, a particular problem. However, with collaboration from the social environment, these maturing processes will be able to take the child to the point of solving the given problem (Vygotsky, 1987).

Vygotsky gives an example of two boys, both eight years old. They are both capable of doing academic work, with no assistance, at an eight-year-old's level. A conventional pedagogical view would say that these boys are at the same level. However, as Vygotsky says, "I do not terminate my study at this point, but only begin it" (Vygotsky, 1978, p. 86):

We attempt to determine how each of these children will solve tasks that were meant for older children. We assist each child through demonstration, leading questions, and by introducing the initial elements of the task's solution. With this help or collaboration from an adult, one of these children solves problems typical of a twelve year old, while the other solves problems only at a level typical of a nine year old (Vygotsky, 1987, p. 209).

With this deeper examination, it is apparent that the mental ages of the two children are not the same, and that their subsequent course of development will not be the same:

This difference between twelve and eight, or between nine and eight, is what we call *the zone of proximal development. It is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers* (Vygotsky, 1978, p. 86, emphasis in original).

He went on to state that the ZPD “*has more significance for the dynamics of intellectual development and for the success of instruction than does the actual level of development*” (Vygotsky, 1987, p. 209, emphasis in original). Vygotsky did a set of experiments measuring children in terms of high or low IQ and large or small zones of proximal development. The subsequent success in school of these children was evaluated, and it was found that the ZPD was more predictive of academic success than was the measure of IQ. The explanation for this was that having a “greater number of maturing functions gives a child better opportunities to benefit from school instruction” (Chaiklin, 2003, p. 56). As a result of this finding, Vygotsky “argued that instruction should be tied more closely to the level of potential development than to the level of actual development” (Wertsch, 1991, p. 28).

Another practical implication is that:

Instruction is only useful when it moves ahead of development. When it does, it impels or wakens a whole series of functions that are in a stage of maturation lying in the zone of proximal development” (Vygotsky, 1987, p. 212, emphasis in the original).

This forward-oriented perspective inherent in the ZPD is in sharp contrast to the constructivist model. “Within a constructivist framework, learning is defined as an active process in which learners construct new knowledge and awareness based upon current and past knowledge and experience” (Ruschoff & Ritter, 2001, p. 221). Looking at the child’s development from the perspective of his past and current knowledge is precisely what Vygotsky was referring to as the child’s actual, or present level of development, not at what knowledge the child could learn in his or her ZPD. As Vygotsky said, “...the developmental process lags behind the learning process; this sequence then results in zones of proximal development” (Vygotsky, 1978, p. 90). This understanding of the relationship between development and instruction is crucial to carry the learning process forward – other theories of education tend to be oriented toward what the child can do, at this moment, independently. From this perspective, it is very difficult for learning to carry development forward, in the ZPD.

The essential interrelatedness of the ZPD and *perezhivanie* has been articulated in this way:

Perezhivanie describes the affective processes through which interactions in the ZPD are individually perceived, appropriated and represented by the participants (Mahn & John-Steiner, 2002, p. 49).

As Seth Chaiklin points out, if the ZPD refers to the process of learning, “why not name it the ‘zone of proximal learning’”? (Chaiklin, 2003, p. 42). In the case of this study, child development is not the focus, but instead it is the learning process taking place in young adults through peer-to-peer ESL text chat. For this study, therefore, it is

more appropriate to refer to the “zone of proximal learning” or ZPL. This term is introduced again and used in the discussion chapter of this dissertation.

Teaching writing so that it is relevant to life. In his study of the developmental history of written language in children, Vygotsky came to three “exceptionally important practical conclusions.” One of these is “the teaching should be organized in such a way that reading and writing are necessary for something” (Vygotsky, 1978, p. 117). He emphasized that:

...writing should be meaningful for children, that an intrinsic need should be aroused in them, and that writing should be incorporated into a task that is necessary and relevant for life. Only then can we be certain that it will develop not as a matter of hand and finger habits but as a really new and complex form of speech (Vygotsky, 1978, p. 118).

Although Vygotsky is addressing the needs of children learning their first language, this implication can be argued to apply to students learning a second language as well. Vygotsky cites the boredom that can ensue in children when writing is taught in such a way that it emphasizes mechanical exercises instead of genuine expression of the thoughts, interests and feelings of the child. This may also very well be true for second language learners; the same problems of lack of motivation and boredom can afflict them if the teaching of writing is not made relevant to their lives.

Considering the depth and breadth of his thought, of which *perezhivanie* and the ZPD are only two parts, it is no surprise that Vygotsky’s work has become more and more influential, even though it has been many decades since his thoughts were first put to paper (Emihovich & Lima, 1995).

Motivational Factors in Second Language Learning

In the 1950s Wallace Lambert and Robert Gardner (1959) formulated a seminal theory regarding what they saw as the two major motivational factors affecting second language learning. These are the *instrumental* and the *integrative* factors. Lambert (1963) described these in the following way:

The orientation is “instrumental” in form if the purposes of language study reflect the more utilitarian value of linguistic achievement, such as getting ahead in one’s occupation, and is “integrative” if the student is oriented to learn more about the other cultural community as if he desired to become a potential member of the group (Gardner, 1991, p. 47).

Motivational factors are distinct from a given student’s linguistic aptitude or knowledge of effective strategies to learn a second language. Motivation deals with the affective aspects of language learning. These two categories of learner motivation have been widely referenced by scholars over the past several decades and are considered by many to be quite relevant to research today, in varied contexts and different countries (Hernandez, 2008; Liu, 2007; Sayadian & Lashkarian, 2010). Instrumental motivation is sometimes referred to as extrinsic motivation while integrative motivation is sometimes referred to as intrinsic motivation.

In their research with English speaking students, Gardner and Lambert found that “integratively oriented students are generally more successful in acquiring French than those who are instrumentally oriented.” (Gardner & Lambert, 1959, p. 271). Hernandez’ research with students learning Spanish also concluded that “integrative motivation is critical for the development of students’ L2 oral proficiency” (Hernandez, 2008, p. 9).

Student Perceptions of the Use of Computers in Language Learning

Mark Warschauer is a seminal scholar in the field of computer-mediated-communication (CMC) as used in language learning, although in the last decade he has focused more on the digital divide separating rich and poor countries and on researching how the wider distribution of laptops to poor populations can remediate that divide.

In his 1996 study, “Motivational aspects of using computers for writing and communication” (1996b), Warschauer critiques Gardner and Lambert’s model of instrumental and integrative motivation. Warschauer’s criticism of this model is based on three points. First, he characterizes it as ambiguous and poorly-defined. Second, he argues that this “categorization rests largely on social psychological theory rather than educational theory” (Warschauer, 1996b, p. 29). Finally, he states that the theory isn’t pragmatic enough in that it does not provide ways for educators to improve the delivery of their instruction.

Warschauer’s 1996 study was one of the first quantitative studies to explore the effect of computer usage among university ESL students (1996b). He looked at 167 students engaged in writing courses in the United States, Hong Kong and Taiwan. His research concluded that there are three major types of motivation for students to use computers in their study of English. These are communication, empowerment and learning.

Communication was the strongest motivational force in Warschauer’s study. It involved not only the students’ desire to communicate with speakers of the target language, but also with other nonnative speakers of English, including their classmates and other students around the world. As Warschauer says:

The benefits of this communication are seen as many: feeling part of a community, developing thoughts and ideas, learning about different people and cultures, and students' learning from each other (Warschauer, 1996b, p. 38).

Warschauer also points out that "CMC [computer-mediated communication] can encourage real communication by temporally and geographically expanding the opportunities for interaction" (Warschauer, 1997, p. 477). This is certainly one of the overwhelming advantages of CMC, to stretch the range of communication from the immediate environment to potentially the entire world.

Empowerment is another motivational factor that does not fit into Gardner and Lambert's model of instrumental or integrative factors. Empowerment deals more with affective factors such as increasing one's sense of personal power, reducing a feeling of isolation and enabling a person to contact other people more freely.

Learning, the third motivational factor mentioned by Warschauer, is something that students perceive as occurring in a more effective fashion when used in computer-mediated second language instruction. Being able to learn more independently was cited often by the participants, as well as the capability to learn more quickly and do better on their writing assignments. They also felt more able to direct their own education in the manner they felt best.

Jonita Stepp-Greany, in her 2002 study, criticizes Warschauer's research because it only focused on CMC through email and the Internet (Stepp-Greany, 2002). She attempted to remedy this by doing a study on university students enrolled in a beginning Spanish course. Besides using task-driven Internet activities and email pen-pals, she also utilized a publisher-produced CD-ROM with a mystery story on it, and threaded

discussion groups (a predecessor of chat rooms). The results of the study were mixed. While 66% of the students indicated a high interest in the technology-enhanced language learning (TELL) environment, only 50% said they preferred TELL instruction to face-to-face classes. 64% liked the CD-ROM mystery video, but only 38% enjoyed the email pen-pal exercise. However, in terms of raising students' confidence to study Spanish, the TELL program was fairly successful: 79% of the students reported that they felt able to find the meaning of vocabulary items on their own, and 65% said they were confident to learn independently.

There is quite a difference between Warschauer's finding that most students liked to use email to have stimulating international relationships and Stepp-Greany's students only reporting a 38% approval. A study in 2005 by Chung, Graves, Wesche and Barfurth supported Warschauer's finding on this point (Chung, et al., 2005). Their study involved using Korean-English chat rooms, partnering ethnic Koreans who had just come to Canada from Korea and who wanted to learn English with Korean-Canadian students who wanted to learn Korean. The researchers found that CMC could help create Internet-based, enthusiastic partnerships across international lines, although it may be observed that the shared ethnic roots of the two groups might have contributed to their perceived satisfaction with the program.

Shin recognizes the early contributions of Warschauer in terms of how ESL learners can develop their communications capability through CMC (Shin, 2006). However, she feels that the development of international connections – mentioned briefly by Warschauer – needs to be more emphasized. In her study, Shin successfully used a text chat room environment to enable graduate students, visiting scholars and their

spouses from five different countries to communicate in English (their second language). The participants were able to create an online community in which everyone could share a group identity. Satar and Ozdener conducted an email study that affirmed Warschauer's position that international relationships can be very stimulating for students:

CMC tools continue to provide an incentive for people to learn and use a foreign language by creating an urge to share and know about others, thus providing a genuine reason for language learning (Satar & Ozdener, 2008, p. 595).

The Importance of Affect for this Study

In 2002 Mahn and John-Steiner emphasized the importance of understanding the affective factor in human development and how this is a crucial part of Vygotsky's thought:

... an appreciation of his [Vygotsky's] work and particularly his best-known concept – the Zone of Proximal Development (ZPD) – is deepened through an examination of the role of affective factors in learning” (Mahn & John-Steiner, 2002, p. 46).

By expanding the scope of the examination of the ZPD to include affective variables we can both amplify its dynamic character and deepen understanding of this Vygotskian concept. This approach reveals the ZPD as a complex whole, a system of systems... (Mahn & John Steiner, 2002, p. 49).

A similar situation can be said to apply to this present study. There have been a fair number of studies on text chat for the purpose of learning a second language between native speakers (NS) and nonnative speakers (NNS) and a few studies between NNS and NNS. However, these studies have, for the most part, concentrated on the cognitive

aspect of learning, and have not elucidated ways the emotional aspect affects individuals' development in the ZPD. Barson, Frommer and Schwartz (1993) conducted a study involving French as a second language students. This study primarily investigated the process by which teams of students could academically collaborate on class projects. Sotillo (2000) studied synchronous and asynchronous communication in ESL students and focused on an analysis of discourse functions and syntactic complexity. A study done by Toyoda and Harrison (2002) researched the interaction between Japanese students in Australia and native Japanese speakers. The emphasis of this study was an analysis of the negotiation of meaning in linguistic exchanges. In contrast to these studies, my research focuses on the *affective* perceptions of ESL students and includes investigating the ways Vygotsky's theories of *perezhivanie* and the ZPD can illuminate the data from the study.

In addition, because this study includes an investigation of Vygotsky's concept of the *perezhivanie* (emotional experiences) of ESL students as they text chat, the affective dimension is necessarily a central part of this research. Of course, it's true that the aspect of emotion is recognized, even emphasized in various theories of education. The previously mentioned work by Gardner and Lambert and those of other scholars are examples of this. However, the relationship between the individual's emotional experience and the sociocultural environment in which the experience takes place can be more fully analyzed within the perspective of *perezhivanie*.

In addition to this, a more complete examination of the zone of proximal development (or, as in the case of this study, "proximal learning") leads us to the understanding that all the multi-faceted aspects of human life are shaped by social relationships:

Our investigation is guided by the realization that human beings come into existence, attain consciousness and develop throughout their lives in relationship to others (Mahn & John Steiner, 2002, p. 48).

One of the most important aspects of human interaction is the affective dimension. This must be taken into consideration for a fuller understanding of the reality of human interdependence. An example of this affective concern is the issue of the effect of anxiety on ESL writers. When “negative affective factors such as fear or anxiety are present, the zone in which effective teaching/learning occurs is diminished” (Mahn & John-Steiner, 2002, p. 49). Anxiety is often produced when the writing environment of the ESL student is one in which correct mechanics are emphasized over the process of writing itself. When writing is taught to ESL students as the manufacture of error-free content, a great degree of anxiety can be the result. This anxiety can drastically slow down the composition process, stifle creativity and result in a loss of confidence in the writer as to his or her ability to write. As Ann Raimes puts it:

We have, I fear, trapped our students within the sentence. They worry about accuracy; they stop after each sentence and go back and check it for inflections, word order, spelling and punctuation, breathe a sigh of relief and go on to attack the looming giant of the next sentence (Raimes, 1984 p. 260).

To describe the writing of sentences as attacking a “looming giant” may seem like hyperbole, but for researchers who have investigated this subject, it is not an exaggeration. Thomas Schovel also emphasizes the stressfulness of ESL classes that center on perfecting grammar, comparing them to trauma centers at a hospital (Schovel, 2005).

Holbrook Mahn (1997) investigated the experience of writing for college ESL students and found that they indeed did feel trapped by the mechanics-oriented teaching of writing they had been exposed to in the past. To create a different experience, Mahn had students do free-writing in dialogue journals at the beginning of every class. Errors were not corrected. Instead the teacher/researcher responded, also in writing, to the *content* of what the students wrote. Although there was an initial questioning of this procedure by some students, by the end of the semester there were dramatic changes in the affective attitude or emotional experience, the *perezhivanie*, of students in the composition class. One student expressed it in this way:

...[in previous] writing composition, the grammar ghost was present in every sentence and between the lines...For the first time in my life I see English teacher who want his student to be released from the verbs and tenses prison and to wake up from the grammar nightmare (Mahn, 1997, p. 187).

Several students emphasized that their confidence to write in English increased as a result of the dialogue journals. As another student reported:

Journals changed my confidence, which is more confidence, not less...Journal makes me more confidence in writing...I can see that I first write with simple sentence then, the more I write, the more complex thought I want to express. And whenever I can express my complex thought, the more confident I have (Mahn, 1997, p. 202).

In 2007 Shang did a study indicating that CMC (computer mediated communication) can help improve students' writing abilities. His research involved students emailing each other task-based messages. They experienced an increase in the

syntactic complexity and grammatical accuracy of their writing as a result of this asynchronous CMC (Shang, 2007). Recent studies (Satar and Ozdener, 2008; Yang, 2006) involving the relationship between synchronous CMC (text chat) and ESL students' confidence to write have indicated that the experience of text chat, either one-on-one or in a group chat setting, increases students' confidence to write in English. Satar and Ozdener found that "...text chat can be an important tool to help learners gain confidence by providing them with a safe environment in which to practice and evaluate themselves" (p. 596). Yang did a study in 2006, using only group text chat sessions and found that most students reported that this group chat helped them gain confidence to plan their written and oral assignments.

Identity as an English User and Ownership of English

Bonny Norton, a leading scholar in the field of language and identity, defines identity in the following way:

I use the term identity to refer to how people understand their relationship to the world, how that relationship is constructed across time and space, and how people understand their possibilities for the future (1997, p. 410).

In her view, when language speakers communicate with each other, they are not only conversing with their partner, they are also in the process of creating and re-creating their personal identity in relationship to the social world.

How is identity as an English language user constructed? The following are three major themes that have been identified by Norton (1997). First, identity as a language user is complex, contradictory and multifaceted. It is important to avoid any simplistic concepts of identity. Second, identity is not fixed but is fluid; it changes across time and

place. Third, identity constructs and is constructed by language itself. An illustration of this approach to a dynamic construction of identity can be seen in Norton's concept of *investment*.

The construct of investment, inspired by the work of Bourdieu (1977, 1991), signals the socially and historically constructed relationship of learners to the target language and their often ambivalent desire to learn and practice it (2010, p. 353).

Investment is arguably a more comprehensive concept of a learner's relationship to the target language than that provided by the motivational theory of Gardner and Lambert. Norton states that:

Central questions in my own work are not "Is the learner motivated to learn the target language?" and "What kind of personality does the learner have?" Instead, my questions are framed as follows: "What is the learner's investment in the target language? How is the learner's relationship to the target language socially and historically constructed?" The construct of investment conceives of the language learner as having a complex history and multiple desires (1997, p. 411).

An example of the importance of the concept of investment can be seen in the case of a highly-motivated student who performs poorly (does not invest) in a classroom in which he or she is made to feel uncomfortable because of an environment that is racist, elitist or homophobic (Norton, 2010).

Building on theories of the complex nature of language identity, Rampton (1990) has developed a construct of three factors influencing language identity: *language expertise* – the level of mastery of the language; *language affiliation* –personal

identification with the language regardless of whether or not the individual is of that ethnic background; and *language inheritance* –being born into a culture that is associated with the language regardless of the level of expertise or affiliation.

Within the overall construct of identity as an English language user, an important concept is that of the ownership of English. Using Higgins' (2003) conceptualization, users of English can be defined as having ownership of English when they have a "great deal of self-confidence [in using the language] and a firm sense of legitimacy..." and feel that they are standing in "an authoritative position from which to judge English" (p. 640). The issue of ownership of English can play a significant role in the affective experience of ESL students. If they feel that they have no ownership over the language, they may feel disempowered, marginalized and alienated (Kachru, 2009). As Norton puts it, "If learners of English cannot claim ownership of a language, they might not consider themselves legitimate speakers of that language." (Norton, 1997, p. 422). Perhaps for most people, the answer to the question of who owns English is very simple: it belongs to native speakers. As H. G. Widdowson states, "We are teaching English and the general assumption is that our purpose is to develop in students a proficiency which approximates as closely as possible to that of native speakers" (Widdowson, 1994, p. 377).

If nonnative speakers feel made to be illegitimate in their usage of English, it can have a significantly negative impact on their motivation to study the language. The implication is that nonnative speakers, however excellent their command of English may be, can never be full-fledged users of English (Kachru, 2009). Another problem with the concept that English is exclusively owned by native speakers is the understated racism in the perceived identity of those native speakers. Native speakers are usually thought of as

being well-educated white people from the United States, Canada, England, Australia, South Africa or New Zealand:

The central question addressed is the extent to which English belongs to White native speakers of standard English or to all the people who speak it, irrespective of linguistic and sociocultural history (Norton, 1997, p. 409).

Those who feel that nonnative speakers are not truly owners of English relegate them to the status of second-class users of the language. No matter how well-educated the nonnative speakers may be, their opinions about English will always be superseded by those of virtually any native speaker who disagrees with them. Interestingly, the assumption that native speakers own English is widely held by nonnative speakers as well as native speakers (Jenkins, 2006).

One thought-provoking question is, “Is there actually one, true standard English?” Widdowson argues that, at least in terms of lexicon, there is not. Specialized vocabulary from many different fields, from bioengineering to finance, from technology to law, is often incomprehensible to those outside that particular field. Creation and institutionalization of such terms of restricted technical use are inevitable, driven as they are by dual purposes. “They are communicative in that they meet the needs of in-group transactions, and they are communal in that they define the identity of the group itself” (Widdowson, 1994, p. 383).

Why is this specialized vocabulary accepted as standard English? Admitting the fact that the presence of such terminology makes it impossible to have just “one” standard English, why is it still accepted as standard? The reason is that such terminology is assumed to have been created by very well-educated people in those various fields.

These people have invented new terminology from the position of being very well-versed in English. Their inventions are not the result of ignorance but grow out of their expert knowledge of the English that already existed before they created the new vocabulary.

The same cannot be said of vocabulary invented by nonnative speakers. There is no protective umbrella of higher education to legitimize terms in general use by ordinary people, and terms brought into usage by nonnative speakers are relegated to the slightly scornful category of “nonstandard English”. An example is the word “prepone” commonly used in India:

To postpone an event is to put it back, to prepone an event is to bring it forward...there is clearly nothing deviant in the derivational process itself, and indeed we can see it at work in the formation of the related words predate and postdate (Widdowson, 1994, p. 383).

The odds are very high that, if an Indian person uses the term “prepone” in a country such as England, he or she will be censured as speaking English incorrectly, even if the person addressed has heard the term before and knows what it means.

Another example of a nonnative, invented word is the Chinese term “pocket food”, meaning a snack. In a study done by Dekhinet, a Chinese nonnative speaker (NNS) used that term with a native speaker (NS) tutor. She “learnt that ‘pocket food’ cannot be used in English” (2008, p. 420). The student didn’t learn that “pocket food” cannot be used outside of China, mind you, but that it was forbidden in the English language altogether. In South Korea, the term “hand phone” is used instead of “cell phone”. I have observed English classes in that country where students were told that they couldn’t use that word, that it was wrong.

Certainly, if mistakes are made by English learners, for instance spelling “cell phone” as “sell phone”, that is incorrect. That usage would be mistaken; it would come from ignorance of the spelling of the homophone. But to use the terms “hand phone” and “pocket food” is not necessarily a mistaken use of English. Scholars who feel that the ownership of English is shared by all speakers of the language, throughout the world, would say that “hand phone” represents a variety of English, Korean English, and is not something that should be proscribed by NS teachers.

So who owns English? Widdowson admonishes ESL teachers not to:

...assume, with bland arrogance, that your way of teaching, or your way of using English, carries a general guarantee of quality. To put the point briefly: English and English teaching are proper to the extent that they are appropriate, not to the extent that they are appropriated (1994, pp. 388-389).

Bonny Norton concludes her article *Language, identity and the ownership of English* by writing:

I suggest that if English belongs to the people who speak it, whether native or nonnative, whether... standard or nonstandard, then the expansion of English in this era of rapid globalization may possibly be for the better than for the worse (Norton, 1997, p. 427).

