PROMOTING SOCIAL PRESENCE: BUILDING CONNECTEDNESS IN EDUCATIONAL CYBERSPACE

by

KRISTY YAN LIANG

A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

in

THE FACULTY OF GRADUATE STUDIES

(Language and Literacy Education)

THE UNIVERSITY OF BRITISH COLUMBIA

April 2006

© KRISTY YAN LIANG, 2006
Abstract

The purpose of this study was an attempt to increase our understanding of how using language/culture/identity narratives online affects both native and non-native English-speaking students' development of social presence. I used Garrison and Anderson's (2003) definition of social presence as participants' ability in a community of inquiry to project themselves socially and emotionally, as a 'real' person (i.e., their full personality), through the medium of communication being used.

This study examines an intensive graduate course offered in mixed-mode (face-to-face and online) at a Canadian university in the summer of 2004 with 12 graduate students and their instructor. This study analyzed the online collaborative activity in the course that involved sharing and discussing group members' autobiographies about learning a second language (L2) and focusing on their language/culture/identity development experiences. From the beginning of the course, each student wrote and shared their autobiography on the WebCT Bulletin Board (BB). This study mainly employed grounded theory and applied quantitative content analysis (QCA) as a supplementary method. Multiple sources of data consisted of online BB transcripts, interviews, participants' assignments and field notes. And which were used to examine students' engagement in online learning community.

In this study, a theoretical model called Cyber-Narrative Mediated Connecting involving the use of mixed-mode and language/culture/identity narrative was constructed. The theoretical model consisted of four major core categories: Valuable Connecting, Constructed Connecting, Experiential Connecting and Medium Connecting. This study showed that sharing language/culture/identity narrative was not only
an icebreaker, but also facilitated student interaction, promoted their social presence and participation, particularly for L2 students. This research also showed that social presence is substantial in facilitating the creation of an online learning community. The student participants used various strategies to develop connectedness with other community members, especially the participants who preferred a high level of connectedness, consistent with the view that social presence is one of the important antecedent conditions for constructive learning. The theoretical model adds to existing social presence theory. Moreover, the use of multiple research procedures helps shed light upon the benefits of the online discussions.
TABLE OF CONTENTS

Abstract .......................................................................................................................... ii
List of Figures ................................................................................................................ vii
List of Tables ................................................................................................................ vii
Acknowledgements ...................................................................................................... viii

Chapter One: Introduction ............................................................................................. 1
  1.1 Background of the Problem ..................................................................................... 2
  1.2 Statement of the Problem ....................................................................................... 4
  1.3 Statement of the Purpose and Research Questions .................................................. 6
  1.4 Significance and Rationale ..................................................................................... 7
  1.5 Personal Perspective .............................................................................................. 8
  1.6 Dr. Rogers' Course Design ..................................................................................... 11
  1.7 Structure of the Research ..................................................................................... 12
  1.8 Definition of Terms ............................................................................................... 13
  1.9 List of Abbreviations ............................................................................................. 17

Chapter Two: Review of Literature ................................................................................ 19
  2.1 Introduction .......................................................................................................... 19
  2.2 Asynchronous CMC and Language Learning ......................................................... 25
    2.2.1 Impediment of Productive Social Interaction .................................................. 27
    2.2.2 Social Spaces in Virtual Communities ............................................................ 29
    2.2.3 Community ..................................................................................................... 30
    2.2.4 CMC and Community ..................................................................................... 34
  2.3 Learning via CMC .................................................................................................. 38
    2.3.1 Motivation ...................................................................................................... 39
    2.3.2 Social presence ............................................................................................... 40
  2.4 Interaction ............................................................................................................ 44
    2.4.1 Instructor/Moderator ...................................................................................... 45
    2.4.2 Effects of Social Presence .............................................................................. 47
    2.4.3 Group Cohesion .............................................................................................. 49
    2.4.4 Ideal Social Presence and CSCL ................................................................... 50
    2.4.5 Subjective Awareness .................................................................................... 51
  2.5 Narrative Interaction ............................................................................................. 53
    2.5.1 Experience ..................................................................................................... 55
    2.5.2 Narrative Practices ......................................................................................... 57
Chapter Three: Methods of Inquiry