ESL educators should be aware of the negative affective impact on students of the assumption often made that they are not and can never be true owners of English. It may be difficult for NS to fully grasp the extent of the disempowerment that can occur when this happens. Furthermore, ESL educators should keep in mind the possibility that ESL students have been subjected to that form of marginalization in the past by NS teachers.

Negotiation of Meaning and Collaborative Learning

Negotiation of meaning occurs when there is an incident of nonunderstanding in the middle of discourse. Negotiation of meaning is initiated by the interlocutor who does not understand the meaning of what another person has said. It is possible that the individual who does not understand the meaning of what the other person said may simply ignore that, and continue the conversation. However, if the person who does not understand tries to clarify with the other person the meaning of what was said, the process of negotiation of meaning is initiated. Many researchers use negotiation of meaning as a significant measurement of the degree of second language acquisition that takes place in a communicative interaction (Kern, Ware, & Warschauer, 2004; Smith, 2003; Zhao & Angelova, 2010). Descriptions of the exact process of negotiation of meaning range from fairly simple to complex. Foster and Ohta (2005) simply characterize negotiation of meaning as 1) learners' clarification requests, and 2) comprehension checks and confirmation checks. Toyoda and Harrison identify nine categories for negotiations of meaning, according to the causes of the difficulties. These categories are: "recognition of new word, misuse of word, pronunciation error, grammatical error, inappropriate segmentation, abbreviated sentence, sudden topic change, slow response and inter-cultural communication gap" (Toyoda & Harrison, 2002, p. 84).

Peer-to-Peer Interaction in the ZPD

One important question that is researched in this study is the nature of the interaction in the ZPD between two peers. Vygotsky states that "more capable peers" (Vygotsky, 1978, p. 86) can help an individual advance from his or her level of actual

development to the level of proximal development. Several research studies have been conducted investigating the use of text chat between peers. The relationship between peers can be, and for the sake of their mutual development hopefully is, a collaborative one. John-Steiner speaks of this relationship as follows:

The collaboration context provides a mutual zone of proximal development where participants can increase their repertory of cognitive and emotional expression (John-Steiner, 2000, p. 187).

It's instructive to examine a study utilizing peer-to-peer computer mediated communication before the advent of text chat. This seminal study was done in 1993 (Barson, et al.), investigating peer-to-peer exchanges using email (one of the first types of computer mediated communication (CMC)). It involved pairing students of French in Harvard and Stanford. Students utilized email to collaborate with students from the other university in a task-based activity (either making a newsletter or producing a short video). Email was also used to facilitate the interaction between students and their teachers in classes at each institution. A central concern for the researchers was to create an educational situation where "attention to grammar and linguistic form per se occurs in the context of actual, authentic communication as opposed to contrived, pseudocommunication typical of more traditional approaches" (Barson, et al., 1993, p. 566). The results of the study illustrated the capability of asynchronous CMC to bring together physically-separated learning communities for the purpose of accomplishing meaningful collaborative tasks.

Studies on the Use of Peer-to-Peer Text Chat

A seminal study utilizing text chat was done by Susana Sotillo in research comparing synchronous and asynchronous CMC (Sotillo, 2000). Two groups of advanced ESL students used a synchronous chat program, while one of the groups also used an asynchronous discussion program. Sotillo reported beneficial results in both synchronous and asynchronous activities. The “asynchronous discussions in particular allow language learners more time to plan their writing, edit their spelling, grammar, and punctuation when paying attention to form, and make longer contributions than students composing synchronously” (Sotillo, 2000, p. 24). On the other hand, Sotillo found that “the quantity and types of discourse functions present in synchronous discussions were similar to the types of interactional modifications found in face-to-face conversations that are deemed necessary for second language acquisition” (Sotillo, 2000, p. 1)

In some studies the peers are on an equal footing in the sense that they are students at the same level of study, but are different in that they consist of a native speaker (NS) interacting with a nonnative speaker (NNS) of the target language. In 2008 a study was done by Rayenne Dekhinet which involved NS of English tutoring NNS. Communication between the NS and NNS was facilitated through an online instant messaging system, or chat format. Tutors used various strategies to bring errors to the attention of the tutees, through the medium of chat. These included four implicit strategies as well as explicit correction. One problem with applying this type of assistance in the classroom is the difficulty of finding enough tutors to implement the system.

Another example of NS interacting with NNS is the previously-mentioned study by Toyoda and Harrison involving Australian college students of Japanese text chatting

with native Japanese college students (Toyoda & Harrison, 2002) where the researchers looked at negotiation of meaning and analyzed nine different categories of negotiation that took place. One significant finding was that some language aspects were brought out in the communication with native speakers that were not previously addressed in the teaching experience. An example of this is the “abbreviated sentences” category of negotiation, involving the fact that abbreviated sentences are much more commonly used in Japanese than in English and can be much more abbreviated. In one case, a native speaker used the phrase, “Part time jobs or something?” meaning “Are you thinking of including part-time job [as one point] in your theme?” The nonnative speaker understood this “superficially and started talking about his own part-time job experiences” (Toyoda & Harrison, 2002, p. 92) The text chat nature of the discourse brought this aspect of highly-abbreviated Japanese sentences into focus in a way that “is not easy to notice when... conversing in face-to-face situations” (Toyoda & Harrison, 2002, p. 97).

In 2005 a Canadian study was conducted that involved an innovative version of the NS – NNS paradigm. This was done by pairing second-generation Korean-Canadian students (who were studying Korean) with newly-arrived Korean students who were studying English. Both groups consisted of high school students. In this tandem arrangement, students took turns being the more capable peer in helping their partner do homework in his or her target language via text chat. Researchers found that “students from two different linguistic and cultural backgrounds were able to teach and learn from each other through on-line chat interactions” (Chung, et al., 2005, p. 74). Of course, this particular dynamic is not easy to reproduce in most educational settings.

Studies where peers are both NNS of the target language are fairly rare, but are of interest because they are closer to the thrust of my study. Foster and Ohta (2005) did a study with two different groups of NNS involving verbal communication. One group consisted of 19 American college students studying Japanese who spoke to each other in Japanese during the study. The other group consisted of 20 young adults from several different countries who were studying ESL in London and who conversed in English during the study. The researchers found that there were long stretches of conversation in which there was no indication of negotiation of meaning. Instead, they found that learners engaged in actively assisting each other to co-construct the meaning of the interaction “all in the absence of communication breakdowns” (Foster & Ohta, 2005, p. 402). Foster and Ohta found that participants engaged in three types of interactional processes to facilitate understanding. These were: assistance, self-correction and encouragement to continue. Assistance took two forms, co-construction (joint creation of an utterance) and other-correction (correction by the peer). The data showed that:

...learners were sensitive to the difficulties their partners were experiencing and proactively offered a variety of conversationally-based assistance, including co-construction and other-correction (Foster & Ohta, 2005, p. 421).

Foster and Ohta concluded that the ZPD can be conceptualized as a place in the conversation where learners rely on each other to continue their discourse. A perfectly comprehensible understanding was of less importance, to most participants, than continuing to have a mutually supportive and amiable conversation (Foster & Ohta, 2005).

Commenting on the fact that few Second Language Acquisition (SLA) studies have examined text chat utilizing NNS – NNS, Sauro and Smith have stated that:

Chat environments remain a promising site for research on second language development; however, to date, few studies have examined the full range of target language output learners produce during chat (2010).

In 2003 Bryan Smith did a study with 14 NNS dyads of nonmatriculated ESL students at a university in the United States. Each dyad received two tasks, a sequential ordering or jigsaw task and a decision-making task. Jigsaw tasks usually consist of six pictures of a series of events. Each partner in the dyad has three pictures. The partners have to describe to each other the pictures they have and they then have to put the pictures in the correct sequence. Sometimes assistance will be given by showing pictures and names for four or so low-frequency items on each page – vocabulary that the participants might not be expected to know.

The decision-making task that Smith used involved eight items, four for each partner, and required them to reduce the list to four. An example might be, “What is an appropriate gift for a young girl?” Unlike the jigsaw task, there is no one single correct answer. Smith did a quantitative analysis and found that both tasks required negotiation of meaning, with significantly more negotiations in the decision-making task. Smith attempted to explain the high number of negotiated interactions in text chat, or computer mediated communication (CMC), by stating that in CMC:

...a certain degree of support is stripped away, concentrating the entire burden of communication on written characters. As a result, a more explicit marking of

understanding and nonunderstanding, as well as turn boundaries, is required in CMC than in face-to-face interaction (Smith, 2003, p. 47)

Jigsaw tasks have been found by some researchers to promote a greater degree of negotiation of meaning than decision-making tasks (Blake, 2000), although Peterson (2006) found that the decision-making task resulted in more negotiation of meaning.

In 2006 Dong-shin Shin did a text chat room study involving graduate students, visiting scholars and spouses of either group for a total of 16 participants. The teacher, who was not the researcher, was also involved in this study, as the facilitator of the chat room. Benefits of the text chat room format were acknowledged, including having no problems with pronunciation, not having to go to a common physical location and being able to study the transcripts of the text chat room sessions for future review and study. Difficulties were expressed as well, with some participants “calling the discontinuity of interactions and the disruption of adjacent pairs in the large group chat interactions ‘crazy people’s talk’” (Shin, 2006, p. 70). Discontinuity of interactions, or multiple strands of dialog, is a problem that is sometimes found in the context of such a large group. One participant will formulate a response to another user’s comment, and while he or she is composing that, another comment will be posted. Comments often do not follow a clear strand, and this can be confusing. Based on her experience in this research study, Shin recommends that group chat sessions be limited to no more than five participants.

Zhao and Angelova did a study in 2010 involving Japanese students and Chinese students chatting with each other in English. In groups of five on each side they would both chat and videoconference with each other once a week. There were two parts to each session. First, students took turns answering pre-selected topics about college life in their

respective countries. This part was limited to 10 minutes or less for each side. The second part of the weekly session was free discussion about the topics that were just discussed or about any other topics the students wanted to discuss. The whole session lasted one hour. A quantitative analysis was done comparing the number of negotiations in the chat texting activity to the number in the videoconferencing activity. Although text chat did support negotiation of meaning, in this study videoconferencing was shown to have a greater number of negotiation routines than did chatting. Since videoconferencing is more similar to face-to-face interaction than is text chat, the researchers used this data to argue against Smith's (2003) finding that text chat requires more negotiations than does face-to-face conversation (Zhao & Angelova, 2010).

A study by Sauro and Smith (2010) examined 12 dyads of English-speaking German-as-a-foreign-language students. Each dyad was required to do a jigsaw task. Comparing their data to previous studies with face-to-face interaction, the researchers suggested that "learners do appear to use the increased online planning time afforded by chat to engage in careful production that results in more complex language" (Sauro & Smith, 2010, p. 573). This is one possible advantage of text chat over verbal conversations.

In 2009 Zeng and Takatsuka did a sociocultural study with 16 Chinese students utilizing text chat to develop their English skills. The researchers did this emphasizing the need for generating "peer – peer dialogues in the target language for meaningful purposes in and out of the class" (Zeng & Takatsuka, 2009, p. 434). Taking Vygotsky's thought as their theoretical lens, they discuss whether or not peer-to-peer interaction adequately fits into the paradigm of the ZPD:

Generally, learning within ZPD is perceived to occur in the expert – novice interaction... however, there has been an increasing interest in broadening the scope of ZPD to include peer – peer interaction in L2 acquisition (Zeng & Takatsuka, 2009, p. 435).

Based on their Vygotskian framework, Zeng and Takatsuka shifted the theoretical focus from the traditional interactionist model, which examines negotiation of meaning from a cognitive, individually-based perspective, to a sociocultural model which views learning as taking place through a collaborative relationship between the two interlocutors:

Through collaborative dialogue, learners mutually scaffold each other to find how best to express their intended meaning by giving and receiving assistance as they interact with each other... Thus, learners' mutual attention to form in their collaborative dialogue does not necessarily result from noncomprehension, as is the case in the traditional interactionist literature; rather, it is a collaborative endeavor to achieve better joint performance. (Zeng & Takatsuka, 2009, p. 436)

The researchers found that the chat environment of the study assisted learners in creating collaborative dialogue and improved their language learning.

Advantages and Disadvantages of Text Chat

Advantages of text chat. One of the more obvious advantages of chat over face-to-face communication is that busy students can do it in the convenience of their own residence or at any location where they can access the Internet. Another advantage is that it is possible to read the chat transcript while the chat session is in process to clarify the meaning of what has been written. After the chat session has been completed, the entire

transcript can be referred to, in order for the participant to learn from mistakes (Shin, 2006). Zeng and Takatsuka have pointed out that the slower nature of chat discourse allows individuals to produce utterances at their own pace. This can lead to less anxiety than face-to-face communication (Zeng & Takatsuka, 2009). The lag time between individuals taking turns in the conversation allows more time to process input and an opportunity for monitoring and self-correcting output (Sauro & Smith, 2010). Lai and Zhao also found that text chat leads to learners noticing their linguistic errors, more than in face-to-face interactions (2006).

Bryan Smith has stated that chat may be:

...an ideal medium for students to benefit from interaction primarily because the written nature of computer-based discussions allows a greater opportunity to attend to and reflect upon the form and content of the message, while retaining the conversational feel and flow as well as the interactional nature of verbal discussions (Smith, 2003, p. 39).

The opportunity for long distance collaboration makes it possible for individuals to learn more about different cultures as well (Kern, et al., 2004). Jepson has pointed out that the anonymous nature of chat enables individuals to reverse, if they so choose, gender or socioeconomic roles (Jepson, 2005). This anonymity may help users to feel less shy or apprehensive than they normally would in face-to-face conversation. In one study, researchers found that in online negotiations female executives were as likely as male executives to put forth a new proposal. However, in face-to-face interactions, men were five times more likely to put forth a new proposal (McGuire, Kiesler, & Siegel, 1987).

Another advantage of chat room communication is that it can potentially help marginalized students participate in a discussion (Abrams, 2003). Warschauer concurs with this, pointing out that in verbal communication in a group the extent of participation can sometimes vary widely, with some individuals dominating the conversation while others say almost nothing. Chat can provide more equality of participation compared to face-to-face conversation (Warschauer, 1996a).

Bringing up a practical, technological point, Sotillo has mentioned that text chat doesn't have the potential bandwidth or Internet congestion problems that video can often have (2006).

Disadvantages of text chat. One of the more obvious limitations of text chat, and also asynchronous CMC, such as email, is that it “removes or reduces paralinguistic and nonlinguistic aspects of face-to-face conversation and as the support of these factors is stripped away, the entire burden of communication is on written characters” (Zhao & Angelova, 2010, p. 19). Not having this access to non-verbal communication and cues of meaning from tone of voice, volume of voice, etc. can be frustrating to some users as valuable information may be lost.

The synchronous nature of chat has also been criticized by some scholars. It may not be seen to be as serious or as enduring a form of written communication as, for example, a wiki document (Godwin-Jones, 2003). Bordonaro (2003), while acknowledging that chat can lead to improvement in reading and writing abilities, has stated that it does not improve speaking skills since it does not involve verbal communication. Also, she says, chat may be seen as an inauthentic form of communication when compared to speaking (Bordonaro, 2003). This is because chat has

unique conventions in the communicative process, such as the use of emoticons, icons that represent emotions that are expressed through pitch, volume or nuance in spoken discourse. Also, extreme abbreviations such as “u” for “you” and “c” for “see” are commonly used to both simplify and speed up the chat, and these may offend some people.

For students or educators who expect chat communication to adhere to similar norms and conventions as traditional written discourse, the informality that is commonly expressed through Internet-based communication may be perceived as a problem. In a German-American study done by Paige Ware, one American student put it this way:

The German students were sloppy in the way they write. I’m very rigorous about it. If I don’t know something – a name, der, die, das – I will check in the dictionary before writing something. I wouldn’t say “It doesn’t matter.” Maybe because of the medium we use – on the Internet, nobody cares (Sara, interview). (Ware, 2005, p. 72).

This view is shared by Richard Kern, who said that chat “is often less correct, less complex, less coherent than other forms of language use” (Kern, 2006, p. 194). It should be acknowledged, however, that this relaxed format of communication is prevalent in email and other asynchronous forms of Internet-based communication.

In her study, however, Ware stated that Sara’s view that chat was “sloppy” was an opinion not shared by most of the participants in her study. The majority of the participants had a different expectation for chat, feeling that it represents a different genre of writing, with its own rules and norms. Another American student in Ware’s study was asked to comment on Sara’s remark. Ruth, in an interview, said:

I think a lot of that had to do with time, because people aren't going to resort to their dictionaries for every single article... - is this feminine? Neuter? You take to writing the way you would speak... I think there were students here who said, hey, do you want accuracy or do you want us to do it? [Laughs] I heard that comment one time (Ware, 2005, p. 72).

Ware concludes that ideally, different assumptions about text chat should be negotiated in advance in order to create an effective text chat experience. Teachers should be aware of the potential for tensions and affective dysfunction in some text chat situations and be ready to ameliorate any problems that may occur. Finally, Jepson cautions educators and researchers who are involved with facilitating chat interactions that sometimes learners can be frustrated by what they perceive as too much control over the process by the teacher or the researcher (2005).

Text chat is a fairly new medium for one-on-one communication in general, and for ESL research in particular. The research in the present study will investigate international students' affective experiences and perceptions of the use of peer-to-peer ESL text chat. In the process of doing so, the sociocultural theory of Vygotsky will be used as a central lens.

Chapter Three

Method

Overview of Method

This study investigated ESL students' perceptions of doing text chat with other ESL students around the world. The chat was done using a computer or a laptop, not a cell phone, in order to access free international communication. Instead of text chatting with native speakers, the students chatted with various partners ("remote partners") who are also English language learners. These partners live in many different countries and speak many different first languages. All the remote text partners are, just like the participants in the current study, learning English as a second language. The remote text chat partners were chosen by the participants utilizing a program called "Livemocha" which enrolls users from around the world.

The theoretical frame for the study was the thought of Lev Vygotsky (1978, 1987, 1994). This framework was used to shape all aspects of this study, including formulating the best procedures to gather data for analysis. The data collection consisted of four major aspects. The first data collection method consisted of initial interviews conducted with all participants. Second, each participant answered various questions that the researcher emailed to them every week regarding their individual text chat experience during that week. Third, group text chat sessions were held during weekly meetings of the whole group, and transcripts of these group chat sessions were acquired. Fourth, final interviews were conducted with each participant.

Data Collection Method in Light of the Theoretical Framework

As mentioned previously in the introduction and in the review of literature, the theoretical lens for this study is the thought of Lev Vygotsky (1978, 1987, 1994), the founder of sociocultural theory. The current study especially focuses on his concepts of *perezhivanie* and the zone of proximal development. *Perezhivanie* is the emotional experience an individual has in the interconnected relationship with his or her environment. In this relationship the environment shapes the individual and the individual also shapes the environment. Given this theoretical framework, it was decided to include interviews in the study. There are few better ways to ascertain a person's perceptions of a given aspect of his or her environment than to ask that individual what those perceptions are. Similarly, emailed questions and answers were part of the data collection because they also facilitate the participant's expression of his or her personal experience. Group chat sessions were included in the study as well, since transcripts of the give-and-take between participants in the study shed light on their spontaneous expressions of thought and experience.

Description of the Livemocha Program

Livemocha is an international online language-learning program. It offers classes in several languages and has a free text chat program. There are over eight million users on Livemocha, mostly in their twenties, from over 100 countries. With such a large number of users, it was possible for participants to find someone to chat with at any time of the day or night. The chat program enables users to chat one-on-one only; no group chat is available. For the purposes of this study only the chat program was used.

The Livemocha text chat program works in the following manner: when someone wants to use the program, they log on and select the chat button. The language they want to learn (English in the case of our participants) has already been saved on their individual profile. Twelve potential chat partners are displayed, showing their photos, countries of origin and online names (e.g. Mohammed Mostafa, Natasha1991, adorablenaria, etc.). Information as to what languages the potential partners speak and what languages they are seeking to learn can be found by putting the cursor over the individual chat partner's photo. Right-clicking on the photo of a potential chat partner gives all the information in his or her profile, including gender, age, relationship status and an introductory paragraph. Having an interesting and informative profile is important, because when someone selects a partner to chat with, the potential partner may accept the invitation or not depending on the inviter's profile.

If any particular user is online at a given time, then "chat now" appears under their name. Participants can then click on that person's picture and initiate contact. If the remote texter whose picture they clicked on agrees to chat with them, then that person will send an introductory message like "Hi" or "Who are you?" and the chat will commence. Many Livemocha participants use the program primarily to find new friends. When they have found a person with whom they want to continue corresponding, they will often give that particular individual their contact information on Facebook, Yahoo Messenger or other social media programs and continue to communicate via that modality.

Selection of Participants

Participants in the research study were recruited from a large research university in the Southwestern part of the United States. For the purpose of this study, the pseudonym of “South West University” (SWU) will be used. The ESL preparatory program at that university will be referred to by the pseudonym of “South West University English Preparation Program” (SWU-EPP). SWU-EPP was chosen for the study because the composition of students there conformed to the target group the researcher sought. The study was originally conceived as dealing with international students who had come to the United States to study English in preparation for entrance into undergraduate or graduate programs here. SWU-EPP had some students who were in an “academic bridge” program. These students took regular classes at SWU in addition to their SWU-EPP coursework. Therefore, they were not recruited for the study due to the fact that they had already matriculated.

In the fall semester of 2011 there were a total of 65 students at SWU-EPP, comprising the four levels of the program (excluding the “academic bridge” students previously mentioned). These levels were: Low-intermediate, Intermediate, High-intermediate and Advanced. The process of recruitment began by posting flyers a few days before the researcher went to the classrooms to introduce the study in person. These flyers introduced the study, explaining that it involved text-chatting with other ESL students around the world, that students who chose to be involved could possibly make friends with students from other countries and other cultures, and that they could chat from any place of their own convenience. The flyers also mentioned that participants could receive up to \$100 in compensation for full participation in the study. Finally, it

gave the contact information of the researcher (see *Appendix A*). Flyers were put up in various places around the SWU-EPP teaching area, as well as one in each classroom.

Tuesday, September 6, 2011 was the first time for the researcher to meet the students. The director of SWU-EPP introduced the researcher to each class, one by one, visiting them at the beginning or end of each class to suit the convenience of the instructor of that class. The researcher gave a short speech explaining the purpose of the study, the requirements to participate, the possible benefit of making friends with students from other countries and other cultures, and the monetary compensation they could expect. The students were informed that the study would last four weeks and take a total of 10 hours. With compensation of \$10 per hour they could make up to \$100 total if they participated fully. At the end of the study a bonus of \$20 was given to each participant who completed the study. A small version of the flyer was handed out to each student. To avoid any appearance of coercion, the researcher was careful to inform potential participants that he had no connection with SWU-EPP and that their participation or non-participation in the study would have no influence on their grades or any other aspect of their studies there. He then answered any questions they had. One possible participant asked if he would receive a certificate of completion if he was in the study, and the researcher decided to agree to this. (Later, certificates were given out to all participants (see *Appendix B*)). The researcher finished by giving the students his phone number and email address, and said that if they were interested in participating in the study they should text or email him by the end of the day. This method of contacting the researcher was done to ensure anonymity; none of the other students in the class would know whether or not other classmates were planning to participate. By the evening of that

first day, seven students had contacted the researcher to inform him of their decision to participate. However, the researcher's goal was to recruit at least 10 students, so that if a few of them discontinued their participation for any reason, there would hopefully still be at least six to eight participants by the end of the study.

In reflecting on recruitment strategy that evening, the researcher thought that maybe he had overemphasized the financial incentive and should place more stress on the need to develop research in the field that could conceivably help ESL students worldwide. Therefore, on Wednesday morning, the day of the initial meeting, he visited each classroom again and handed out a "reminder notice" to each student. The purpose for this notice was twofold. First, it was indeed a reminder to the students who had agreed the day before to come, reminding them of the time and place. However, it was also a second effort at recruitment that emphasized the opportunity for a contribution to scholarship and de-emphasized the financial incentive. The size of the text advertising the financial incentive was also reduced to reflect this shift in emphasis (see *Appendix C*).

That afternoon 10 students came to the designated meeting area to join the study. Of these 10 students, two were Low-intermediate, four were High-intermediate and four were at the Advanced level. The potential participants met the researcher at a computer laboratory in the language laboratory complex. At this introductory meeting the researcher handed out consent forms to everyone and read the forms aloud (for consent form, see *Appendix D*). He also answered a few remaining questions they had. He informed them that they could take the forms with them, think about it and let him know their decision by Friday. However, all 10 students decided at that time to be participants in the study and they signed the consent forms.

The following week the first regular meeting was held, beginning with a training session to orient the participants to the Livemocha text chat program. The training consisted of showing them how to register with Livemocha, the procedures necessary to set up their user profiles, how to choose potential chat partners, and the most effective methods for initiating contact with chat partners that had been selected for starting a conversation. To facilitate this, an information sheet was given to everyone, showing them how to register and use the program (see *Appendix E*). The participants succeeded in registering and creating their profiles and then began using the program. The researcher went around the computer laboratory, answering any questions students had and making sure that everyone was able to start their actual text chat session.

After 30 minutes had passed (including the training session and the time each individual chatted online), all the participants terminated their Livemocha session and began the 30 minutes of group text chat. The question asked by the researcher was, “What was your experience with Livemocha?” Some of the students had no difficulty with doing the group text chat. Some of the participants, however, had a certain amount of difficulty doing the group chat. The researcher walked around the room and assisted these students one-by-one to resolve their problems.

By the end of the study, eight of the 10 original students remained. One student, at the Low-intermediate level, dropped out after having some problems getting a university logon ID and password. Although the researcher found the correct office for this student to acquire an online university account, the student was unable to complete that process. Therefore, he eventually dropped out of the study. The second participant to leave was an Advanced student who refused to comply with the requirements of the study. This

student, whose native language was Arabic, refused to conduct any text-chat in English with remote partners, instead choosing to chat in Spanish, which she said she was interested in learning. Finally, her data had to be omitted from the study, leaving a total of eight participants.

Of the eight participants, four were men and four were women. Representation of different countries was not as even. Two students came from Latin America (one from Venezuela and one from Mexico), two came from the Far East (one from Vietnam and one from China), one came from the Middle East (Saudi Arabia) and three came from the same country in Africa (Equatorial Guinea).

The Participants

The participants are listed below in Table 1.

Table 1***Participant List***

Name	Age	Gender	Country	Native lang.	Months in US	English Level	BA?
Analena	20	Female	Eq. Guinea	Fang/Spanish	8	High-Int.	No
Feliciano	24	Male	Mexico	Spanish	8	High-Int.	Yes
Isam	26	Male	Saudi Arabia	Arabic	1	Low-Int.	Yes
Josefina	25	Female	Eq. Guinea	Fang/Spanish	12	Advanced	No
Josue	25	Male	Eq. Guinea	Fang/Spanish	3	High-Int.	No
Lian	26	Female	China	Chinese	12	Advanced	Yes
Mario	23	Male	Venezuela	Spanish	18	High-Int.	No
Trang	26	Female	Vietnam	Vietnamese	3	Advanced	Yes

Method for Data Collection

Four methods were implemented in the data collection: Initial interviews, question-and-answer conversations via email, group text chat sessions and final interviews.

Initial interviews. After completing the introductory meeting with all participants, initial interviews were arranged and took place over the course of the following six days. The researcher wanted to have the initial interviews finished before the first group chat meeting. These initial interviews lasted approximately 30 minutes. Questions were asked about the participants' background, including: age, months in the

United States, level of English at SWU-EPP, years of university study completed, career goals, etc. (The complete list of initial interview questions is given in *Appendix F*.)

The initial interview also covered specific study-related questions such as how they felt about writing in English, how much they had used computer-based text chat in their first language and how much they had used it in English. The same questions were asked of everyone, with, of course, different follow-up questions being asked based on the particular answers, comments or questions of the interviewees. The interviews were recorded and manually transcribed. The following is an example of an initial interview question:

If you are studying in order to enter an American college or university, will you be entering undergraduate school or graduate school? What will be your field of study?

One significant change was made from the initial printed list of interview questions to the actual interview questions asked. During the first of the initial interviews, the participant made a distinction between academic English and non-academic English. The other respondents agreed with this distinction. Therefore, during the rest of the initial interviews, participants were asked to give separate answers for academic and non-academic English.

Independent, individual chat time, followed by emailed questions and answers. Each week, for one hour, participants would text chat on their own with one or more ESL students around the world, using the Livemocha text chat program. Whether they chatted with only one partner or with more than one was a matter of their own choosing. There were no restraints placed on the students as far as the content of their

conversations; they were free to talk about whatever they chose. The chat activity was carried out in a manner very convenient for the participants since they could chat from any place (with Internet access) at any time of their own choosing. This could have been on a laptop at his or her place of residence, a café, someplace at the university like the Student Union Building or at any place connected to the World Wide Web. The total chat time with all the different text chat partners during one week was required to be at least one hour. The amount of time participants actually chatted every week was verified by having each participant sign a time log (not an online one, but a physical log) at the beginning of each group session. Times logged in ranged from one to two hours, with most times being one hour or one and a half hours.

Every week one or more questions were emailed to all participants. These questions concerned their experience that week with the text chatting activity. After completing their hour of chat session(s) the participants emailed the researcher their answers to the questions. (For a list of the emailed questions, see *Appendix G*.)

Group chat sessions. Once a week for four weeks a group meeting was held for one hour that included a 30 minute group chat activity. This activity was held at a computer laboratory at the university. The four weekly meetings with group text chat were held beginning the week after the orientation meeting when students signed the consent forms. During these group sessions, for the first 30 minutes participants would text chat with remote partners using Livemocha, in the same manner as they did on their own during the week. In case any participants had not yet answered the emailed question(s) for the week, they would answer them first before doing the Livemocha text chat. After the 30 minutes of text chatting/answering emailed questions, everyone

(including the researcher) would engage in a group text chat. The main contribution of the researcher to the group text chat was to post that week's question at the beginning of the chat session and once or twice to put in a comment steering the group chat back to the question to be addressed.

During the 30 minute group chat session, each person's text (whether a single word, a phrase or a sentence) would appear on the computer screen with their name preceding the text. It was a joint conversation where a participant could read any or all of the previous comments by other participants, and then respond with his or her own text message. With ten or so people chatting together the process went fairly quickly, and any given participant's reply to someone else's comment might appear after some other participants had put in different comments. Because of this, it was sometimes difficult to keep track of the line of chat (Shin, 2006). To help resolve this, sometimes texters would address specific comments to a given person using the other person's name. It can be somewhat confusing to have ten people or so chatting together, but due to the fact that their native language was not English, the chat session was slower than it would otherwise have been, and therefore perhaps easier to follow.

At the beginning of the chat session, the researcher would post a question for them to discuss. If there was more than one question that week, after 10 or 15 minutes another question would be posted and then discussion would begin on that question. On the first week one question was asked, on the second and third week three questions were asked, and on the fourth week two questions were asked. Examples of such questions include: "What was your experience using Livemocha?", "When you're texting someone on Livemocha and you can't understand what they wrote, what do you do?" and "Do you

feel more confident to write non-academic (outside of school) English because of using Livemocha? Why?” The questions used were similar to the ones that had been emailed to them the previous week. This was so the participants would be able to share and discuss their opinions in a give-and-take experience where their opinions might inform each other. One advantage of the researcher being present during the text chat sessions is that he was able to ascertain that real chat was taking place during the session. (See *Appendix H* for the group chat questions.)

Final interviews. After completing the last group chat meeting, final interviews were conducted with all participants over the course of the following eight days. These interviews lasted 30 minutes and focused primarily on their experience during the month-long study using Livemocha. An example of a question asked during the final interviews is this one:

Do you feel that Livemocha has helped you to be more confident in writing English? Please tell me for both school (academic) and for fun (non-academic, like Facebook, texting friends, email, etc.)

(The complete list of final interview questions is given in *Appendix I*.)

One ethical consideration during the interview process, not mentioned by the Institutional Review Board but something that had to be kept in mind, was the personal consequences to the participants “such as stress during the interview and changes in self-understanding” (Kvale & Brinkmann, 2009, p. 63). For this reason, the researcher took care to not subject the participants to undue stress during the interviews and also not appear to confront them if they indicated by their answers, comments or questions that

they had made changes in their self-understanding during the process of the interview itself.

Follow-up question. Four months after the final interviews, a follow-up question was asked of all the students by email. The text of the question was as follows:

“After these last four months since the study ended, can you tell me if you have noticed any change in yourself because of using the Livemocha program? This could include:

a change in your feeling about being an English user

feeling more confident to text other people in English

feeling more comfortable relating to people from other countries

or any other change you can think of.”

This question was asked for the purpose of ascertaining to what degree any changes they experienced through Livemocha had lasted after a period of four months. This concluded the data collection for the study.

Method for Data Analysis

Transcription, retrieval and compilation of data. Four sources of data were utilized to conduct the research for this study. The first source of data was the initial interview. These interviews were audio-recorded at the time they were given. The recordings were then manually transcribed. A second source of data was the email messages sent from all participants answering questions put to them every week by the researcher. These email messages were retrieved and the contents copied into a word processing document. Group chat sessions held every week comprised the third source of data. The text from each of these group sessions was retrieved and copied into the word

processing document. The fourth and final source of data was the final interview conducted with each participant. These interviews were audio-recorded at the time they were given. The recordings were then manually transcribed. Finally, the transcripts of all data from the four sources were compiled into one comprehensive word processing document. In this document, data were organized chronologically by source: initial interviews, email messages, group chat sessions and final interviews. Within each of these source groups, data were organized by participant.

Coding of the data. The coding of the data was done manually; no software programs were utilized. Initially, a provisional “short list” of codes was drawn up guided by the research questions, before examining the data. Then, the comprehensive data document was examined. When a reference to some significant datum occurred it was either counted in an existing code category (e.g. “friendship”) or else a new code was created for that datum (e.g. “sexism”). Some codes were also revised as necessary, having been “examined closely for fit and power” (Miles & Huberman, 1994). Upon completion of this process, a total of 47 codes had been identified. Further examination revealed that some of these codes were similar and they were combined together. The final number of codes was 29 (see *Appendix J*).

Creation of themes. From the list of codes, six different themes were identified, each theme subsuming two or more codes. These themes were: 1) enjoyment of some aspects of the text chat experience; 2) dislike of some aspects of the text chat experience; 3) preference in negotiating meaning; 4) increased confidence in ability to write in English; 5) reduction in anxiety and fear due to less stress on mechanics; and 6) identity

as an English user and ownership of English. The following table (Table 2) lists these themes, detailing which codes were subsumed by each theme.

Table 2

Themes and codes they subsume

No.	Theme	Abbrev.	Name of Code
1.	Enjoyment of some aspects of the text chat experience	ENG CUL FRND LBJ	Learning English Learning about different cultures Making friends Light banter/joking
2.	Dislike of some aspects of the text chat experience	HTS SXISM RUD AP AD	Hard to start chat Sexism Partner was rude Apprehension Abbreviations were difficult
3.	Preference in negotiation meaning	TR ASK AR GS ENM	Translated first Asked chat partner first Asked roommate first Guessed or skipped word Example of neg. of meaning
4.	Increased confidence in ability to write in English	NAE AE PBE	Non-academic English ability Academic English ability Profession-based English ability
5.	Reduction in anxiety and fear due to less stress on mechanics	COM MOC	Belief in content over mechanics Belief in mechanics over content
6.	Identity as an English user and ownership of English	OCLM CDWOC RTL AT DCDE DOE OE NNSE NOOE	Other countries are like me Can deal with other countries Remote texters are like me Able to talk with other countries Different countries use diff. English Doesn't own English Owns English NN Speakers easier to understand No one owns English

These themes will be more thoroughly explored in the next chapter, on the presentation of the data.

Chapter 4

Presentation of Data

Outline of the Study

This study examines English as a second language (ESL) students' perceptions and affective experiences of using peer-to-peer text chat. Students chatted with other ESL students (peers) around the world utilizing an online text-chat program called Livemocha. Using this program, participants could communicate one-on-one via computer-based text chat with counterparts from different countries. Students were free to choose anyone they wished to chat with and they were free to chat about anything they wanted; there were no assigned partners or assigned tasks for them to do that were given by the researcher.

The Research Questions

The main research question for this study is "What are the students' affective experiences and perceptions of the use of peer-to-peer ESL text chat?" In order to more fully explore the implications of this question, three sub-questions were posed:

1. Will participants gain more confidence, through their text-chat experience, to communicate through writing in English?
2. Do participants perceive a change in their identity as an English user through text chatting with other ESL students? If so, how can Vygotsky's theory of *perezhivanie* help analyze this development?
3. How do participants negotiate meaning with each other in their text chatting?
Can this be explained by Vygotsky's theory of the zone of proximal development?

In this exploratory qualitative study, the number of participants is too small to support a quantitative analysis of the measure of variables. Therefore, this study provides data through descriptions of the participants' perceptions of the factors mentioned in the research questions.

***Perezhivanie* and the Zone of Proximal Development**

The theoretical frame for this study is the work of Vygotsky, in particular his concepts of “*perezhivanie*” and the “zone of proximal development” (ZPD). The concept of *perezhivanie* refers to the emotional experience arising from a person's interaction with his or her environment. Vygotsky argues that not only does the environment affect the person, but the person also changes the environment. The individual and the environment are inextricably intertwined in a give-and-take relationship in which both act upon each other.

Dealing as it does with the emotional experience coming about through a person's interaction with the environment, *perezhivanie* is a particularly apt model to analyze not only the main research question but the first two of the research sub-questions as well.

The other major theory of Vygotsky that is used in creating the theoretical frame of this study is the ZPD, one of the best-known of Vygotsky's theories (Emihovich & Lima, 1995). In analyzing the manner in which psychological processes develop, Vygotsky emphasizes that one must look at the potential for development inherent in the mental processes which are still in the process of maturing:

The psychologist must not limit his analysis to functions that have matured. He must consider those that are in the process of maturing. If he is to fully evaluate the state of the child's development, the psychologist must consider not only the

actual level of development but *the zone of proximal development* (Vygotsky, 1987, pp. 208-209).

These maturing psychological functions are not sufficient to allow the child to independently solve a particular problem. However, with collaboration from the social environment, these maturing processes will be able to take the child to the point of solving the given problem (Vygotsky, 1987). Vygotsky's theory of the ZPD is used to illuminate the third and last of the research sub-questions.

Participants

To gain a clearer understanding of the background and goals of the participants in the study, an introduction to each student will be given below. This information was obtained from their initial interviews and represents them at the beginning of the study. All the participants' names have been replaced by pseudonyms to protect their confidentiality. At the time this study was conducted, all students attended the South West University English Preparation Program (SWU-EPP) at South West University (SWU). South West University (SWU) is a pseudonym for a large research university in the Southwestern United States. The South West University English Preparation Program (SWU-EPP) is a pseudonym for the ESL college preparatory institute at that university. These introductions are presented in the participants' own words.

Note: Analena (and also most of the other participants) spends a considerable amount of time texting. Most if not all of this texting, however, is done with friends or family members. Whether this type of texting is done on a cell phone or on Facebook, Yahoo Messenger or other social media programs, it is almost always done with people they already know. The program such as the one used in this study is different in that it

involves contacting strangers from different countries, finding out about them and their cultures, and potentially making new friends with them.

Analena. Hi. My name is Analena. I'm 20 years old and was born in Equatorial Guinea. I graduated from high school there and have been in the United States for eight months to study English. My level at SWU-EPP is High-intermediate. My career goal is to represent international business companies, and I plan to study business law at SWU when I have completed my English studies at SWU-EPP. My native language is Spanish and I text a lot in that. But I also text frequently in English with my friends who don't speak Spanish. I text almost every day. I watch a lot of reality shows on TV and that's helped me know a lot of English slang and idioms.

Feliciano. My name is Feliciano. I'm 24 years old and am from Mexico. I've lived in Texas, Florida, New Mexico and California for a total of eight months. My level at SWU-EPP is High-intermediate. I have a law degree from Mexico and I plan on getting an M.A. in public administration at SWU. I text every day for about two hours, in Spanish and in English. My career goal is to work at a Mexican consulate in the United States or maybe get a diplomatic position in Mexico.

Isam. Hello. My name is Isam. I'm 26 years old and am from Saudi Arabia. I've been in the United States for only two weeks. My level at SWU-EPP is Low-intermediate. I got a B.A. in business and then worked for two and a half years in the supply department of a

bioengineering company in Saudi Arabia. I text often in Arabic with my friends and family but do almost no texting in English. I'm planning to get an M.A. at SWU in either political science or in industrial engineering. I miss my mother; she means the whole world to me. But I have a goal to learn and get my diploma, then she will be happy. I will do it for her.

[Note: During the course of the study, Isam showed a great deal of determination to successfully complete the requirements of the program. For example, although he was at the level of a Low-intermediate student, he succeeded in independently obtaining a university email and chat room account.]

Josefina. Hi, I'm Josefina. I'm 25 years old and was born in Equatorial Guinea. I've been in the United States for one year. I came here to study at SWU-EPP where I'm now at the Advanced level. I completed two years of college at a school in Venezuela and am planning on getting my B.A. at SWU in international studies. I text a lot in Spanish with my Spanish-speaking friends, but I text sometimes in English with my friends from SWU-EPP, for instance, planning what to do on the weekend. When it comes to writing compositions about topics that I'm interested in, I love to write. For example, I will always write two or three narrative essays instead of just the one that is required for an assignment in my SWU-EPP class. However, if it's a topic I'm not interested in, like science, I don't enjoy that kind of writing. My career goal is inspired by my father, who is an ambassador from Equatorial Guinea. I want to get a job in an embassy.

Josue. Hello. My name is Josue. I'm 25 years old. Although my nationality is Equatorial Guinean, I was born in France and spent some time there while I was growing up. I also lived in Morocco and Equatorial Guinea. I went to university in France for three years, studying physics and chemistry. I've been in the United States for three months and my level at SWU-EPP is High-intermediate. Although my French is fluent and I'm still just learning English, it is easier for me to write in English than French, possibly because I feel most free writing in English. I am fluent in French, Spanish and my tribal language, Fang. I text in all those languages as well as in English. My career goal is to become a flight controller working in Equatorial Guinea.

Lian. Hi. My name is Lian. I'm 26 years old and was born in China. I've been in the United States, studying at SWU-EPP, for one year. I'm studying at the Advanced level there. I have a B.A. in agriculture from China. In my English studies at the university in China I spent very little time speaking; the classes were mostly writing. I worked in China for three years in a landscape architecture firm and want to pursue an M.A. in landscape architecture at SWU. My career goal is to work in the United States for a while, but eventually go back and work in China. I don't speak very much English outside of the classroom. My roommate is Chinese and most of my friends are Chinese. I often text in Chinese and only once in a while I will text chat in English with a few international friends.

Mario. Hello. I'm Mario. I'm 23 years old and I'm from Venezuela. I've been in the United States for one-and-a-half years and am studying at the High-intermediate level at SWU-EPP. I have two years of study in agricultural engineering and want to get my B.A. in veterinary science or biology. My career goal is possibly to have a horse ranch or perhaps get a job with an organization that works to save animals' habitats. I'm planning on staying in the United States permanently. I spend a lot of time texting other people living here in the United States, mostly in English.

Trang. Hello. My name is Trang. I'm 26 years old and I'm from Vietnam. I've been in the United States for three-and-a-half months and I'm studying at the Advanced level at SWU-EPP. I have a B.A. in business and I'm planning on getting an M.A. in business administration at SWU. I worked for one year in Vietnam at a rice export company. In that job I used text chat to talk to my customers. They were mostly Vietnamese customers with some English-speaking customers. My career goal is to work in an international company in Vietnam or in the United States if I have the opportunity. I study English outside of class in several different ways, including researching information on the Internet. At home sometimes I'll watch English-language movies, especially English-language romantic comedies with Vietnamese subtitles. This helps me to learn vocabulary.

Main Research Question: Six Themes Expressed in the Data

After analyzing the data from the study, in an effort to answer the main research question concerning the students' affective experiences and perceptions of peer-to-peer ESL text chat, six major themes were identified. These themes were: 1) enjoyment of some aspects of the text chat experience; 2) increased confidence in ability to write in English; 3) reduction in anxiety and fear due to less stress on mechanics; 4) dislike of some aspects of the text chat experience; 5) identity as an English user and ownership of English; and 6) preference in negotiating meaning. These themes will be explored individually in the following sections.

Enjoyment of some aspects of the text chat experience. Overall, the peer-to-peer text chat experience was enjoyable to all the participants. They were all happy to be involved in the study and to use the Livemocha program. Three of the strongest reasons expressed by the participants for having a positive experience were: 1) learning about different cultures and different countries; 2) making friends with people from different parts of the world; and 3) learning English. (See Figure 1.)