3.1 Introduction .......................................................... 63
3.2 General Theoretical Assumptions of the Study ..................... 63
3.3 Constructivist Paradigm .............................................. 65
3.4 Social Presence and Social Constructivism ......................... 68
3.5 The Measurements and Research Design .......................... 69
3.6 Grounded Theory ...................................................... 71
  3.6.1 Philosophical Orientation ....................................... 72
  3.6.2 The Procedures of Grounded Theory Research ............ 73
  3.6.3 The Four Criteria .................................................. 74
  3.6.4 The Application of Grounded Theory Research in Education 75
3.7 Research Site .......................................................... 78
  3.7.1 Setting .............................................................. 78
  3.7.2 Participants ......................................................... 80
3.8 Data Collection ....................................................... 83
3.9 Data Analysis .......................................................... 87
  3.9.1 Analyzing the Online BB Discussion Transcript ............ 89
  3.9.2 Analyzing the Interview Transcripts and Assignments .......... 92
3.10 Trustworthiness of the Study ....................................... 97
  3.10.1 Triangulation ..................................................... 97
  3.10.2 Member Check .................................................... 99
3.11 Summary ............................................................. 100

Chapter Four: Research Results ....................................... 102
4.1 Framework for Organizing the Findings ............................ 103
4.2 Research Question 1 .................................................. 104
  4.2.1 Affective Responses .............................................. 109
  4.2.2 Interactive Responses .......................................... 112
  4.2.3 Cohesive Responses ............................................. 116
4.3 Research Question 2 .................................................. 119
  4.3.1 Quality Connecting ............................................... 119
  4.3.2 Necessary Connecting ........................................... 123
  4.3.3 Valuable Connecting ............................................. 124
  4.3.4 Patterns of Valuable Connecting ................................ 127
4.4 Research Question 3 .................................................. 130
  4.4.1 Constructed Connecting ......................................... 130
List of Figures

Figure 3-1 Concurrent Nested Design, Adapted from Creswell et al. (2003, p. 226) 71
Figure 3-2 Example of the Coding Process, Constructed Connecting 96
Figure 3-3 Diagrammatic Representation of my Methodology 99
Figure 4-1 Occurrences of social presence July 23-Aug 15, 2005 108
Figure 4-2 Coding Process of Valuable Connecting 126
Figure 4-3 Coding Process of Experiential Connecting 141
Figure 4-4 Coding Process of Medium Connecting 146

List of Tables

Table 3-1 Demographic information of the student participants 82
Table 4-1 Organizational Framework for Reporting the Results 103
Table 4-2 Numbers of Messages Read and Posted by Individual Participants 105
Table 4-3 Class Participation 105
Table 4-4 Number of Occurrence and Examples of Social Presence Indicator 107
Acknowledgements

I would like to express my most sincere gratitude to the members of my dissertation committee: Dr. Stephen Carey, Dr. Kenneth Reeder and Dr. Carl Leggo. I am grateful to the members who all have an open mind that gives me freedom in pursuing the topic of my interest. Each member offered very helpful advice and assistance throughout this study. I especially thank Dr. Carey for his availability, insightful comments and untiring editing. Even more, I appreciate his belief in my strength and his never-ending support.

I would like to thank every participant in this study who made this research possible. Their contributions are very much valued and appreciated. I thank all the professors who taught the classes I took at UBC, and inspired me for this study. Many thanks to my fiancé Steven Ma for showing confidence in everything I do. I also thank all my friends and family for their love, support and words of encouragement.
Chapter One: Introduction

The rapid developments of information and communication technology have brought about various possibilities for information exchange and online communication. This development has also significantly influenced perspectives and interests of researchers and teachers toward the use of technology for language education. The motivation shaping the need for this research stemmed from Joan Rubin’s (1975) concept of the good language learner that had been raised for three decades. Naiman, Frohlich, Stern and Todesco (1996) and Norton and Toohey (2001) suggest that looking into the characteristics of the good language learner is still relevant to educators today. The characteristics of the good language learner mainly consist of the individual’s strategies, attitudes and successful experiences. Naiman et al. (1996) listed Rubin’s good language learner’s strategies that include the following:

...(2) The good language learner has a strong drive to communicate, or to learn to communicate. He is willing to do many things to get his message across.