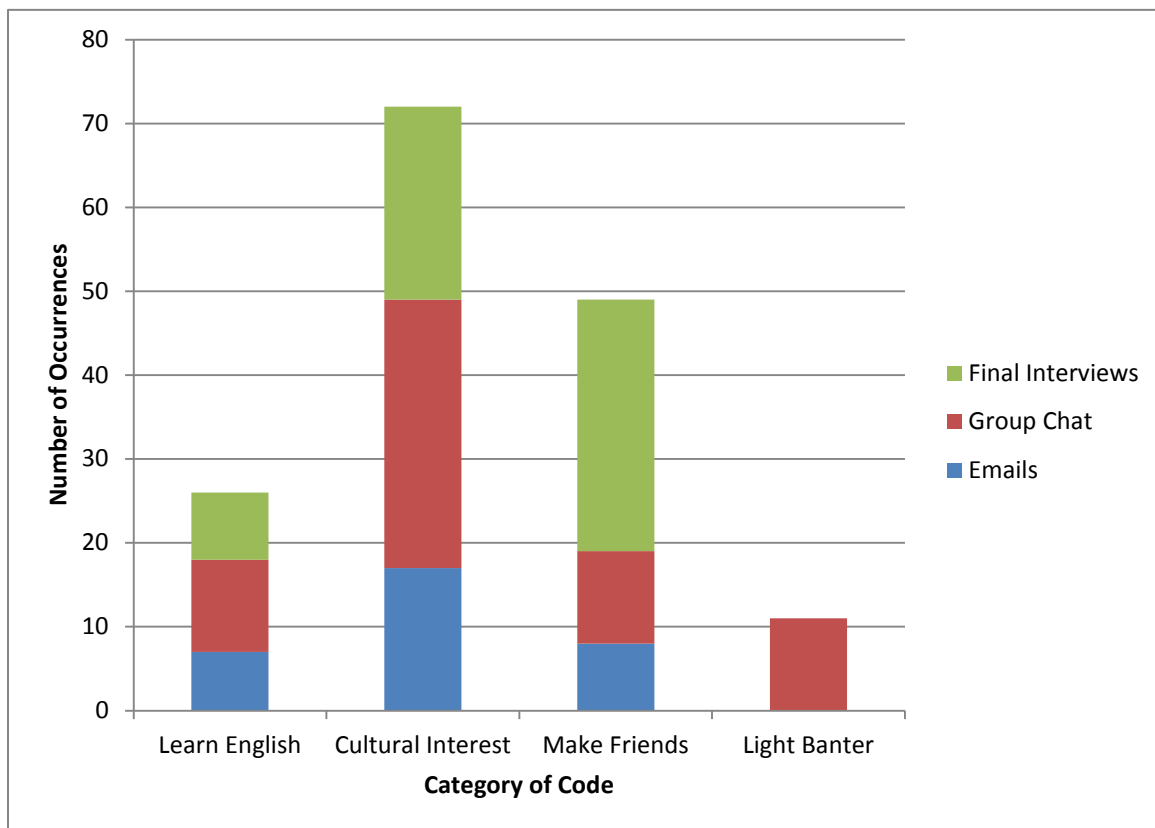


Figure 1.

Occurrence of Codes in Enjoyment of Text Chat

Learning about different cultures and different countries. This category was the one that was most often expressed by the participants under the theme of “enjoyment of some aspects of the text chat.” (Quotations presented are exact renderings of the students’ writing or speech, without corrections. The source of the quotation is given in parentheses after the excerpt.)

Mario: My experience has been excellent. I have know several people around the world such as Italy, Mexico, Turkey, Germany, Russia, Iran, and, USA. It's a very good idea and way to learns different cultures and practice my English! Thanks! (email).

Josefina also stated her enthusiasm for the experience, also based in large part on the fact that she was able to learn more about different countries and share her own culture:

Josefina: The experiences that i had in live mocha was good. I say that because i met interested people from many countries, i got the opportunity to share information, such as talking about my culture, behavior, and the language that i speak in my country. it was amazing know that there are countries that I've never heard about. for example, Serbia. (email)

Analena expressed her interest in exploring new cultures and countries:

Analena: i really enjoy chatting with different people all over the world.

on Thursday i spoke with a guy from Egypt. it was fun we talked about his culture and about the pyramids.

on Friday, i spoke with a girl from Indonesian and a guy from Iran. people are very nice and i'm having fun learning new thinks. thanks! (email)

In the group chat sessions, with all the participants chatting together, there was an opportunity to share their common interests in different cultures and countries with each other. In the following exchange it was an interest in Italy:

Mario: the last week i meet some from from italy!

Trang : what did you learn from him?

Trang : Italian is interested

Mario: ...yeah! i like italy!

Josefina: what are you talking about Mario?

Mario: i like italy because i think is a very wonderfull place!

Josefina: me too

Making friends with people from different parts of the world. Josefina talked about a friend she got to know from Romania, a person she stayed in contact with throughout the course of the study:

Josefina: I got into Livemocha, first it was difficult to me to reach someone who really want to speak. Then today in the morning i met someone from Italy, Romania, And Germany. I talked more time with the guy from Romania, Actually after our conversation we exchange our Facebook account. He talked me about his major, his actually job etc. (email)

In terms of continuing to practice and develop English through online chat, text chatting on Facebook or other social media sites has some advantages over text chatting using the Livemocha program. Many social media site users access their sites on a regular if not daily basis. Since getting on those sites is part of something they do anyway, and not an extra activity outside of their regular routine, they may be more likely to chat with a friend on that site than to chat with a friend on Livemocha. Toward the end of the study, some of the participants seemed to be moving towards using the Livemocha text chat program to meet new friends for conversation practice and using Facebook or other social media sites to maintain contact with these friends. The following is an excerpt from Josue's final interview:

Researcher: And did you make any friends with Livemocha?

Josue: Yeah.

Researcher: Like how many?

Josue: More than ten. First we were speaking Livemocha, so next they give me their Facebook, and I give them my Facebook and sometime we are speaking in Facebook. I spend more time speaking with Facebook than Livemocha.
(final interview)

Trang made a close connection with a girl from Iran, and shared how interesting it was to her that six different languages are spoken there. This is an excerpt from a group text chat exchange:

Trang: last week i made friends with Iran

Trang: and brazil

Trang: ...Iran girl is very nice

Trang: ...i though [thought] Iran people is shy to make friend but the girl who I made friend last week is different

Trang: she really want to study English from me and share special things in Iran

Mario: Trang why did you say she is different?

Trang: Because she open her mind and bold

Josue had a good experience with a friend from Turkey from whom he received an invitation to be shown around his country:

Josue: Yeah. I think he's good, he say me... One time I [want to] go to Turkey because I say he I have a two friends who come from Turkey, and he say me one time I go to Turkey I can send he an email and we can find - can help me to visit his country.

Researcher: In Turkey!

Josue: Yeah.

Researcher: Wow, that's cool.

Josue: Yeah, was very cool. (final interview)

Analena expressed her desire to remain in contact with some of the friends she had made using the Livemocha text chat program:

Researcher: OK, good. And did you make any friends with Livemocha?

Analena: I did.

Researcher: How many friends did you have?

Analena: I think like seven people sent me friend request, and I accept.

Researcher: And what was your experience chatting with those friends?

Analena: It was great. And some of them I have them now on Hotmail or Facebook. We are friends now.

Researcher: So you're going to keep in communication with them?

Analena: Yeah. (final interview)

Learning English. Some participants emphasized how much value they had found in the Livemocha text chat program in terms of practicing and learning English:

Mario: i think is a very good why [way] too knew pople around the word and also practice ingles (group chat)

Josue expressed the thought that he was able to develop his English skills as a result of chatting with remote texters using the Livemocha text chat program:

Josue: I feel something different when i speak in Livemocha because i have to speak English with people who i don't know.

But i thimk is something good because i increase my English (email)

Analena commented that she liked the Livemocha text chat program not only because she learned English but because she was also able to teach others English:

Analena: when i chat on livemocha i feel confidence because no one can see me and i also like it because i'm still learning and i also can help people to improve they English. (email)

Lian expressed the feeling that she wanted to continue using the Livemocha text chat program after the completion of the study so she could learn about other countries and learn English by writing:

Researcher: And do you think you're going to continue to use Livemocha after the study is finished?

Lian: Yeah, I think maybe before I didn't know this, I haven't know this. So now I think I can use it to learn English by writing. Yeah. Know some new things from different country's people and use English. (final interview)

Besides the three reasons given above, another reason that participants found the peer-to-peer text chat enjoyable was the opportunity to engage in light-hearted banter with each other occasionally during the group text chat. The following is from the first weekly meeting for group text chat:

Josue: i have a very bad experience [joking]

Josue: a bold man want my phone number

Mario: ahahahahaha and you give it or not?

Josue: i put the picture of my sister

Josefina: lol [laughing out loud]

Mario: hwy [why] not?? the idea is to know some new person!

Lian: so he saw u [you] r [are] so prety

Lian : haha

Josefina: okay guys lets take it seriously

Josefina: lol

After this interlude, the participants did indeed take the chat session seriously and began to talk again about people they had met online.

Increased confidence in ability to write in English. The second theme revealed in the data was increased confidence in ability to write in English. Since this theme is related to research sub-question # 1, it is covered in that section following this section on the six themes.

Reduction in anxiety and fear due to less stress on mechanics. Several students reported feeling anxiety in their university courses because of being constrained to write with the grammar, spelling and vocabulary expectations commonly demanded by academic writing. They expressed relief at not being so constrained by mechanics and being able to focus on communicative content while they were writing in the Livemocha text chat program.

Josefina stated that she gained writing confidence in non-academic English, partly due to the fact that she didn't feel the necessity of closely monitoring the mechanics of her writing, which she had previously felt compelled to do:

Researcher: Did the Livemocha help you in writing English?

Josefina: Yeah, but in non-academic English -

Researcher: So how did it help you?

Josefina: Um, I think, uh it help me like, like to write more fasters, more faster in English because I do write fast but in Spanish, in my own language. But in English maybe I have to like look for it and like check words before like before I send to the person that I'm chatting with. But in Livemocha I didn't do that, I just did it like the, the first week and then the second week I chose wrong and then I didn't check anything, because I knew like if I did bad some people help me, and they say "Ah, no this word is not like this. I think you did like you spell wrong", something like that. (final interview)

In a group chat session, some students expressed their feelings on this issue as follows. Josefina stressed the importance of comprehension over correct mechanics:

Mario: i feel better when i writing non academic classes

Josefina: it's not important the grammar rules

Josefina: when we write outside class

Lian : i think so, and it is more easy to chat

Josefina: the most important is understand what u are reading

Josefina: i have notion about what u are writing (group chat, also quoted in the negotiation of meaning section)

Analena voiced her feelings about being free to express herself without the anxiety normally attached to writing in class:

Analena: Well, writing's great but it's non-academic is even better because I can't worry about anything and I don't have to worry about nothing. But is academic sometime it could be painful, especially if it's a topic that I don't have too much idea about it. Sometime like painful... (final interview)

In an email Analena again mentioned the difficulty she had writing an essay about an assigned topic, something that is required on the Test of English as a Foreign Language (TOEFL) examination. (Getting a certain score on the TOEFL examination is necessary before matriculating at SWU or most other universities):

Analena: about the question that you have asked us i feel confident or less

confident depending about the topic that i'm writing about.

but i feel hundred per cent confident when i'm chatting because i don't have to follow any rules and i can write about what ever comes out to my mind.

(email)

The above statements by Analena illustrate the sharp contrast between the *perezhivanie* she experienced sometimes when writing essays in her regular writing class and the *perezhivanie* she experienced in text chatting with other ESL students. If Analena had to write an essay on a topic about which she had no idea, her *perezhivanie*, her emotional experience, was similar to that of a student confronting the “looming giant” referred to by Ann Raimes. She worried about what to write and her *perezhivanie* was sometimes a “painful” one. On the other hand, when Analena was text chatting with other ESL students from other countries her *perezhivanie* was relaxed and comfortable; she didn’t worry about the correctness of her grammar, spelling or any other such issues and simply focused on the content of the conversation.

In the following group text chat exchange, Trang and Analena demonstrated a distinct difference between Trang’s anxious approach to using “wrong words” and Analena’s more relaxed approach to using common text chat abbreviations like “thx”:

Trang: sometimes we still use wrong words

Analena: i don't think they are wrong

Trang: i didn't know what thx means?

Analena: just bad spelling

Trang: some words they use abbreviation

Trang: and idoms

Analena: it's mean thanks!

Trang: so it is hard to understand (group chat)

Mario referred to the difficulty of writing academic English.

Mario: Yeah, [academic writing is] very hard.

Researcher: Yeah

You got, you have to use very hard words. (final interview)

Later, Mario expressed the feeling of freedom he felt when he was no longer constrained to produce flawless English in writing:

Mario: [I gain more confidence through writing non-academic English] I fell

[feel] in that way because I don't have to use a good words or good language
just have to be myself and that's all! (email)

Lian echoed the concept that communication in a target language does not always have to stress correct mechanics but can instead emphasize comprehension:

Researcher: Has the text chat helped you in writing?

Lian: I think is help me at non-academic.

Researcher: Um-hm.

Lian: Yeah. [laughs] It's because academic writing needs you should take care your grammar, your vocabulary, your word choice. But when I use Livemocha in the chat we don't care about that. Just can make other people understand me. It's OK, just we can talk we can understand, we can continue.

Researcher: I see.

Lian: Yeah. Sometimes I don't never mind about the spelling, even some wrong word is have a little mistake, but we can understand each other. Nobody will care about that. (final interview)

This point of realization was a big step for Lian. She had been rather insulated from non-Chinese society, even while living and studying for one year in the United States. She had a Chinese roommate and also a Chinese friend with whom she spent most of her time outside of class. She didn't usually text chat with international students, even with her classmates. By the end of the study, Lian had a new outlook on communicating with non-Chinese people:

Lian: Before I used Livemocha, I had hardly used writing in English for chat. I think I tried to avoid use English to chat, so I almost didn't chat with any international students even classmates. Livemocha also helps me. I need to use English writing in chat. Then I found write non-academic that is not very hard as my thought. Maybe I will use English to chat more frequent. (final interview)

Four months after the final interview, all the students were emailed a follow-up question about the longer-term effects of the text chat experience. In response to this email, Lian reported that she did in fact continue to text more than she had before the

study and that she had made friends from around the world. She also expressed that she felt more confident to use English, and that these changes were due to her Livemocha text chat experience:

I think through these months using Livemocha and learning English, now I feel more confident for use English. I get more international friends, so English is the only way we chat. We always use text chat to make conversations. (four months later, follow-up email)

Dislike of some aspects of the text chat experience. Although there were many positive experiences reported by the participants, there were also significant negative experiences noted by some participants, especially by some of the female students who raised objections to the behavior of certain male chat partners, from whom they felt unwanted attention. Here is an excerpt from a group text chat session:

Analena: someone asked me to be his girlfrind

Trang: really?

Mario: that's fine!

Analena: is not...

Lian: last week i met a guy, but i didnt think he was friendly

Trang: i think someone in Livemocha is good but someone is strange

Josue: yes

Lian: so someone use chat just want to find girlfriends

Trang: yes

Trang: they don't want to study English or other languages from you, you only wanna to find girlfriend

Trang: they only wanna to find girlfriend

Analena: not all of them (group chat).

This problem of sexism from male text partners was quite disturbing to some of the female participants:

Trang: But they [some text partners] only want ask the “Oh, I want to see your picture on Facebook” or “I want you to be my girlfriend.” Oh, my God! (final interview)

In an email exchange, Josefina mentioned more specifically what bothered her about these sexist remarks, saying:

Josefina: The bad experiences that i had, most of the men wanted to talk about personal stuff. things that make me uncomfortable. (email)

Bringing up a different problem, Josue expressed frustration with the problem of having to wait for a long time for a woman text partner to answer his request to chat:

Josue: When you talk with a girl she still was speaking with other people. So it’s the only bad experience because sometime we have to wait a lot of time to have talk someone to have speak with you.

Researcher: Oh, you mean the same girl is talking to different partners at the same time, so you have to wait a long time [for her] to answer you back?

Josue: Um-hm. (final interview)

Trang complained about rudeness from some of her text chat partners:

Trang: And maybe I think Livemocha good and not good because you know some people are nice but some people not nice.

Researcher: Oh, yeah?

Trang: Yeah. Some friend, of my friends they Livemocha or some people not good but they has some problem or they not comfortable about anything. They use not polite word.

Researcher: They use bad words?

Trang: Yeah! And so some people they want to ask you and they don't want to say something about their country or anything.

Researcher: So they don't want to give you any information about their country.

Trang: Yeah! They only ask me about my country, how is my country, what is special in my country but maybe they when I ask about same why Russia they maybe they only answer short sentence and don't want to answer. (final interview)

Some remote texters were reported as being very rude. Mario had the following encounter with one:

Mario: i have a bad experiencie today! well it's was more funny someone tell my... Are you from Venezuela?? the most dangerous country in the world?? ahahahahaha (group chat)

Apprehension was an affective experience referred to by some participants in the study. Three instances of participants mentioning apprehension were recounted in the data. Feliciano admitted to initially being scared when he started using the Livemocha text chat program:

Feliciano: Yeah, Livemocha help me and it's good for it's good because you you can see the English like normal when the first time I type with scare, I'm scared and the last time it more confident and - (final interview)

Trang referred to apprehension and the need she perceived for circumspection in dealing with unknown remote chat partners:

Trang : keep your secret [don't tell too much about yourself to your remote partner]

Trang: you don't know how they are (group chat)

Lian experienced a certain degree of apprehension throughout the study in regards to initiating conversations with remote texters. She would contact several individuals and wait for one of them to start the conversation, and then she would respond to that person. She felt that she needed help starting the conversation and would always wait for the other person to initiate the discourse:

Researcher: So when you used Livemocha how did you start a conversation?

Lian: I always I think I just send to someone say hi, hello, and then waiting [laughs] them to can start a conversation... So sometimes I think is you send a message and you need to wait a long time, so I always send [to] two different people. And then maybe you know, the same time as three or four people then some of them will send message back. I say, "Hi", "Hello." Then they will send back and maybe it's start a conversation.

Researcher: I see. So you mean you send it to three or four people and then one of them will finally start a conversation...

Lian: Maybe some of them can help me to start a conversation.

Researcher: That's an interesting way to do it.

Lian: Yeah, cuz I don't know how to start conversation with a strange people [a stranger]. A different country.

Researcher: Yeah. So you wait for them to say something to you.

Lian: I think so! [laughs] (final interview)

Mario mentioned that he felt the need for caution in dealing with people from different cultures and different countries:

Mario: i think is not too different if I talk with some one that i know or that he/she live in the same contry but i have to be a little bit more cautious because i dont know they culture (group chat)

One problem alluded to by Trang was the lack of visual information inherent in text chat. She said that she felt limited due to not being able to see the person's face:

Trang: I think when you speaking you can understand more. Easy to understand well. Because if you don't understand what they say you can guess because you see their face. Yeah. But in that [Livemocha] not.

Researcher: Yeah, that's true.

Trang: You don't know what they feel and you don't know how they feel really, because you don't see their face. And you when you talk together you can repair pronunciation... Sometimes you text everyone can understand you, but you speak someone don't understand you. I think speaking better.

Researcher: So speaking is better, because you can learn -

Trang: Yes, can learn more. (final interview)

Identity as an English user and Ownership of English. Because this theme is related to research sub-question #2, it is dealt with in the research sub-question section, which immediately follows this section on the six themes.

Preference in negotiating meaning. Because this theme is related to research sub-question #3, it is dealt with in the section on the research sub-questions, which immediately follows this.

Research Sub-Questions

Research sub-question # 1 - Confidence. The data were unequivocal on this point: all participants reported increased confidence in their ability to write in English as a result of their Livemocha text chat experience. Every student experienced an increase in his or her confidence to write non-academic English. Josefina wrote “I feel confident writing in in non academic english.” Lian seconded this, saying “I feel confident to write non-academic.” Also, four students reported an increase in their confidence to write academic English.

Distinction between academic and non-academic English. All of the students except Isam drew a clear distinction between academic and non-academic writing in English. Academic English was what these students felt they needed to succeed in their studies at SWU-EPP, pass the TOEFL examination and matriculate at SWU. Non-academic English was what they used to communicate with English-speaking friends, write blogs on the Internet or to participate in other informal discourse contexts. Lian described the difference in the following way:

Researcher: Do you think that text-chatting in Livemocha has made a difference
in your writing?

Lian: Yeah, I think it’s more helpful for my non-academic writing.

Researcher: Um-hm.

Lian: Yeah. It's frequently like talk: I can get some new things, but it's different from the academic writing. I think it's like the speaking in our everyday's life and the speaking in TOEFL test. Do you see the difference? It's the formal thing it's the informal. (final interview – also quoted in section “No increase in confidence to write in academic English”)

Increased confidence in writing non-academic English. All students reported increased confidence to write non-academic English as a result of the Livemocha text chat program:

Josefina: okay... i feel confident writing in non academic english

Analena: i feel more confident chatting

Analena: because i can write about what ever comes out to my mind

Lian: i feel confident to write non-academic (group chat)

Mario said that, in addition to feeling more confident to write better (text chat) in non-academic English, he felt more confident in other situations as well:

Mario: I feel more confidence when I talk with someone in a non-academic language because I can be or use an informal words or language and express myself very well! i feel in that way not just chatting in Livemocha also I'm feeling better in the street or outside class! (email – also quoted in incidental finding about two students learning to *speak* English better because of their Livemocha experience).

Trang reported feeling that her ability to write non-academic English improved:

Trang: I feel little more confident to write non-academic English because of using Livemocha. Because chatting in Livemocha, I have friends around the world and I can wide my knowledge and can improve my English to write. (email)

Feliciano also expressed how Livemocha helped him develop his vocabulary, how practicing a word several times would enable him to be able to write it automatically, without thinking:

Feliciano: Yeah, because maybe one word, one word you forget how is spelling how write, and after the conversation you it's like mechanic [automatic]. I don't know, because it's too easy, it like, like in your native language... And it's too easy, it's not "How is this spell, how is this write?" It's, it's easy, yeah...Because you can learn new word and it's easy word or hard word.

Researcher: Can you think of any words that you learned how to use just practicing with Livemocha? Some word or some expression, some idiom or something that you've learned from Livemocha?

Feliciano: Maybe awesome... I don't [didn't] know how write awesome. After that it's too easy. I went to type "awesome" I can it's -

Researcher: You don't have to think about it, right? [both chuckle]

Feliciano: It's many words, don't remember right now, but it's - it's good. (final interview)

Josue mentioned that disclosing the fact that he was an English learner enabled him to feel free to "speak" [text] without fear of making mistakes.:

Researcher: How did it help you in your writing of English?

Josue: When I speak [chat] with someone and I tell him, “I’m learning English” so he know my English will not be perfect. So I feel free to speak. If I make something wrong it’s okay because I’m just here to learn.... (final interview)

Increased confidence in writing academic English. Four students (50%) reported that they gained confidence in writing academic English as a result of using the Livemocha text chat program. These were Josue, Feliciano, Josefina and Mario. Josefina had originally said that she did not perceive a gain in confidence to write academic English. However, in a follow-up email written four months after the final interview, she said that Livemocha “help me more to organize my though [thought] in my [academic] writing.” (follow-up email).

Mario said that his university writing improved as a result of the Livemocha experience:

Mario: No, it [Livemocha] can help in both, that’s the way in university or in friends or something...

Researcher: So the Livemocha can help you in both ways?

Mario: Yeah, I think so.

Researcher: How could it help you in the university?

Mario: Just for example, for me, I think I’m feeling more easy to write, to wrote.

More confident to wrote – (final interview)

Josue said that writing in English for university work had become easier than writing in French, even though he had attended a university in France for three years:

Josue: Yeah, because sometime when you have homework and teacher ask you to write an essay sometimes something boring because you don’t have any idea.

You have to find something. But when you speak with someone it's normal you write whatever you want. It's OK.

Researcher: So you don't have to write this way, or this topic. You can just write your own -

Josue: Yeah, you will write whatever you want. The thing is that it help you to increase your level... Yeah, I think it can be very good. Yeah. Because before I come here it was very, very hard to speak or write in English, because when I was in French in university sometimes ask us to write something or speak about something and it was very hard. But now I feel, I think, good when I speak in English or when I write English. (final interview)

Josue also mentioned later on in the interview that he had been helped with writing in English. He even said that he thought it might be a good idea that the Livemocha program be used in the future by SWU-EPP:

Josue: I think it help to write...it help me to, for example, my expression because sometime...when you learn a language the most difficulty is the first time you have to try and Livemocha help me to try to speak, to use different word and different expression. So when I was speaking with different person, I using different word, different sentence, so I think they help me a lot...Yeah. I think it [Livemocha] can be include in the program.

Researcher: You think it can be?

Josue: Yeah. Or maybe should be.

Researcher: You mean like in SWU-EPP?

Josue: Yeah. It can be very good. (final interview)

Feliciano expressed his view that a given conversation using Livemocha text chat could include non-academic, academic or profession-related writing, depending on the topic at any given moment:

Researcher: So you think it's good for academic English or just non-academic English? Did you use it - ?

Feliciano: Maybe depend the people, about the people. Because if you talk about school or something like -

Researcher: Um-hm.

Feliciano: Academic, it's a can talk to the specific topic, academic professions.

Researcher: Yeah, that's true. That's true. Or if you're doing like non -academic you can talk about the -

Feliciano: Sports...The culture, food. (final interview)

No increase in confidence to write in academic English. Two students – Analena and Lian – reported that their confidence to write academic English did not increase as a result of their use of Livemocha. Analena stated that she gained increased confidence in writing non-academic English and, at the same time, made it clear that that she felt she gained no confidence in her ability to write academic English as a result of the Livemocha text chat experience:

Analena: Yeah, non-academic yeah, but not academic. Because academic I have to follow some rules, like writing a certain topic. But if non-academic I think yeah. (final interview)

Lian also mentioned that the Livemocha program helped her with non-academic English but not with the academic English she needed to pass the TOEFL exam:

Researcher: Do you think that text-chatting in Livemocha has made a difference in your writing?

Lian: Yeah, I think it's more helpful for my non-academic writing.

Researcher: Um-hm.

Lian: Yeah. It's frequently like talk: I can get some new things, but it's different from the academic writing. I think it's like the speaking in our everyday's life and the speaking in TOEFL test. Do you see the difference? It's the formal thing it's the informal. (final interview – also quoted in section “Distinction between academic and non-academic English”)

Not sure if academic writing increased, or it only increased a little. Trang reported that she felt her academic writing had improved only “a little bit” through the Livemocha experience (final interview). Isam (the sole Low-intermediate student) was the only participant who did not describe a difference between academic writing in the university context and non-academic English using Livemocha. He stated that he felt the main benefit of the Livemocha text chat program was that it helped him in spelling:

Researcher: Do you have any, is there a special experience you had with Livemocha?

Isam: ...that's good, that like special learning when I mistake in spelling, spelling mistake can be fixed.

Researcher: I see, so when you have a spelling mistake they tell you.

Isam: Yeah, tell me then good spelling do good in spelling to fix. (final interview)

Improvement in reading and speaking. An incidental finding, not related to the research questions of this study, was the fact that all students in the study reported some

degree of improvement in their ability to read English as a result of using Livemocha.

Analena explained it in this way:

Researcher: Do you think Livemocha helped you in reading English at all?

Analena: Yeah.

Researcher: In what way?

Analena: Cuz when someone write me I have to read it and I have to read it fast to answer that person, so I think it help me. (final interview)

Feliciano reported the Livemocha helped him to read English, especially in terms of grammar:

Feliciano: Yes. Because when you type or you receive the text, you practice your grammar and you're reading all parts of the for a good for a good conversation.

Researcher: Oh, yeah.

Feliciano: And needs to easy identify how is spelling that word or these word. It's yeah, it's good for grammar and reading. It's very good. (final interview)

Two participants, Trang and Mario, described an improvement in their ability to *speak* English as a result of their Livemocha experience. In her final interview, Trang mentioned that the Livemocha experience helped her more in speaking than in writing English:

Trang: So I think Livemocha help you much more in reading. And talk, speaking. Writing a little bit.

Researcher: I see. So it helps you to speak? Livemocha helps you in speaking English?

Trang: Yes, because when you talk English mocha you can use short word and same you speaking. It's same.

Researcher: Well, that's interesting. Yeah, so the speaking is similar to the chatting.

Trang: Yeah, chatting. Yeah. (final interview)

In response to a follow-up email question sent to her asking "Can you tell me how using Livemocha helped you speak English better? How did that happen?" Trang replied:

Trang: Yes, I said Livemocha could help me speak English better. I learned many idioms and slang my friends on Livemocha. I used them in speaking and could understand native speakers more. Moreover, I also learned many new words that could help me improve my English. (one-month-later, follow-up email)

Mario seconded this feeling about being able to speak English better through his experience with the Livemocha text chat program:

Mario: I feel more confidence when I talk with someone in a non-academic language because I can be or use an informal words or language and express myself very well! i feel in that way not just chatting in Livemocha also I'm feeling better in the street or outside class! (email – Also quoted in section on how students learned to write in non-academic English).

Research sub-question #2: Identity as an English user. In the course of the study, an issue emerged in relation to the second research question on the participants' identity as English users. This issue was the perception of some students that they had an identity as a global user of English, that they were *owners* of English. Scholars in the field of Global English (Kachru, 2009; Norton, 1997; Widdowson, 1994) have stated that

English does not belong solely to native speakers, but to everyone in the world who uses it. They argue that saying nonnative speakers are not truly owners of English relegates them to the status of second-class users of the language. In that paradigm, no matter how well-educated the nonnative speakers may be, their opinions about English will always be superseded by a native speaker who disagrees with them. The consequences of the perception that only native speakers of English own the language may be very serious. Nonnative speakers of English may feel disempowered, marginalized and alienated. If they do have these negative affective perceptions, learning English may very well become more problematic for them.

In discussing the ownership of English, it is important to realize that a universal view of ownership does not imply that errors are acceptable. Errors are always errors and one purpose of education is to help everyone (native and nonnative speakers alike) make fewer of them. For instance, spelling “cell phone” as “sell phone” is a mistake and should be pointed out as such to a student who uses it. However, the expression “hand phone” is commonly used in South Korea. From the viewpoint of Global English this is not an error, but represents a particular, regional variation in the language (Kachru, 2009). What is it that gives nonnative speakers of English the confidence to create new expressions such as these? It is the belief in universal ownership of English, that English belongs to them and to anyone who uses it, not just to native speakers (Widdowson, 1994). The perception of students as to whether or not they own English is an important consideration as we study their affective experiences and perceptions of the use of peer-to-peer text chat.

The subject of ownership of English emerged in the middle of the study in an email from Trang. In response to the question, “Do you feel any different as an English user after chatting with someone from another country?” she replied that she felt a common base with the ESL students with whom she was texting and that this communication was easier than that with native speakers:

Trang: I feel different after chatting with someone from a different country such as when I talk to international people, they are use simple sentences with simple words so that I can understand clearly. (email)

The question of ownership of English was explored in a subsequent emailed question and also in questions asked during the weekly chat session. These questions were “When you chat on Livemocha you communicate with other non-native speakers around the world. Do you feel that English ‘belongs’ to you? Do you ‘own’ English or just ‘borrow’ it from native speakers? Why?” The most crucial element in the definition of “ownership” as used in this context is that the owner of a language is the *legitimate* user of that language, that he is not “borrowing” it from someone else and thus is beholden to the “real” owner (a native speaker of the language) but has as much right to use the language as anyone else (any native speaker). The researcher illustrated the meaning of “own” and “borrow” in this context by pointing to his hat and saying, “This is my hat; I own it. If someone else uses it, they are borrowing it.” [Note: the participants may not have understood the full meaning of “ownership” as defined in the literature review. However, they did seem to grasp the main idea. Future studies could possibly formulate ways of more fully conveying the meaning of the word “ownership” to ESL participants.]

In answering these questions, four students (Josue, Feliciano, Josefina and Trang) said that they felt ownership of English, at least under certain conditions. Three students (Isam, Analena and Lian) expressed the belief that either they didn't own English or else nobody did. The other student, Mario, was not able to express what he believed on this point. The researcher was unable to get him to understand that the question referred to his ownership of English, not to "his own English."

Belief that they do own English. Josue and Josefina held a similar conviction that, if they could write English better than the remote texter they were chatting with at any particular moment, then at that time they owned English:

Josue: I think it depend on the person. For example, I see my English level is more than the other person, I feel that English is my home language because I speak better than the other person. But, for example, if the other person who are speak English his English level is more than mine, I think I still learn English. (final interview)

Josefina expressed a similar sentiment:

Josefina: Sometimes I feel like I do own English. When I'm talking with someone who, who is learning English but his level in English is like low. If I can help him to improve his English, in this case I feel like I own English. But I can, like, I can teach what I know, you know what I'm saying...

Researcher: Were you able to help people in Livemocha a lot of times?

Josefina: Yeah, with one girl, I don't know Iraq, she was actually her spell was very bad. And then I help her in the spelling and sometime she trying to say, like, when she wrote, it doesn't make sense what she try to explain me or what

she trying to tell me. So maybe I just, the only thing I say, like the same word but in different way. If to make her feel like, OK, is that what you trying to tell me? And then if she say, ah, yes, or no, then I say can you explain me more please? You know, in this case, yeah, the like I think we, we uh help each other. (final interview – also quoted in “Negotiation of Meaning” section)

So, for these two participants, what determined if they owned English or not was the comparative level between them and their text partner in that particular conversation. If the text partner was perceived as being “worse” in English, then the two participants felt that they were indeed owners of English in that context. On the other hand, if the text partner was perceived as being “better” in English, then the two participants felt they didn’t own English but were just users of the language. Interestingly, Josefina stated that in the relationship she had with the woman from Iraq, they helped each other to find the meaning of what the woman was trying to say. For these two participants, practicing English in the Livemocha environment helped them develop their sense of ownership of the language. The other two students who indicated that they did own English, Trang and Feliciano, did not say that the Livemocha experience helped them to develop a greater sense of ownership of English. So, in total, two students out of the six who did not already have a conviction of ownership (33%) reported that they had been helped by the text chat experience to have a greater sense that they were owners of English.

For Trang, ownership of English was dependent on whether or not she was confident of her mastery of the English she was using:

Trang: I think sometime I can own my English but sometime I can borrow.

Researcher: Um-hm.

Trang: Yeah, because when it's I study English in my country so maybe simple sentences I can own my English because I know exactly is right. (final interview)

Feliciano simply stated unequivocally that he owned English:

Researcher: ...how do you feel? Do you feel like "Oh, this is somebody else's English" or "This is a native speaker's English" or do you think, "No, this is my, my English."

Feliciano: Yeah, it's mine. My English. My communication, my communication. (final interview)

Belief that they do not own English. Analena had a different philosophical outlook than the other students. She felt that nobody owned English, that it was just something that anybody could use:

Analena: I really don't think English belong to anyone. It just a language that anyone could speak, and it didn't belong to anyone. So when I'm writing, chatting in English I don't think I am borrowing English from anyone. I'm just learning, like for a person could learn Spanish... (final interview)

While Analena rejected the idea that anyone could claim ownership over English, Lian and Isam felt that they did not own English because of the inadequacy of their language skills. Lian explained the reason she felt inadequate compared to native speakers – that NS could understand other persons who had a strong accent:

Lian: I don't know other nonnative speakers but until now is not belong to me...I can speak English but is not like belong to me...Um, because sometimes I

also can't understand the people's saying, when they speak so fast, use the different word, have some dialect.

Researcher: Yeah.

Lian: Yeah. I can't understand. But I think native people own it because even they have dialect, even we have dialect, they also can understand. But in our class we have the international students, so we come from different country and speak different native languages, so some of languages have the dialect when they speak English. Even some Spanish speaker speak English I also can't understand.

Researcher: Because their accent is very strong?

Lian: Yeah. But I think native speaker can get the meaning.

Researcher: I see. So a native speaker can understand. But it's very hard for you to understand it sometimes.

Lian: Yeah. [laughs] they can't understand you and they have the accent. (final interview)

Isam expressed his belief that he did not own English because he was still a beginner, but that he felt he was growing in the language and could eventually become the "captain of the ship":

Researcher: So, do you feel that English kind of belongs to native speakers?

Isam: Yeah, cuz language like see so many words, so many phrase, so many sentence day by day go up grow up ... to be the captain of the ship when he's good speaker. (final interview)

What implications is it possible to draw from the participants' perceptions of their ownership of English? Josue and Josefina, having a sense of ownership of the language under certain conditions as outlined above, would be predicted to be more likely to initiate and continue conversations with other non-native speakers of English. Josefina actually referred to this in her follow-up email four months after the final interview. She wrote that she was roommates with a young Vietnamese woman, and was able to talk to her "without feeling scared that maybe she is not going to understand me." On the other hand, Lian had the opposite perception. She did not feel ownership of English in spite of being at the Advanced level at SWU-EPP. She would be predicted to be less likely than Josefina or Josue to initiate or continue conversations with other non-native speakers.

Research sub-question #3: Negotiation of meaning. Research question #3 is "How do participants negotiate meaning with each other in their text chatting? Can this be explained by Vygotsky's theory of the zone of proximal development?" Negotiation of meaning takes place when an incident of nonunderstanding occurs in the middle of discourse. Negotiation of meaning may be initiated by the interlocutor who does not understand the meaning of what the other person has said. If the person who does not understand tries to clarify, with the other person, the meaning of what was said, the process of negotiation of meaning is initiated.

In the case of the current study, there are limits to the extent to which the precise negotiation of meaning can be analyzed. This is because of the constraints placed upon the research to protect the confidentiality of the remote text partners. In agreement with the Institutional Review Board (IRB) for South West University, it was decided that the transcripts of the chat sessions with the remote text partners would not be included in the

study. There was concern for the confidentiality of the remote text partners, even the remote possibility that one of them would confess to a crime. For this reason, the transcripts of the conversations were not made available to the researcher and, in fact, no semiotic information whatsoever from the remote text partners was communicated to the researcher. The only data for this study consists of the reported perceptions and experiences of the study participants themselves. Therefore, the only insight we can get into the negotiation of meaning that took place is from the descriptions of the participants.

Different strategies to resolve an incident of nonunderstanding. In discourse, when there is an instance of nonunderstanding, there are several different strategies the participants involved can use to address this problem. The interlocutor who does not understand what the other person said may do one or more of the following:1.

Consult the partner, which can include directly asking the meaning, stating the phrase in different words to check if that is what the other person meant to say or other forms of consultation.

2. Guess (by him or herself, not consulting the other person) the meaning of the word or phrase, perhaps by its context, and continue the conversation without consulting the partner.
3. Use a resource such as a dictionary, thesaurus or translating software.
4. Ask a third party not directly involved in the conversation.

Of course, there are other possible strategies as well, but the above four were the ones identified as being used by the participants in this study. Of the above strategies, only the first one constitutes negotiating of meaning. A good example of negotiation of

meaning is the following excerpt from a text chat session, where certain participants were trying to decipher the meaning of some commonly used text chat abbreviations by asking other participants:

Researcher: Does everyone know what lol means?

Trang: English in class is different English in chatting or outside [addressing a previous question]

Analena: yes

Analena: i do

...

Analena: laugh out loud

Lian : yes [in response to Trang]

Lian : it is so different

Trang: laugh out loud? what does it mean

...

Lian : like f2f

...

Lian : nvm

Mario: nvm??? what it's that?

Trang: f2f means face to face, all right? [is that right?]

Lian : yes

Trang: and nvm?

Lian : i think nvm is never mind [she is correct; it means never mind]

Lian : i am not sure (chat room session)

Another example of negotiating for meaning can be found in this statement by Josefina, referring to how she emphasized realizing the meaning or content of what was written by her partner.

Josefina: the most important is understand what u are reading

Josefina: i have notion about what u are writing (group chat, also quoted in the negotiation of meaning section)

The second strategy of resolving an incident of nonunderstanding, that of guessing the meaning without asking the other person, was exemplified by Feliciano. He was the only student who specifically mentioned deriving the meaning of a word or phrase from the context:

Feliciano: I use a translator.

Researcher: Uh, huh.

Feliciano: And I learn these new word....maybe on the Google translation. Or on my cell phone. It's very easy...because I have the application, and on the put the word and click...

Researcher: So, you almost always use the translation. What if you can't find the right word, or if you use the translation but you're still not sure about the word. Then what do you do?

Feliciano: Maybe, I try the find the logic [from the context].

Researcher: Like kind of think about it. Not guessing but logically what it's supposed to mean?

Feliciano: Yeah, the conversation. Yeah. (final interview)

The third strategy for uncovering the meaning of a word or phrase that is not understood, that of using a resource such as a dictionary, was used by all of the students at one time or another.

Isam stated that his primary strategy is to translate and his secondary strategy is to ask his partner what he or she meant:

Isam: The first thing if is new vocabulary translate. If still didn't understand, ask him, "What you mean by this?" ...

Researcher: Which do you do the most? Do you translate the most or ask the most?

Isam: The first I translate . If I still didn't understood, ask them, or ask him or ask him. (final interview)

Josue stated that he sometimes will negotiate for meaning, but he seemed to prefer to use the Livemocha online translator:

Josue: Sometimes using translator, or sometime I ask him, I say I'm sorry, I don't understand, can you repeat or and you say it in, for example, other word.

Researcher: So you just type that in. Do they –

Josue: Yeah, because in Livemocha I think you have some translator.

Researcher: Right, there's a translator right there.

Josue: It's very good. (final interview)

The fourth strategy for resolving an incident of nonunderstanding, that of asking a third party not directly involved in the conversation, was utilized by Analena. She often did her out-of-class texting in her dormitory room, and was frequently able to get assistance from her roommates when she didn't understand her partner:

Researcher: So, when you're chatting on Livemocha and you don't understand what somebody wrote, what do you do so you can understand what they said?

Analena: Yeah, I always use my own dictionary. It's an English Spanish dictionary. Or sometime I ask my roommate.

Researcher: Well, if you're chatting with the person and you don't know what they say, you could ask your roommate later on. Is that what you mean?

Analena: No, at the moment.

Researcher: Oh, because you're chatting in your dormitory, is that what you mean?

Analena: Yeah, in the living room. (final interview)

Two categories of participants in terms of their initial strategy to resolve an incident of nonunderstanding. For the purpose of presenting and analyzing the data, two categories of students will be considered. One group consists of participants who, in general, used negotiation of meaning as an initial strategy to uncover the meaning of a word or phrase they did not understand. Their usual method of dealing with nonunderstanding was to directly consult their partner. The second group consists of participants who, in general, employed a different initial strategy as a means of dealing with not understanding the meaning of a word or phrase. This latter group (with one exception, Feliciano) sometimes used negotiation of meaning as a secondary or tertiary attempt to clarify the meaning of a word or phrase, if other strategies failed. Of course, this second group might also have simply disregarded the nonunderstanding if other strategies failed.

Participants who generally used negotiation of meaning as their first means to resolve an instance of nonunderstanding. Two students, Josefina and Trang, generally used negotiation of meaning when an instance of nonunderstanding occurred in a text chat conversation. Josefina argued that it is quicker to ask the other person than to look up the word in a dictionary:

Researcher: This is the next question: “When you’re texting someone on

Livemocha and you can’t understand what they wrote, what do you do?”

Josefina: When i’m texting with someone in livemocha if i don’t understand what they wrote i always ask what they mean

Trang : yes

Analena: that is a good start

Trang : some words that i don’t know, I use dictionary [“if there are still some words I don’t know, then I use a dictionary.” This is my presumption because, in her final interview, (excerpt below) she states that she always asks first]

Mario: i have to use google traslation

Analena: but i always look on my dictionary

Josefina: it’s better to ask them

Josefina: u [you] take time to search for a word in a dictionary

Analena: maybe u are right (group chat)

Josefina expressed her adamant determination to negotiate meaning, even if her partner didn’t want to do so:

Josefina: Yeah, if I don’t understand what they wanna say, I just ask them, “What you mean?” or “What you try to explain me?” If the person feel like he can

explain that, I just wrote like rewrite what she wrote to me and then it like in another way.

Researcher: Um, hm.

Josefina: And I say, “OK, is this that you’re trying to tell me?” If the person say “Ah, yeah, thank you” or “Oh, no, I think it’s not yeah.” And then, many people just give up. They say, “Oh, I can’t explain you”, and they say, “No, no, no, never mind.”

Researcher: I see.

Josefina: But I always like insist because is I think is important like even though, is like you try you try, but you can’t do it. I think we should we should try again, if the other person can’t understand what you wanna say. (final interview)

To the researcher, this demonstrated her personal characteristic of determination as well as a strong desire to understand the real content of a conversation.

In this next passage, Josefina described what could be referred to as a collaborative process when she stated that she and her partner “help each other”:

Josefina: Yeah, with one girl, I don’t know Iraq, she was actually her spell was very bad. And then I help her in the spelling and sometime she trying to say, like, when she wrote, it doesn’t make sense what she try to explain me or what she trying to tell me. So maybe I just, the only thing I say, like the same word but in different way. If to make her feel like, OK, is that what you trying to tell me? And then if she say, ah, yes, or no, then I say can you ‘splain [explain] me more please? You know, in this case, yeah, the like I think we,

we uh help each other. (final interview – also quoted in “Ownership of English” section)

Trang stated that first she asks if she doesn’t understand what the other person is writing:

Trang: First I ask them, what do you mean, or something. But I can guess it but I’m not sure I can ask them. (final interview)

In an email, Trang clarified this strategy, arguing that even if a person knows the meaning of every word in a phrase, he or she may still not understand the meaning if it’s an idiom, and therefore it is better to ask the partner:

Trang: When I am texting someone in Livemocha and i don't understand what they wrote, I asked back them...sometimes, I know all words' mean in sentence or question but I also don't understand clearly what they want to say and I need to ask back them. (email)

Participants who generally used other strategies than negotiation of meaning as their first means to resolve an instance of nonunderstanding. Mario first mentioned using translation before negotiating for meaning, but he did, like Trang, argue that negotiating for meaning can be superior to translation when it comes to deciphering idioms:

Researcher: ...when you’re chatting in Livemocha and you don’t understand what somebody wrote, then what do you do? How do you try to understand what they said?

Mario: Try to translate it for my first language, or I use asking them, “Hey, what does that mean?” That’s it....

Researcher: And, if you ask them, if you try to ask them, what kind of experience is that? Like, how do you ask them?

Mario: I asking, “Hey, I don’t got it. Can you put in another way, using another word. What does that mean?

Researcher: So, does that usually work?

Mario: Yeah.

Researcher: OK, good. And, could you give me some example or some experience of somebody asking you. Somebody said something you couldn’t understand and how you said to them, “What do you mean? Can you think of some example?...

Mario: I don’t know, I can’t remember now. Oh! “How to figure out.” That is like, how to use that or how to, I don’t know, I never was seen that word before....

Researcher: And that’s a little difficult to translate with Livemocha, right?

Mario: Yeah, or another dictionaries or something. (final interview)

By saying this, Mario was indicating that some idioms (like “figure out”) cannot necessarily be easily understood by reference to a dictionary, but can be ascertained through negotiation of meaning.

Lian indicated that her preference was to translate, but if that failed she would ask the other person. However, she felt it was “impolite” to ask too much:

Lian: I use dictionary. This is the best way for me, because in my culture someone may think that is not politeness when you always ask the meaning of some words. And they may not want to talk with you anymore, so I like to use dictionary first. (email)

Long-term Effects of the Livemocha Experience

Four months after the final interviews, a follow-up question was asked of all the students by email. This question was asked for the purpose of ascertaining to what degree any changes they experienced through Livemocha had continued to last after a period of four months. Five of the eight participants answered the question. These participants all stated that they had experienced long-term benefits from the Livemocha experience. These benefits included increased confidence in their ability to use English, feeling more comfortable in relating to international students from other countries and enjoying the experience of having made friends from around the world. Trang reported that:

I think I dont change my thought about Livemocha. Livemocha is really good for people who need to study English. They can improve their vocabulary and how to use it. If you have lots of vocabulary you will feel more little confident in English and moreover you can wide your relationship and can know many different things from many friends around the world (four months later, follow-up email)

Feliciano wrote that:

After to use livemocha now is very easy for my to text in English I feel more confident writting in English and I feel very happy because is very good for to improve my english.

The livemocha es a good tool when you start to learn English and need to improve a new lenguaje [Spanish for “language”]

Now I feel more confident when I related whit [with] other people and to understand everything or more than I started (four months later, follow-up email)

Josefina shared the following:

Now i'm living with a girl from Vietnam and i can talk with her about everything without feeling scared that maybe she is not going to understand me. My English is getting more and more great than the first time i started using live mocha.

(follow-up email)

This concluded the data collection for the study. In the discussion chapter which follows an analysis of the data will be made in the light of the literature, especially Vygotsky's theories of *perezhivanie* and the zone of proximal development.

Table 3 (below) summarizes the major themes that emerged from the data.

Table 3***Major Themes***

RESEARCH QUESTION	FINDINGS	EXAMPLES
Main Research question: “What are the student’s affective experiences and perceptions of the use of peer-to-peer ESL text chat?”	Enjoyment of text chat experience (all participants)	“My experience has been excellent...it’s a very good idea and way to learn different cultures and practice my English” (Mario)
	Reduction of anxiety and fear due to less stress on mechanics	“the most important is understand what u are reading i have notion what u are writing” (Josefina)
	Dislike of text chat experience (ex: sexism)	“so someone use chat they just want to find girlfriend” (Lian)
Research sub-question #1: “Will participants gain more confidence, through their text chat experience, to communicate through writing in English?”	Increase in confidence for non-academic English ability (all participants)	“So I feel free to speak [chat]... I’m just here to learn and I think when you speak, speak, speak you increase your English level.” (Josue)
	Increase in confidence for academic English ability	“It can help in both, that’s the way in university...for me, I think I’m feeling more easy to write, to wrote. More confident to wrote” (Mario)
Research sub-question #2: “Do participants perceive a change in their identity as a English user through text chatting with other ESL students? If so, can Vygotsky’s theory of <i>perezhivanie</i> help analyze this development?”	Identity as an English user and ownership of English: “I own English”	“Sometime I feel like I do own English. When I’m talking with someone who, who is learning English but his level of English is like low. If I can help him to improve his English, in this case I feel like I own English” (Josefina)
	Identity as an English user and ownership of English: “I do not own English”	“I don’t know other nonnative speakers but until now is not belong to me” (Lian)
Research sub-question #3: “How do participants negotiate meaning with each other in their text chatting? Can this be explained by Vygotsky’s theory of the zone of proximal development?”	Used negotiation of meaning as first choice when nonunderstanding of meaning occurs.	“When I am texting someone in Livemocha and I don’t understand what they wrote, I asked back them...sometimes, I know all words mean in sentence or question but I also don’t understand clearly what they want to say and I need to ask back them” (Trang)
	Used translation as first choice when nonunderstanding of meaning occurs.	“The first thing if is new vocabulary translate. If still didn’t understand, ask him, “What do you mean by this?” (Isam)

Chapter 5

Discussion

Overview

The previous chapter reported how data analysis identified six major themes as emerging from this study. In this chapter, the main focus is to present the major findings of the current study, and to examine how these findings relate to the research questions in light of the literature, especially in relationship to the sociocultural theory of Lev Vygotsky (1978, 1987, 1994). Also, in this chapter there is a discussion of the implications of the study, its limitations and suggestions for further research.

Four Major Findings from the Study

From analysis of the data four major findings emerged. These findings are: 1) all students reported enjoyment of the text chat experience; 2) students reported experiencing a reduction in anxiety and fear due to less stress on mechanics; 3) all participants reported increased confidence in ability to write non-academic English; and 4) some students perceived acquiring a sense of ownership of English through the text chat experience. The following sections of this chapter answer the research questions in light of these major findings, guided by the literature in the field.

Main Research Question

The main research question is: “What are the students’ affective experiences and perceptions of the use of peer-to-peer ESL text chat?” All four of the major findings are related to the main research question. Two of those findings are addressed here as part of the main research question. These findings are: all students reported enjoyment of the text

chat experience and students experienced a reduction in anxiety and fear due to less stress on mechanics. The other two findings will be explored in the research sub-questions.

Enjoyment of the Text Chat Experience

The first major finding of the present study is that the peer-to-peer text chat experience was very enjoyable to all the participants. They were all happy to be involved in the study and to use the Livemocha program. What caused this overwhelmingly positive response to the peer-to-peer ESL text chat? Why did all the participants report such a favorable experience in using the Livemocha program? To address these questions I rely on seminal theories in the field of motivation to learn a second language.

Motivational considerations in understanding the enjoyment of the peer-to-peer text chat.

Gardner and Lambert's theory of instrumental and integrative motivational factors. In examining the motivation of the participants in the current study from the perspective of Gardner and Lambert's instrumental/integrative model, it can be seen that all of the students had a very strong instrumental motivation. They had all invested the time, money, and effort required to come to the United States and enroll in an English language program. Their goal is to matriculate in an American university and graduate with a B.A. or M.A. in various fields, for example business law (Analena) or landscape architecture (Lian). In order to matriculate, they need to get a certain score on the Test of English as a Foreign Language (TOEFL) exam. They also need to acquire good academic English skills to succeed in their classes once they enter the university. Thus, all the students have an instrumental motivation to learn English. Therefore, if participation in the Livemocha text chat program resulted in any of the students perceiving an

improvement in their academic English skills, that would account for motivation to be in the program. In fact, four out of the eight students reported gains in their level of academic English as a result of the Livemocha program. Mario said that “I think I’m feeling more easy to write, to wrote. More confident to wrote.” Josue expressed the perception that “when I was speaking with different person, I using different word, different sentence, so I think they help me a lot.” He went so far as to say that he felt the Livemocha program should be included in the curriculum at SWU-EPP. Josefina wrote that participation in the study “help me more to organize my thought [thought] in my writing.” Therefore, for four of the students, participation in the study led to an increased ability to write academic English which resulted in instrumental motivation, according to Gardner and Lambert’s theory on this point.

In terms of Gardner and Lambert’s theory of integrative motivation, only one student, Mario, expressed an intention to stay in the United States permanently. However, all the students were planning on living in the United States and studying at a university here. Therefore, they had the goal of integrating into student culture and life as an international student for a period of years. If the participants could gain better non-academic English skills, this expertise could help them achieve that goal. As it happened, all eight students declared that their non-academic English improved as a result of being in the study. Mario said that “I feel more confidence when I talk with someone in a non-academic language because I can be or use an informal words or language and express myself very well!” Trang put it this way, “I feel little more confident to write non-academic English because of using Livemocha. Because chatting in Livemocha, I... can improve my English.” A striking example of how one student perceived that the text chat

program helped her integrate into student life was Lian. Before the study, she reported that she spent almost all of her time with a Chinese roommate and Chinese friends, having little give-and-take with non-Chinese students outside of class. Four months after the study she recounted that “I think through these months using Livemocha ...now I feel more confident for use English. I get more international friends.” In summary, the data from the present study corroborates Gardner and Lambert’s integrative motivational theory. All the participants were better able to integrate into life as an international student through the text chat experience, and this almost certainly was a factor in increasing their motivation to use the Livemocha program.

The motivational theory of Mark Warschauer. However, one aspect of enjoyment that the students experienced, which cannot be well-explained by the instrumental/integrative motivational model, is that of appreciating the opportunity to get to know other countries and other cultures. This particular aspect of motivation can be analyzed through the theory of Mark Warschauer. He found three major types of motivation for students using computer-based learning: communication, empowerment, and learning (1996b). The strongest of these was communication which, for Warschauer includes communication with other NNS of English around the world. Students appreciate “learning about different people and cultures” (1996b, p. 38). This type of motivation was found in the experience of the participants in the current study. Analena shared that “i really enjoy chatting with different people all over the world. on Thursday i spoke with a guy from Egypt. it was fun we talked about his culture and about the pyramids.” Josefina said that “it was amazing know that there are countries that I’ve never heard about. for example, Serbia.” Mario stated that “My experience has been

excellent. I have know several people around the world such as Italy, Mexico, Turkey, Germany, Russia, Iran.... It's a very good idea and way to learns different cultures and practice my English! Thanks!”

Warschauer’s finding of an increased sense of empowerment was also mentioned by some students in this study, especially resulting in a reduction in feelings of isolation and increased ability to relate to other students. Lian is one striking example of this (quoted above). Josefina also experienced this, stating that “Now i'm living with a girl from Vietnam and i can talk with her about everything without feeling scared that maybe she is not going to understand me.” Josue mentioned that “one time I go to Turkey I can send he [remote partner from Turkey] an email and we can find - can help me to visit his country.”

The motivational element of learning elaborated by Warschauer has a different emphasis from the instrumental motivation upheld by Gardner and Lambert. Warschauer is dealing with computer-mediated communication in a model in which participants had some opportunity to direct their own learning. They could direct their education, to a certain point, in a manner they felt was best. That aspect of learning independently was an inherent aspect of the present study. The participants were free to choose whomever they wanted to chat with, from among millions of users around the world. They were also free to chat about whatever they wanted to; there were no assigned topics or tasks.

Shin, in the results from her 2006 study, agreed with Warschauer on the motivational power of international communication, even arguing that he didn’t emphasize this factor enough. This finding is corroborated by data from the present

study, as there was such a strong motivation expressed by all the participants based on the value of their communication with remote text partners from all over the world.

Enjoyment and *perezhivanie*. How can the enjoyment that participants in the present study experienced be illuminated through Vygotsky's theory of *perezhivanie*? The social environment in the Livemocha program is one in which participants share information about their cultures, their countries and themselves. Their partners are expected to do the same. Trang was quite angry when one of her partners from Russia shared very little about herself; this is contrary to the Livemocha protocol. "Yeah! They only ask me about my country, how is my country, what is special in my country but maybe they when I ask about same why Russia they maybe they only answer short sentence and don't want to answer."

Where does this type of give-and-take occur, where partners share so much information about themselves and their cultural backgrounds? It is not with an acquaintance, much less a stranger; this relationship is characteristic of friendship. Initially, the student's *perezhivanie* is shaped by the formality of the situation. As the student gets to know the other person better and decides to maintain the conversation, the *perezhivanie* gradually changes to a more informal character and then to that of a friendly relationship. The social environment (created through interactions with the other person) changes as well; both partners are affected by and affect the mutual environment.

This type of give-and-take relationship was very motivating and very enjoyable. At the time of her final interview Analena was asked about her experience with the seven people she had made friends with on Livemocha. She replied, "It was great. And some of them I have them now on Hotmail or Facebook. We are friends now." When asked if she

planned on staying in communication with them she said that she would. During a group chat session Trang spoke about a friend she made from Iran. “i though [thought] Iran people is shy to make friend but the girl who I made friend last week is different. she really want to study English from me and share special things in Iran.” When asked how her friend was different, she replied, “Because she open her mind and bold.” When Josue was asked how many friends he had made through Livemocha, he said, “More than ten. First we were speaking Livemocha, so next they give me their Facebook, and I give them my Facebook and sometime we are speaking in Facebook. I spend more time speaking with Facebook than Livemocha.” The theory of *perezhivanie* illuminates the fact that part of the enjoyment students felt through their participation in the Livemocha text chat program was due to the experience of friendship.

Reduction in Anxiety and Fear Due to Less Stress on Mechanics

The second major finding of the current study was that through text chat students experienced a reduction in the anxiety and fear they encountered in their regular ESL classes where mechanics were stressed. Particularly in preparing for the Test of English as a Foreign Language (TOEFL), students felt extreme pressure to have correct vocabulary, grammar, spelling and word usage, due to the nature of the test itself. This situation illustrates the paramount importance of *perezhivanie* in writing. A *perezhivanie* of trepidation and affliction can drastically slow down the composition process, stifle creativity and result in a loss of confidence in writers’ ability to write. As Ann Raimes puts it, students “...worry about accuracy; they stop after each sentence and go back and check it for inflections, word order, spelling and punctuation, breathe a sigh of relief and go on to attack the looming giant of the next sentence (Raimes, 1984 p. 260).” Lian

corroborated this, stating that “It’s because academic writing needs you should take care your grammar, your vocabulary, your word choice.” Thomas Schovel recognizes the stressfulness of ESL classes that center on perfecting grammar, comparing such classes to trauma centers at a hospital (Schovel, 2005). This stress was felt by Analena in the present study, especially in preparing for the essay-writing portion of the TOEFL exam. She said, “But is academic sometime it could be painful, especially if it’s a topic that I don’t have too much idea about it. Sometime like painful...”

In his 1997 study, one of Holbrook Mahn’s students remarked that in his efforts to write he felt imprisoned by grammar. In the present study, Mario expressed the difficulty of laboring under the expectation of producing complex vocabulary. He said, “Yeah, [academic writing is] very hard... You got, you have to use very hard words.”

Just as students in Mahn’s study felt liberated through the use of uncorrected dialogue journals, so students involved in the current study also experienced a reduction in anxiety in their writing of English through their text chatting. Analena revealed a *perezhivanie* of relief, saying, “Well, writing’s great, but it’s non-academic is even better because I can’t worry about anything and I don’t have to worry about nothing.”

There is an important implication of the reduction in anxiety experienced by the participants in their text chatting. In the grammar-translation approach to teaching language, there is such a strong emphasis on correctness of form that what the student writes or says tends to be reduced to a small “correct” amount. In the process the content can easily be lost. Text chat, on the other hand, is an approach that allows a student to make some mistakes, as long as the meaning of the discourse is clear. Text chat, by opening up an opportunity for risk-taking in writing, can allow students to express

themselves more fully and completely. As Mario stated, “I fell [feel] in that way because I don't have to use a good words or good language just have to be myself and that's all!”

Report of Increased Confidence in Ability to Write Non-academic English

The third major finding is related to research sub-question #1: “Will participants gain more confidence, through their text chat experience, to communicate through writing in English?” All eight participants reported a gain in confidence to write in non-academic English as a result of their text chat experience using the Livemocha program. The research of Satar and Ozdener (2008) would predict this, as they state that text chat can be a valuable means of assisting learners to achieve greater confidence by offering an environment in which they can practice the target language. Josefina wrote “I feel confident writing in non academic english.” Trang wrote “Livemocha is really good for people who need to study English. They can improve their vocabulary and how to use it.” Lian stated that “I feel confident to write non-academic.” Feliciano mentioned that he was able to learn new vocabulary through his Livemocha experience. “Awesome... I don't [didn't] know how write awesome. After that it's too easy. I went to type “awesome” I can...” When Isam was asked if he had any special experience with the Livemocha program, he replied “that's good, that like special learning when I mistake in spelling, spelling mistake can be fixed... tell me then good spelling do good in spelling to fix.” Analena wrote that “after the study i noticed that i increased my writing speed in English.”

A related finding is that when it came to confidence in writing *academic* English, four participants reported an increase in their confidence to do this kind of writing. Josue said that “...when I was in French in university sometimes ask us to write something or

speak about something and it was very hard. But now I feel, I think, good when I speak in English or when I write English.” Mario said that “it [Livemocha] can help in both, that’s the way in university or in friends or something...” When asked how he felt the text chat experience could help him in university work, he replied, “Just for example, for me, I think I’m feeling more easy to write, to wrote. More confident to wrote.” Yang (2006) did a study utilizing group text chat and found that students reported that this chat benefitted them in acquiring greater confidence to plan their written assignments. Josefina corroborated this finding, stating, four months after her final interview, that “Live mocha help me more to organize my though [thought] in my writing.”

Another issue determining whether or not students have a meaningful experience with writing is the question of relevance. Vygotsky wrote that, “...writing should be meaningful... an intrinsic need should be aroused... and that writing should be incorporated into a task that is necessary and relevant for life” (Vygotsky, 1978, p. 118). For an ESL student having an interesting time communicating with an overseas partner, writing is indeed “necessary and relevant” for their immediate experience of life at that moment. In the process of utilizing text chat to accomplish a relevant goal, the perception of *all* the students in this study was that they developed greater confidence in their ability to write in English. Every student in the study is quoted above as having had this change in perception.

How can we analyze this change in perception in light of the theory of *perezhivanie*? *Perezhivanie* is the unity of environmental factors and personality factors, both of which influence each other. In the case of the students who reported greater confidence to write in English, something changed in their perception of their interaction

with the environment that indicated to them an improvement in their ability to do this. However, their personal characteristics are also crucial. One example is overall self-confidence about ability to learn English. A person with no confidence about his or her ability to learn English, a person who is hopeless about that, would perceive little or no improvement in English ability even if the English language environment of that individual changed drastically for the better. Thus, the *perezhivanie* of perceived improvement in confidence to write in English will vary according to how much the interaction with the actual learning environment changes and also what the personal characteristics of that person are.

In the case of the present study, all students perceived an increased confidence to write in non-academic English. This would indicate that there was the perception of a positive change in all the participants' English-writing ability (in the environment of texting their remote partners) and also that the participants' personal characteristics, in conjunction with the environment, were such that a *perezhivanie* was created that was one of satisfaction with their perceived progress in writing non-academic English. What these personal characteristics are would be something that could be addressed by more detailed and in-depth research than this exploratory study can offer. In the case of perceiving an increase in confidence to write *academic* English four of the eight participants reported such an increase. For these four students, then, the perception of this improvement was the result of change in one or both of the relevant factors, the environmental factor of the actual writing with their remote partners and the participants' personal characteristics. The unique interaction of these factors in each individual led to the creation of a *perezhivanie* of satisfaction with his or her perceived progress in writing

academic English. Once again, the specific environmental factors involved and the personal characteristics involved are something that could be delved into in more elaborate research than this introductory study can provide.

Identity as an English User and Ownership of English

The fourth and last major finding is related to research sub-question #2: “Do participants perceive a change in their identity as an English user through text chatting with other ESL students? If so, how can Vygotsky’s theory of *perezhivanie* help explain this development?”

Concerning the issue of identity as an English user, Norton’s (1997) concept of investment can be seen very clearly in the case of Isam. He displayed a great deal of determination to successfully complete the study. The reason for this investment was situated in his individual history. He had an intense personal desire to make his mother happy.

Examining Rampton’s model of three types of language identity, the case of Josue illuminates the aptness and complexity of this construct. In terms of language *inheritance*, as a member of the Fang tribe, Josue identified with the Fang language. Also, as a citizen of Equatorial Guinea, he was born with an identity linked to the Spanish language, the national language of that country. In terms of language *expertise*, Josue spoke three languages besides English: Fang, Spanish and French. In terms of language *affiliation*, Josue identified strongly with France, having spent a considerable amount of time in that country, including attending university there for three years. In fact, Josue referred to himself as “French-African”.

The concept of ownership of English is an important one, involving ESL students' perception of themselves in relationship to the language. As detailed in the review of literature, scholars in the field of Global English (Kachru, 2009; Norton, 1997; Widdowson, 1994) argue that English does not belong solely to native speakers, but to everyone in the world who uses it. Widdowson admonishes ESL teachers not to "assume, with bland arrogance, that your way of teaching, or your way of using English, carries a general guarantee of quality" (1994, pp. 388-389).

At the beginning of the study, two students already felt that they owned English, at least under certain circumstances. Of the remaining six students, two (or 33%) came to experience a feeling of ownership of English as a result of their practice of the Livemocha text chat. These students were Josue and Josefina. Both students reported that if they perceived that their text partner was "worse" than them in English ability, they felt that they owned English. On the other hand, if they perceived that their text partner was "better" than them in English ability, they felt that they did not own English. In the case of these both of these two students, it was a change in the social environment (communication dynamic with the remote text partner) that led to a change in their *perezhivanie*. Their personal characteristics were the same in each case, but their *perezhivanie* changed according to the change in their environment.

Two other students, Trang and Feliciano felt that they owned English, but not as a result of their participation in the present study. They felt this way before the study. Trang said that she felt as if she owned English when she was speaking "exactly" right, for example speaking simple sentences while studying English in Vietnam. From the perspective of *perezhivanie*, in that particular environment Trang felt confident that her

English was “perfect” so her emotional experience was one of ownership. Feliciano, on the other hand, simply stated that he owned his English, that it was his “communication.” Feliciano was a very self-confident individual when it came to the process of text chatting. He was the only one of the participants who said he felt able to write about non-academic, academic or even professionally-related English at any time he desired. He displayed, more than did the other participants, a significant amount of self-reliance and self-confidence. Therefore, his feeling of ownership of English may have been a result of his overall confidence to use the language. All four of the participants who felt some degree of ownership over English did so when the relationship with their environment led them to feel self-confident and in control of the situation.

***Perezhivanie* and Feelings of Non-ownership of English**

Of the four students who did not say they owned English, one (Analena) had a philosophical attitude that *nobody* owned English. Analena’s perception of the English-language using environment was that English was just something used by anyone who wanted to use it, and that it didn’t belong to anyone. Although she gave every indication of understanding the definition of ownership, she rejected the concept in regards to language use. That fixed perception was a personal characteristic that created an environment in which, no matter whom she was texting, ownership of English was a non-issue. Her *perezhivanie*, created through the interaction of her individual characteristics and her environment became one of nonrecognition of the concept of ownership of English. Another participant, Mario, was a special case in that he was not able to understand the question of ownership, thinking that the researcher was asking about “his own English,” not ownership of English.

Therefore, there were two remaining students, Lian and Isam, who felt that other people owned English, and that they did not, even under any circumstances. The fact that these two participants did *not* feel ownership of English is consistent with Jenkins' (2006) study that found that it is common for nonnative English speakers to feel that English only belongs to native speakers.

Unlike Josue and Josefina, whose *perezhivanie* was one of self-confidence in relationship to the environment, Isam and Lian felt low confidence in their relationship with their text partners. Isam was enrolled in the Low-intermediate level of English at SWU-EPP while Lian was at the Advanced level. However, their *perezhivanie* was similar in that both perceived their relationship to their environment as one in which they always had an inferior position. Isam felt that his level of English was very elementary, although he was working his way up to becoming the “captain of the ship” of English. Although Lian was at the Advanced level of study at SWU-EPP, she suffered from a lack of confidence in her ability to use the English she did have, partly as a result of spending almost all of her out-of-class time with her Chinese roommate and Chinese friends. When asked if she felt she had ownership of English, she replied “I don’t know other nonnative speakers but until now it does not belong to me...” For both of these participants, then, their *perezhivanie* was one of inferiority or even intimidation and therefore they felt they were not legitimate users of the language and as a result had no real ownership over their English-speaking environment.

Research Sub-Question #3

Research sub-question #3 is: “How do participants negotiate meaning with each other in their text chatting? Can this be explained through Vygotsky’s theory of the zone of proximal development?”

Text chat is similar to face-to-face conversation in that it is still synchronous, if not verbal. Thus, it is a form of communication that lends itself to negotiation of meaning, more than an asynchronous medium like email. Negotiation of meaning has been well documented in many text chat studies (Dekhinet, 2008; Smith, 2003; Toyoda & Harrison, 2002). However, in the present study the question of how participants negotiated meaning was unable to be answered due to the mandate of the IRB that no transcripts of the text conversations be made. However, seven of the eight participants (Feliciano being the exception) did report using negotiation of meaning and it is instructive to analyze this concept using Vygotsky’s theory of the zone of proximal learning (development).

The Zone of Proximal Learning

In the present study, the term “zone of proximal learning” (ZPL) is a more accurate term than “zone of proximal development” (ZPD). In the case of this study, child development is not the focus, but it is rather the learning process taking place in young adults through peer-to-peer ESL text chat. As Seth Chaiklin points out, if the ZPD refers to the process of learning, “why not name it the ‘zone of proximal learning’?” (Chaiklin, 2003, p. 42). The literature cited here all refers to the ZPD. However, the focus here is a certain *expression* of the ZPD which as outlined above is more appropriately

termed, for the purposes of this study, the zone of proximal learning (ZPL). Therefore, the term ZPL will be used in the discussion component of the rest of this chapter.

From a Vygotskian perspective negotiation of meaning can take place in an effective fashion only because the two partners are having discourse in their joint ZPL. In the present study, learning in the ZPL took place in the relationship between *peers*. The participants in the study and their text chat partners were both ESL students, came from countries outside the United States and were mostly in the same age range (in their twenties). Another similarity was in their level of English expertise. Both partners were learning English and still made many errors but were willing and able to communicate with each other utilizing the English they had. Thus, when successfully communicating with each other, their *perezhivanie* was one in which they both felt comfortable in their ability to relate to each other in English.

In the process of text chat in the Livemocha program, participants were learning from each other, making meaning with each other through the medium of English as a second language. They were able to learn from and with each other in a give-and-take relationship. This give-and-take is a kind of collaboration, where the partners are both working together to create a relationship. John-Steiner speaks of this relationship as follows:

The collaboration context provides a mutual zone of proximal development where participants can increase their repertory of cognitive and emotional expression (2000, p. 187).

This type of collaboration was seen in the present study in the friendly interchange between two ESL students from different cultures and/or countries. In their

efforts to communicate with each other, they were creating a ZPL by each partner for the other.

As Mahn and John-Steiner put it:

... the ZPD [is]...a complex whole, a system of systems in which the interrelated and interdependent elements include the participants, artifacts and environment/context and the participants' experience of their interactions within it. (2002, p. 49).

In the case of text chat, the partners are the participants, the text chat environment is the context and the partners' chat experience is the experience of their interactions within it. Mahn and John-Steiner continue:

In addition, we suggest that the complementarity that exists between these elements plays a central role in the construction of the ZPD. When a breach in this complementarity occurs because the cognitive demands are too far beyond the learner's ability or because negative affective factors such as fear or anxiety are present, the zone in which effective teaching/learning occurs is diminished. (2002, p. 49).

The influence of a negative factor could be seen in the present study in the problem of sexism. When female participants experienced unwanted sexual advances the zone of effective learning was certainly diminished, and in many cases resulted in termination of the conversation.

Finally, as was elaborated in the section on perception of an increased confidence to write in English, all the participants in the present study reported such an increase. There was a universal perception that learning took place through the text chat

relationship. Learning that couldn't have taken place by the individual acting alone was enriched and energized through the joint efforts of the participants to learn from each other and assist each other to learn within their ZPL. An example of this is Josefina's reporting that, in her relationship with a woman from Iraq, they helped each other to find the meaning of what the woman was trying to say. The ZPL is a powerful paradigm that enables those who participate in it to realize learning they could never accomplish alone.

Other Perceptions

Sexism. All four women in this study reported a problem with sexism at one point or another during their experience with Livemocha. Josefina reported that "The bad experiences that i had, most of the men wanted to talk about personal stuff. things that make me uncomfortable." Lian wrote "last week i met a guy, but i didnt think he was friendly... someone use chat just want to find girlfriends." Trang was especially distressed by this, saying "But they [some text partners] only want ask the 'Oh, I want to see your picture on Facebook' or 'I want you to be my girlfriend.' Oh, my God!" Analena as well, mentioned that "someone asked me to be his girlfriend." In all these cases, we can see that the students' *perezhivanie* was affected by these sexual advances. When the unwanted comments were made, the environment of the text chat changed abruptly due to a change in that student's perception of the partner's intentions. A change in perception changes the environment for the individual. The personal characteristics of the student, in relation to the environment, create the student's *perezhivanie* (Vygotsky, 1994). The student's personal characteristics were such that the remarks were unwanted and distasteful. Therefore, the *perezhivanie* the student had at that time was that of being uncomfortable. It is possible that, in a given case, the student misunderstood the

intentions of the remote partner, especially since English is not her first language.

However, the reality of the environment for any individual is created by that individual's perception of the environment. It is *that* environment, along with the person's personality, that determines their *perezhivanie*.

This problem of sexism was reported in the current study but was not found in the literature on text chat. The reason sexism is not reported in other studies may be because the text chat in those studies is monitored, either deliberately or inadvertently, by either the researchers and/or by other participants. For example, the fact that the study by Zhao and Angelova (2010) involved students working in teams of five people on each side would have made it quite unlikely for one of the participants to make sexist comments. The person who puts up a message during a group chat session has his or her name automatically placed before his or her message. Therefore, other students on their team and also students on the other team would see who it was if someone posted any type of inappropriate remark. Sexism was a problem in the current study, but for better or for worse, completely free text chat like that done in the present study is more similar to real life than the chat that is done in most other studies.

Lack of visual information. One limitation of text chat that is mentioned in the literature is that it “removes or reduces paralinguistic and nonlinguistic aspects of face-to-face conversation and as the support of these factors is stripped away, the entire burden of communication is on written characters” (Zhao & Angelova, 2010, p. 19). That problem is affirmed in this study by Trang, who said, “You don't know what they feel and you don't know how they feel really, because you don't see their face.” Trang mentioned that another reason she preferred face-to-face conversation over text chat was that it provided

her with an opportunity to correct her pronunciation. “And when you talk together you can repair pronunciation... Sometimes you text everyone can understand you, but you speak someone don’t understand you.” Although Trang reported occasional feelings of frustration in not being able to see the person she was chatting with, Analena reported that “when i chat on livemocha i feel confidence because no one can see me.” However, Analena did not elaborate on this comment. The difference between participants who are favorable to the lack of visual information and those who are unfavorable to it is a question that could be investigated through further research.

Relaxed approach to grammar. A problem that is sometimes reported with text chat is that the informality commonly expressed through Internet-based communication may be perceived to be offensive to some participants. Unlike Ware’s 2005 study in which some students complained about other students not using “proper grammar”, no one in the present study reported being offended by this emphasis on understanding content over having perfectly correct mechanics. Lian stated that “...when I use Livemocha in the chat we don’t care about that [grammar, word choice, vocabulary]. Just can make other people understand me. It’s OK, just we can talk we can understand, we can continue.” Analena shared that “...i feel hundred per cent confident when i’m chatting because i don’t have to follow any rules and i can write about what ever comes out to mind.” Josue said that “When I speak [chat] with someone and I tell him, “I’m learning English” so he know my English will not be perfect. So I feel free to speak. If I make something wrong it’s okay because I’m just here to learn.” One possible reason participants in the present study had greater acceptance of informal discourse compared to those students in Ware’s study may simply be the time that has elapsed since then.

Text chat has become much more common over the six years since Ware's research was conducted, and that may explain the more relaxed approach to grammar and word usage in the present study.

Vygotsky and 21st Century Technology

In studying text chat it has been shown how Vygotsky's theories of *perezhivanie* and the zone of proximal learning apply to the relatively new technology of text chat. The fact that ideas written in the early part of the 20th century can explain phenomena in the 21st century is an illustration of the universality of his thought. At the same time, investigating text chat through the lens of Vygotsky's thought has extended sociocultural theory into a new arena, one that will continue to expand with the progress of technology.

Implications of the Study

The present study has implications for the field of English writing in general and for ESL writing in particular. It was seen how being able to participate in the activity of uncorrected writing was liberating for the participants, freeing them from the "painful" experience of traditional writing exercises. This type of unfettered writing activity has been shown (Mahn, 1997) to be effective in dialogue journals, helping students to learn to write much more effectively. The type of free writing practiced in the current study may be valuable to practice in other forms besides text chat, and curricula should be examined for ways to implement it.

This study also has implications for the ESL/EFL classroom. A text chat program like the one used in the present study has many benefits to students, including the fact that it led to a perception of greater confidence to use English. The program is free, which is a real consideration in this time of budgetary constraints. It is also available anywhere a

student has Internet access and at any time convenient to the student. This complements the fixed schedule of classes prevalent in English preparation programs and can in this way be attractive to students.

Limitations of the Study

This is an introductory study and it is small, only having eight participants. Also, the time frame was short, only four weeks. Another limitation was that there was no access to the actual transcripts of text chat between the participants and their remote text partners. Since the remote texters were chosen by the participants and, unlike the participants, had not signed consent forms to be part of the research project, the transcripts of the text chats could not be made available to the researcher. This limitation may have had advantages, however. The fact that the actual conversations were not monitored by the researcher or by other participants meant that the study was more like “real life”. Giving the students that freedom to chat as they chose may have been one motivating factor that made participation in the study more attractive. This possibility could be explored in future research.

Suggestions for Future Research

This study focused solely on the perceptions of the participants toward text chat, not on the text chat itself. In future studies, it might be valuable to expand the scope of the research by having two groups. The research for one group could have the same parameters as the current study. The other group could be set up in such a way as to enable the collection and analysis of the actual text chat between partners. One way of establishing this second group would be to recruit a large number of international participants living in the United States and simply have them text with each other. A

more difficult but possibly more meaningful approach to creating a second group would be to recruit a significant number of Livemocha users (remote texters) from several countries around the world. These participants from other countries would have the study explained to them, sign consent forms legal in their country and in the United States, and then participate in the study with ESL students studying in the United States. This method would allow for transcripts of the actual text chat between participants in the United States and their counterparts around the world to be available to the researcher, while at the same time preserving the international and intercultural character of the participants' text chat experience. Also, the participants' freedom to choose whomever they wanted to chat with would be retained. One issue that would have to be taken into consideration is whether having transcripts of their chat made available to the researcher would affect the participants' willingness to be open in what they chat about.

If the researcher wanted to avoid the problem of sexism as it was manifested in the current study, participants could be asked to contact only a partner of the same gender. Another approach to dealing with this problem would be to instruct participants on ways of coping with uncomfortable remarks or questions. On the other hand, sexism is a significant issue in itself and could be explored as such in future studies.

Another possibility for future research would be to look at the link between Livemocha and Facebook. Several participants reported that once they made good friends with someone on Livemocha they would friend each other on Facebook and continue their relationship there. There is a significant difference in the amount of information that is shared on Facebook compared to Livemocha. Being friends on Facebook can open up a

person's whole life to their friends. An interesting subject for future research would be to explore how these relationships develop or discontinue over time.

One simple but valuable addition to a future study would be to provide a list of commonly used text chat abbreviations. These could be helpful even for the researcher, who in my case didn't know, for example, that "nvm" meant "never mind" and had to look it up in an online dictionary. For ESL participants such a list would be even more helpful.

Conclusion

The main goal of this study was to come to understand the affective experiences and perceptions of international students toward the use of peer-to-peer ESL text chat. That goal was realized, especially through the findings on enjoyment of text chat and reduction in the anxiety and fear often prevalent in conventional classes.

Also, the ESL students who participated in this study perceived that the international text chat program they used was beneficial to them, and in more ways than one. First, all of the students reported that their confidence in their ability to write in English, especially non-academic English, improved as a result of their participation in the study. Half of the students also reported an increase in their confidence to write academic English. Second, some students perceived a gain in confidence to relate to other international students through the medium of English. Finally, some participants perceived that their identity as a global owner of English was enhanced as a direct result of being in the study. This self-realization can give students greater impetus to continue their efforts to learn the language.

Any program that has the potential to help students in all the above ways should be carefully considered for implementation into the curriculum at ESL language institutes. It is hoped that programs similar to the one used in this study will be utilized to help international students who enroll in language institutes become successful in their studies and in their future careers.

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Appendix A

Text of Initial Recruitment Flyer

Attention English Language Learners!

Would you like to participate in
a research study?

The study will involve text-chatting with other
ESL students around the world. You may be
able to make friends with students from
other countries and other cultures, chatting
from any place of your own convenience. You
will also receive \$100 in compensation.

To participate in this research study,
please contact me **by this evening**.

email: _____ or

text me at: _____

Thanks!

Dale Garratt

Appendix B

Example of Certificate of Completion of the Study

CERTIFICATE OF COMPLETION

THIS CERTIFICATE IS PRESENTED TO

JOSEFINA _____

**IN RECOGNITION OF YOUR VALUED PARTICIPATION IN THE
ESL TEXT-CHAT RESEARCH STUDY**

Dale A. Garratt, M.A., Principal Investigator

Date

Appendix C

Text of Reminder Flyer

Reminder Notice!

If you would like to participate in a research study.

The study will involve text-chatting with other ESL students around the world. You may be able to help increase knowledge in the field, and help other ESL students.

You will also receive \$100 in compensation.

The first meeting will be today
at 2pm in room 4 of the
computer lab at Ortega Hall.

Thanks!

Dale Garratt

Appendix D

Consent Form

South West University Consent to Participate in Research

Students' perceptions of the use of peer-to-peer ESL text chat

05/27/2011

Introduction

You are being asked to be in a research study that is being done by Dale A. Garratt, who is the Principal Investigator from the Department of Language, Literacy and Sociocultural Studies. This research is studying students' feelings about text chat.

There have been some research studies that have ESL students text chatting with a native speaker of English. This has helped the ESL students to develop their English skills. However, there have been very few studies that have ESL students text chatting with *other* ESL students. That's what this study is going to look at.

You are being asked to be in this study because you are an ESL student at SWU-EPP. A maximum of 15 people will be in this study at South West University.

This form will explain the study, and will also explain the possible risks as well as the possible benefits to you. We hope you will talk with your family and friends before you decide to take part in this study. If you have any questions, please ask me.

What will happen if I decide to be in the study?

If you agree to be in the study, the following things will happen:

- After you read the consent form, sign it and agree to be in the study, there will be a meeting. This will show you how to use the text chat program, Livemocha, that will be used in the study. This will take about one hour.
- During the first week of the study I will do an interview with you, using text-chat or just talking, whichever you are more comfortable with. **The spoken interviews will be recorded and typed up.** This interview will last about 30 minutes.

Appendix D (cont'd)

Each week, for one hour, you will text chat with one or more ESL students around the world, using a text chat program called Livemocha. You can do this wherever you want, at your home, at school or wherever. The Livemocha program has millions of users around the world, so you can always find someone to chat with. The total chat time with all your different text chat partners will be one hour per week. **At the end of each hour that you chat, you will answer a couple of questions about how you felt about the chatting.** Then you'll email me the answers to those questions.

Each week, we will all meet together for one hour at the computer lab that is used by SWU-EPP. **At the beginning of that meeting you'll write down the dates and times you chatted with someone.** During the first 30 minutes you will text chat with someone using Livemocha, the same as you do on your own. Just like you do during the week, after you chat you'll email me the answers to a couple of questions. During the second 30 minutes, we will all get together in a chat room. During this time we will talk about how you felt about the week with your text chat.

At the end of the study, I'll interview you again to find out what you thought about the study. Like the first interview, this will last about 30 minutes.

How long will I be in this study?

The study will take a total of 10 hours and last for 4 weeks.

What are the risks or side effects of being in this study?

You may feel a little shy or nervous when you text chat with a new person, especially when you first start. You may not be familiar with people from the country you are chatting with, which may make you a little uncomfortable at the beginning.

You might have stress, unhappiness, inconvenience and possible loss of privacy anytime you are in a research study.

For more information about risks and side effects, please ask me.

What are the benefits to being in this study?

You'll have a chance to text chat with ESL students from many different countries. This will give you a chance to develop your ability to write in English. You may also make friends with people from other countries and find out more about them. Besides this, the study may find out information that can help other ESL students.

Appendix D (cont'd)

What other choices do I have if I do not want to be in this study?

You do not have to be in this study. It's completely up to you.

How will my information be kept secret?

We will do our best to protect your privacy, but we cannot guarantee this.

Information that is in your study records will be used only by me, since there is no sponsor of this study. The South West University Institutional Review Board (IRB) that protects people who are in studies like this and/or other organizations may be allowed to look at your records. There may be times when we are required by law to share your information. However, your name will not be used in any reports that are printed up about this study. A copy of this consent form will be kept in your record.

All copies of your interviews and your emails will be kept on my laptop, with a password. Any written records, like this consent form, will be kept in a locked drawer.

What are the costs of taking part in this study?

There are no costs to you.

Will I be paid for taking part in this study?

We know you are very busy, and we want to pay you for your time. The study takes 10 hours, and you will be paid \$10 for each hour. Therefore, if you do everything in the study, the total amount you get will be \$100. You will be paid at the end of every group meeting (once a week), when we all get together in the computer lab.

How will I know if you learn something new that may change my mind about being in the study?

We will let you know if there is any new information during the course of the study, such as changes in the risks or benefits of being in the study or new choices about being in the study that might change your mind about being in the study.

Can I stop being in the study once I begin?

Appendix D (cont'd)

Being in this study is completely up to you. You have the right to choose not to be in it or to quit at any time you want.

If anyone hurts another person in the study, they will have to leave the study.

Who can I call with questions or complaints about this study?

If you have any questions, worries or complaints at any time about the research study, I (Dale A. Garratt) will be happy to answer them. My cell phone is _____.

You can also call me at my home number in the evenings; it's _____.

If you would like to speak with someone besides me, you may call the SWU Main Campus IRB at _____.

Who can I call with questions about my rights as a person in the study?

If you have questions regarding your rights as a person in the study, you can call the SWU Main Campus IRB at _____. The IRB is a group of people from SWU and the community who are not in the study at all and protect the safety and rights of people in studies like this one. For more information, you can also go to the IRB website at _____.

Appendix D (Cont'd)

CONSENT

You are making a decision whether or not to be in this study. Your signature below says that you read the information on this form (or the information was read to you). By signing this consent form, you are not giving up any of your legal rights as a person in the study.

I have had an opportunity to ask questions and all questions have been answered to my satisfaction. By signing this consent form, I agree to be in this study. A copy of this consent form will be given to you.

Name of Adult Subject (print)	Signature of Adult Subject	Date
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INVESTIGATOR SIGNATURE

I have explained the research to the subject and answered all of his/her questions. I believe that he/she understands the information described in this consent form and freely consents to participate.

Dale A. Garratt
Name of Investigator

(Signature of Investigator)	Date
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Appendix E

Explanation Sheet, How to Use Livemocha

How to register for and use Livemocha

- 1) Go to: <https://www.livemocha.com/>
- 2) Choose your home language.
- 3) Choose English as the language you want to learn.
- 4) Type in your email.
- 5) Type in your password twice.

New screen

- 6) Answer the three questions. The third question should be answered "conversation".

New screen

- 7) Under "Get Started on Livemocha" click on "Chat".

New screen

- 8) Click on "chat now" with one of the people you'd like to chat with.

New screen, with a new window at the bottom of the taskbar.

- 1) The screen will say: "Waiting for _____ to connect".
- 2) You'll get a message, "You must send a message to connect". Click on OK.
- 3) Click in the text box (narrow one) and say "hi" or anything you want to. Hit "enter".
- 4) If they don't connect after a minute or two, then close the box, go back and select someone else.

When they connect, then start chatting! (Hit "return" after each text you want to send).

WHEN YOU GET HOME, PUT A PHOTO ON YOUR PROFILE. Maybe no one will select you if you have no photo!

Appendix F

Initial Interview Questions

- 1) Hello, _____. What city in your country are you from?
- 2) What is your home or native language?
- 3) What is your age?
- 4) How long have you been here in the U.S.?
- 5) What academic level have you completed?
- 6) What level of English are you in at SWU-EPP?
- 7) Why are you studying English at SWU-EPP?
- 8) If you are studying in order to enter an American college or university, will you be entering undergraduate school or graduate school? What will be your field of study?
- 9) What is your career goal?
- 10) Outside of a classroom situation, how have you studied English before (Internet, movies, TV shows, songs, friends, hiring a tutor, other)?
- 11) Have you done text-chat before in your home language? (Text-chat means chatting online with someone you may know or may not know.) If so, how much? And if so, why?
- 12) Have you done text-chat before in English? If so, how much? And if so, why?
- 13) On a scale of 1 – 10, with 1 being the lowest and 10 being the highest, how would you rate your confidence to read in English?
- 14) On a scale of 1 – 10, with 1 being the lowest and 10 being the highest, how would you rate your confidence to write in English?
- 15) On a scale of 1 – 10, how do you feel about writing in English? 1 means you feel it is very difficult and painful. 10 means it is easy and enjoyable. What makes you feel this way?
- 16) On a scale of 1 – 10, how do you feel treated by the community as an English user? Rejected/foreigner/outsider (1), Accepted/part of the society, insider (10). What makes you feel this way?
- 17) On a scale of 1 – 10, how comfortable do you feel about being in the U.S.? 1 is the most uncomfortable and 10 is the most comfortable. Please explain any details about why you feel this way.
- 18) How well are you able to type in English? (scale of 1 – 10)

Appendix G

Questions for Emailed Answers

First week: “What was your experience using Livemocha?”

Second week: “Do you feel any different as an English user after texting with someone from another country?”

Third week –

Question #1: “When you’re texting someone on Livemocha and you can’t understand what they wrote, what do you do?”

Question #2: “Do you feel more confident or less confident to write non-academic (outside of school) English because of using Livemocha? Why?”

Fourth week –

Question #1: “When you chat on Livemocha you communicate with other non-native speakers around the world. Do you feel that English ‘belongs’ to you? Do you ‘own’ English or just ‘borrow’ it from native speakers? Why?”

Question #2: What were some good experiences with Livemocha this past month?

Question #3: What were some bad experiences with Livemocha this past month?

Appendix H

Questions for Group Chat Sessions

First week: “What was your experience using Livemocha?”

Second week:

Question #1: “Hi, please write some good experiences with Livemocha.”

Question #2: “What bad experiences have you had with Livemocha?”

Questions #3: “Do you feel any different as an English user after chatting with someone on Livemocha?”

Third week –

Question #1: “What’s the most interesting country you’ve learned about using Livemocha? Did you learn anything new about it?”

Question #2: “When you’re texting someone on Livemocha and you can’t understand what they wrote, what do you do?”

Question #3: “Do you feel more confident or less confident to write non-academic (outside of school) English because of using Livemocha? Why?”

Fourth week –

Question #1: “When you chat on Livemocha you communicate with other non-native speakers around the world. Do you feel that English ‘belongs’ to you? Do you ‘own’ English or just ‘borrow’ it from native speakers? Why?”

Question #2: “What were some good and some bad experiences with Livemocha this past month?”

Appendix I

Final Interview Questions

- 1) How was your experience with Livemocha?
- 2) Please tell me about a special experience (good or bad) with Livemocha.
- 3) Do you feel that Livemocha has helped you to be more confident in writing English? Please tell me about for school (academic) and for fun (non-academic, like Facebook, texting friends, email, etc.)
- 4) How do you feel about writing in English? Please tell me for both school (academic) and for fun (non-academic).
- 5) If your feeling about writing has changed over the last four weeks, do you think Livemocha made a difference?
- 6) When you chat in Livemocha in English, do you feel that you “own” English? Does English belong to anyone in the world who uses it? Or just to native speakers?
- 7) How do you feel treated by the non-SWU community as an international student?
- 8) How comfortable do you feel living in the U.S.?
- 9) When you are chatting with someone and you don’t understand what they wrote, what do you do?
- 10) What kinds of people did you choose to chat with? (same or different age, same or different gender, from a particular country or culture?)
- 11) Did you make any friends with Livemocha? [The official “friends” category, somewhat like Facebook]? How many friends did you make? How was that experience for you?
- 12) Do you think you will use Livemocha in the future?
- 13) How is regular text-chatting (on the phone with your friends, for example) different from the chatting on Livemocha?

Appendix J

List of Codes for Data Analysis and Frequency of Occurrence

KEY (for more than 10 occurrences of a code):

1st # after total: from email messages

2nd # after total: from chat sessions

3rd # after total: from final interviews

- a) ENG Learning English (26: 7 – 11 – 8)
- b) CUL Learning about different cultures (72: 17 – 32 – 23)
- c) HTS Hard to start the chat process at first (4: all in the first email responses)
- d) FRND Friendship (49: 8 – 11 – 30)
- e) AD Abbreviations were difficult (5)
- f) PBE Confidence increased in writing profession-based English (1)
- g) TR Translated when didn't understand the text (20: 7 – 5 – 8)
- h) ASK Asked the chat partner when didn't understand the text (23: 6 – 7 – 10)
- i) AR Asked roommate when didn't understand the text (1)
- j) NAE Confidence increased in writing non-academic English (24: 6 – 6 – 12)
- k) SXISM Sexism (7)
- l) OCLM [People from] other countries [are] like me (1)
- m) GS Guessed or skipped the word when didn't understand the text (4)
- n) RUD Partner was rude (10: 2 – 3 – 5)
- o) NNSE Non-native speakers easier [to understand] (4)
- p) COM [In chat] content [should be emphasized] over mechanics (11: 1 – 8 – 2)
- q) CDWOC Can deal with [people from] other countries (1)
- r) LBJ Light banter/joking [during group chat sessions] [11: 0 – 11 – 0)
- s) RTLM Remote texters are like me (2)
- t) AE Confidence increased in writing academic English (9)
- u) AT Able to talk [with someone from another country] (1)
- v) AP Apprehension (3)
- w) DCDE Different countries use different [forms of] English (4)
- x) ENM Examples of negotiation of meaning during group chat (4)
- y) MOC [In chat] mechanics [should be emphasized] over content (4)
- z) DOE Doesn't own English (13: 2 – 7 – 4)
- aa) OE Owns English (7)
- bb) NOOE No one owns English (2)
- cc) CSE Confidence increased in speaking English (3)

References

- Abrams, Z. (2003). The effect of synchronous and asynchronous CMC on oral performance in German. *The Modern Language Journal*, 87(2), 157-167.
- Barson, J., Frommer, J., & Schwartz, M. (1993). Foreign language learning using e-mail in a task-oriented perspective: Interuniversity experiments in communication and collaboration. *Journal of Science Education and Technology*, 2(4), 565-584.
- Bednar, A. K., Cunningham, D., Duffy, T. M., & Perry, J. D. (1992). Theory into practice: How do we link? In T. M. Duffy & D. H. Jonassen (Eds.), *Constructivism and the technology of instruction: A conversation* (pp. 17-34). Hillsdale, NJ: Lawrence Erlbaum.
- Blake, R. (2000). Computer mediated communication: A window on L2 Spanish interlanguage. *Language Learning & Technology*, 4(1), 120-136.
- Bordonaro, K. (2003). Perceptions of technology and manifestations of language learner autonomy. *CALL-EJ Online*, 5(1). Retrieved from <http://www.tell.is.ritsumei.ac.jp/callejonline/journal/5-1/bordonaro.html>
- Brown, J. S., Collins, A., & Duguid, P. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18, 32-42.
- Chaiklin, S. (2003). The zone of proximal development in Vygotsky's analysis of learning and instruction. In A. Kozulin, B. Gindis, V. S. Ageyev & S. M. Miller (Eds.), *Vygotsky's Educational Theory in Cultural Context* (pp. 39-64). Cambridge, UK: Cambridge University Press.
- Chung, Y.-G., Graves, B., Wesche, M., & Barfurth, M. (2005). Computer-Mediated Communication in Korean-English Chat Rooms: Tandem Learning in an

- International Languages Program. [Article]. *Canadian Modern Language Review*, 62(1), 49-86.
- Cobb, T. (1999). Applying constructivism: A test for the learner-as-scientist. *Educational Technology Research and Development*, 47(3), 15-31.
- Cummins, J. (2000). *Language, power and pedagogy: bilingual children in the crossfire*. Clevedon, England: Multilingual Matters Limited.
- Cunningham, D. (1992). Assessing constructions and constructing assessments: A dialogue. In T. M. Duffy & D. H. Johassen (Eds.), *Constructivism and the Technology of Instruction* (pp. 35-44). Hillsdale, NJ: Lawrence Erlbaum.
- Dekhinet, R. (2008). Online enhanced corrective feedback for ESL learners in higher education. *Computer Assisted Language Learning*, 21(2), 409-425.
- Emihovich, C., & Lima, E. S. (1995). Introduction: The Many Facets of Vygotsky: A Cultural Historical Voice from the Future. *Anthropology & Education Quarterly*, 26(4), 375-383.
- English Central (2011). Accessed on June 27, 2011 at <http://englishcentral.com>
- Foster, P., & Ohta, A. S. (2005). Negotiation for meaning and peer assistance in second language classrooms. *Applied Linguistics*, 26(3), 401-430.
- Gardner, R. C. (1991). Attitudes and motivation in second language learning. In A. G. Reynolds (Ed.), *Bilingualism, Multiculturalism, and Second Language Learning. The McGill Conference in Honour of Wallace E. Lambert*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gardner, R. C., & Lambert, W. E. (1959). Motivational variables in second-language acquisition. *Canadian Journal of Psychology*, 13(4), 266-272.

- Gibbons, P. (2009). *English Learners, Academic Literacy and Thinking: Learning in the Challenge Zone*. Portsmouth, NH: Heinemann.
- Godwin-Jones, R. (2003). Emerging technologies. *Language Learning & Technology*, 7(2), 12-16.
- Hernandez, T. A. (2008). Integrative motivation as predictor of achievement in the foreign Language classroom. *Applied Language Learning*, 18(1 & 2), 1-15.
- Higgins, C. (2003). Ownership of English in the outer circle: An alternative to the NS-NNS dichotomy. *TESOL Quarterly*, 37(4), 615-644.
- Jenkins, J. (2006). Current perspectives on teaching world Englishes and English as a lingua franca. *TESOL Quarterly*, 40(1), 157-181.
- Jepson, K. (2005). Conversations -- and negotiated interaction -- in text and voice chat rooms. *Language Learning & Technology*, 9(3), 79-98. Retrieved from <http://llt.msu.edu/vol9num3/jepson/>
- John-Steiner, V. (2000). *Creative Collaboration*. New York, NY: Oxford University Press.
- John-Steiner, V., & Mahn, H. (1996). Sociocultural approaches to learning and development: A Vygotskian framework. *Educational Psychologist*, 31(3/4), 191-206.
- Jonassen, D. H. (2004). *Learning to solve problems: An instructional design guide*. San Francisco: Pfeiffer.
- Kachru, B. B., Kachru, Y. & Nelson, C. L. (Ed.). (2009). *The Handbook of World Englishes*. Malden, MA: Wiley-Blackwell.

- Kasi, F. (2010). Collaborative action research: An alternative model for EFL teacher professional development in Pakistan. *Asian EFL Journal*, 12(3), 98-117.
- Kern, R. (2006). Perspectives on Technology in Learning and Teaching Languages. *TESOL Quarterly*, 40(1), 183-210.
- Kern, R., Ware, P., & Warschauer, M. (2004). Crossing Frontiers: New Directions in Online Pedagogy and Research. *Annual Review of Applied Linguistics*, 24, 243-260. doi: 10.1017/s0267190504000091
- Kumaravadivelu, B. (2001). Toward a postmethod pedagogy. *TESOL Quarterly*, 35(4), 537-560.
- Kvale, S. & Brinkmann, S. (2009). *Interviews: Learning the Craft of Qualitative Research Interviewing*. Thousand Oaks, CA: Sage.
- Lai, C., & Zhao, Y. (2006). Noticing and text-based chat. *Language Learning & Technology*, 10(3), 102-120. Retrieved from <http://llt.msu.edu/vol10num3/laizhao/>
- Lambert, W. E. (1963). Psychological approaches to the study of language part II: On second language learning and bilingualism *Modern Language Journal*, 14, 51-62.
- Liang, M.-Y. (2010). Using synchronous online peer response groups in EFL writing: Revision-related discourse. *Language Learning & Technology*, 14(1), 45-64.
- Liu, M. (2007). Chinese students' motivation to learn English at the tertiary level. *Asian EFL Journal*, 9(1), 126-146.
- Livemocha (2011). Accessed on July 1, 2011 at: <http://www.livemocha.com>

- Mahn, H. (1997). Dialogue journals: Perspectives of second language learners in a Vygotskian theoretical framework (Unpublished doctoral dissertation). University of New Mexico, Albuquerque, NM.
- Mahn, H. (1999). Vygotsky's methodological contribution to sociocultural theory. *Remedial and Special Education*, 20(6), 341-350.
- Mahn, H. (2003). Periods in child development: Vygotsky's perspective. In A. Kozulin, B. Gindis, V. S. Ageyev & S. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 119-138). Cambridge, UK: Cambridge University Press.
- Mahn, H. (2009). *Vygotsky's analysis of the unit "system of meaning"*. Paper presented at the American Educational Research Association (AERA), San Diego, CA.
- Mahn (2010). Vygotsky's methodological approach: Blueprint for the future of psychology. In A. Toomela & J. Valsiner (Eds.), *Methodological thinking in psychology: 60 years gone astray?* (pp. 297-323). Charlotte, NC: Information Age Publishing.
- Mahn, H., & John-Steiner, V. (2002). The gift of confidence: A Vygotskian view of emotions. In G. Wells & G. Claxton (Eds.), *Learning for life in the 21st century: sociocultural perspectives on the future of education* (pp. 46-49). Malden, MA: Blackwell Publishers.
- Matsuura, H., Chiba, R. & Hilderbrandt, P. (2001). Beliefs about Learning and Teaching Communicative English in Japan. *JALT Journal*, 23(1), 69-89.
- McGuire, T., Kiesler, S., & Siegel, J. (1987). Group and computer-mediated discussion effects in risk decision-making. *Journal of Personality and Social Psychology*, 52, 917-930.

- Miles, M. B. & Huberman, A. M. (1994). *Qualitative Data Analysis*. Thousand Oaks, CA: Sage.
- Norton, B. (1997). Language, identity, and the ownership of English. *TESOL Quarterly*, 31(3), 409-429.
- Norton, B. (2010). Language and identity. In N. H. Hornberger and S. C. McKay (Eds.), *Sociolinguistics and Language Identity* (pp. 349-369). Tonawanda, NY: Multilingual Matters.
- Pea, R. D. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. *The Journal of the Learning Sciences*, 13(3), 423-451.
- Peterson, M. (2006). Learner interaction management in an avatar and chat-based virtual world. *Computer Assisted Language Learning*, 19(1), 79-103.
- Raimes, A. (1984). Anguish as a second language? Remedies for composition teachers. In S. Mackay (Ed.), *Composing in a Second Language* (pp. 81-97). Rowley, MA: Newbury House.
- Rampton, B. (1990). Displacing the 'native speaker': Expertise, affiliation and inheritance. *ELT Journal* 44, 97-101.
- Rosetta Stone (2011). Accessed August 14, 2011 at: <http://www.rosettastone.com>
- Ruschoff, B., & Ritter, M. (2001). Technology-enhanced language learning: Construction of knowledge and template-based learning in the foreign language classroom. *Computer Assisted Language Learning*, 14(3/4), 219-232.

- Satar, H. M. & Ozdener, N. (2008). The effects of synchronous CMC on speaking proficiency and anxiety: Text versus voice chat. *The Modern Language Journal*, 92(4), 595-613.
- Sauro, S., & Smith, B. (2010). Investigating L2 performance in text chat. *Applied Linguistics*, 31(4), 554-577.
- Sawir, E. (2005). Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal*, 6(5), 567-580.
- Sayadian, S., & Lashkarian, A. (2010). Investigating attitude and motivation of Iranian university learners toward English as a foreign language. *Contemporary Issues In Education Research*, 3(1), 137-148.
- Scovel, T. (2005). Trauma, triage and treatment in the ESL grammar class. *International Journal of Applied Linguistics*, 15(3), 379-383.
- Shang, H.-F. (2007). An exploratory study of email application on FL writing performance. *Computer Assisted Language Learning*, 20(1), 79-96.
- Shin, D.-S. (2006). ESL students' computer-mediated communication practices: Context configuration. *Language Learning & Technology*, 10(3), 65-84.
- Shuell, T. J., & Farber, S. L. (2001). Students' perceptions of technology use in college courses. *J. Educational Computing Research*, 24(2), 119-138. Retrieved from <http://baywood.metapress.com/media/ege9fjyux11wwe2jqjft/contributions/y/w/p/n/ywpmh3dp15lqqnk8.pdf>
- Smith, B. (2003). Computer-mediated negotiated interaction: An expanded model. *Modern Language Journal*, 87(1), 38-57.

- Sotillo, S. M. (2000). Discourse functions and syntactic complexity in synchronous and asynchronous communication. *Language Learning & Technology*, 4(1), 82-119.
Retrieved from <http://llt.msu.edu/vol4num1/sotillo/default.html>
- Sotillo, S. M. (2006). Using Instant Messaging for Collaborative Learning: A Case Study.
Retrieved from
http://innovateonline.info/pdf/vol2_issue3/Using_Instant_Messaging_for_Collaborative_Learning-_A_Case_Study.pdf
- Stepp-Greany, J. (2002). Student perceptions on language learning in a technological environment: implications for the new millennium. *Language Learning & Technology*, 6(1), 165-180.
- Suh, K.-W., Couchman, P. K., & Park, J.-W. (2003). *A web-mediated communication (WMC) model based on activity theory*. Paper presented at the Conference on Transformational Tools for 21st Century Minds, Queensland, Australia.
- Swain, M. (2000). The output hypothesis and beyond: Mediating acquisition through collaborative dialog. In J. P. Lantolf (Ed.), *Sociocultural theory and second language learning* (pp. 97-114). Oxford: Oxford University Press.
- Taylor, R. P. (1980). *The computer in the school: Tutor, tool, tutee*. New York, NY: Teachers College Press.
- Toyoda, E., & Harrison, R. (2002). Categorization of text chat communication between learners and native speakers of Japanese. *Language Learning & Technology*, 6(1), 82-99.

- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. In M. Cole, V. John-Steiner, S. Scribner & E. Souberman (Eds.). Cambridge, MA: Harvard University Press.
- Vygotsky, L. S. (1987). *Problems of General Psychology. The Collected Works of L. S. Vygotsky: Vol. 1. Including the volume Thinking and Speech*. New York, NY: Plenum Press.
- Vygotsky, L. S. (1994). The problem of the environment. In R. Van der Veer & K. Valsiner (Eds.), *The Vygotsky Reader* (pp. 338-354). Cambridge, MA: Blackwell.
- Also available at:
<http://www.marxists.org/archive/vygotsky/works/1934/environment.htm>.
- Ware, P. (2005). "Missed" communication in online communication: Tensions in a German-American telecollaboration. *Language Learning & Technology*, 9(2), 64-89. Retrieved from <http://llt.msu.edu/vol9num2/ware/>
- Warschauer, M. (1996a). Comparing face-to-face and electronic discussion in the second language classroom. *CALICO Journal*, 13(2), 7-26.
- Warschauer, M. (1996b). Motivational aspects of using computers for writing and communication. In M. Warschauer (Ed.), *Telecollaboration in foreign language learning: Proceedings of the Hawai'i symposium (Technical Report # 12; pp. 29-46)*. Honolulu: University of Hawai'i, Second Language Teaching & Curriculum Center.
- Warschauer, M. (1997). Computer-Mediated Collaborative Learning: Theory and Practice. *The Modern Language Journal*, 81(4), 470-481.

- Warschauer, M. (2000). The death of cyberspace and the rebirth of CALL. *English Teachers' Journal*. Retrieved from http://www.gse.uci.edu/person/warschauer_m/cyberspace.html
- Wertsch, J. V. (1991). *Voices of the Mind*. Cambridge, MA: Harvard University Press.
- Widdowson, H. G. (1994). The ownership of English. *TESOL Quarterly*, 28, 377-389.
- Wong Fillmore, L. (1991). Second language learning in children: a model of language learning in social context. In E. Bialystok (Ed.), *Language processing in bilingual children* (pp. 49-73). Cambridge, UK: Cambridge University Press.
- Yang, M.-L. (2006, October). Responding to Synchronous CMC: Taiwanese Students' Perception of Its Use Before Subsequent Oral and Written Tasks. Paper presented at the meeting of the International Conference on Applied Linguistics in Foreign Language Education, Tainan, Taiwan.
- Zeng, G., & Takatsuka, S. (2009). Text-based peer-peer collaborative dialogue in a computer-mediated learning environment in the EFL context. *System*, 37(3), 434-446. doi: 10.1016/j.system.2009.01.003
- Zhao, Y., & Angelova, M. (2010). Negotiation of meaning between non-native speakers in text-based chat and videoconferencing. *U.S.-China Education Review*, 7(5), 12-26.
- Zheng, D., Young, M. F., Brewer, R. A., & Wagner, M. (2009). Attitude and self-efficacy change: English language learning in virtual worlds. *CALICO Journal*, 27(1), 205-231. Retrieved from http://www2.hawaii.edu/~zhengd/publications/Zheng_etal2009.pdf