(3) The good language learner is often not inhibited. He is willing to appear foolish if reasonable communication results. He is willing to make mistakes in order to learn and to communicate. He is willing to live with a certain amount of vagueness. (p. 228)

Bearing these notions in mind and the use of advanced technology for language teaching and learning, I speculate about the good language learner in an online learning environment, and how an online environment can facilitate good language learners. How does the good language learner develop a strong drive to communicate? And what can we as educators do to make a language learner feel uninhibited?
1.1 Background of the Problem

Through computer-mediated communication (CMC), students including NNS students can build their learning communities outside of their classroom. CMC allows the students to experience the process of apprenticing into new online discourse communities (Warschauer, 2000a). Particularly, CMC-based computer-assisted language learning (CALL) can facilitate the formation and development of learning communities through online collaborative learning (Brown, 2001; Curtis & Lawson, 2001; Edelstein & Edwards, 2002; Kim & Bonk, 2002; Kreijns, Kirschner, Jochems, & Van Buuren, 2004). In mixed-mode courses, some online and some face-to-face as defined by Picciano (2002), NNS students encounter different ways of learning. They participate and learn in their virtual CMC community in addition to learning in their traditional FtF learning mode.

CMC has the potential of promoting quality online interaction for language learning. However, little is known about what it takes to create the effective social context, climate, or dimension that facilitates quality online participation (Tu, 2000a, 2000b, 2001; Wegerif, 1998), and how that may affect students’ knowledge and self-identity construction. For example, the inconclusive findings in Distance Education research (e.g. Biesenbach-Lucas, 2003) could be the results of the “impediment of social interaction” because effective social interactions are usually taken for granted by educators and researchers (Kreijns et al., 2004). Warschauer (2000b) also pointed out that research (e.g. Chun & Brandl, 1992; Kern, 1995) that focused on ‘narrow slices of data’ fails to acknowledge the “complex interaction of social, cultural, and individual factors that shape the language learning experience” (p. 41).

Further, a number of researchers have recognized that the effectiveness of asynchronous collaborative learning depends on whether a “sound social space has emerged”
(Kreijns et al., 2004), and whether open and critical dialogues are generated. A sound social space comprises effective work relationships, strong group cohesiveness, trust, respect, satisfaction and a strong sense of belonging and community (Kreijns & Kirschner, 2004). Moreover, a social space is “a combination of physical and virtual interaction, social imagination, and identity” (Shumar & Renninger, 2002, pp. 1-2). As stated, a sound social space is especially important for language learners because a good language learner is uninhibited and has a strong drive to communicate (Rubin, 1975). Only in that sound social space, do L2 students feel uninhibited and willing to take risks to communicate, for example, not afraid of appearing foolish and making mistakes.

In CMC, participants' sense of belonging to that online community is important for learner satisfaction and interaction (Liang & Carey, in press; Tu, 2000a, 2000b; Tu & McIsaac, 2002). Participants' sense of belonging influences their interactions, their imaginations about themselves, and it defines the power relationships among the participants (Anderson, 1991). As in FtF situations, there are possibilities that students could participate in discussion or post messages on an electronic bulletin board (BB) without the feeling of belonging to the community (Picciano, 2002). Without the sense of belonging, students can find their online communication becomes “an artificial exchange” (Biesenbach-Lucas, 2003, p. 33). Students may not actually have the motivation, in other words, be intrinsically motivated about their learning in CMC. As a result, their participations may not be highly interactive or may not produce the effective learning outcomes as shown in a number of research studies (e.g. Biesenbach-Lucas, 2003; Sengupta, 2001). The inconclusive findings in these studies suggest the need for an examination of students' feelings of belonging to the community and how those feelings affect their interactions and the results of learning.
The same problem applies to research about face-to-face (FtF) communication; many CMC researchers and educators take successful social interaction for granted (Kreijns & Kirschner, 2004). CMC has the potential of facilitating successful communication; however, "achieving that potential is not automatic, easy, or necessarily enduring. Like freedom, it is a fragile accomplishment that must be constantly worked at and watched over" (Cole, 2002, p. xxv). Therefore, building and sustaining a learning community online requires extra time and efforts from both the instructor and students. What has been taken for granted is the social context that facilitates quality online participation. According to Mantovani (1996a), social context is a shared symbolic order in which action becomes meaningful and generates meaning. Thus social context is a necessary condition for effective interaction and communication online.

1.2 Statement of the Problem

In order to design and implement successful networked learning environments, a number of factors must be examined. Many education researchers focus on learners’ cognitive process, but fail to acknowledge the relevance of developing "trust, social cohesiveness and a feeling of belonging to the group" (Kreijns & Kirschner, 2004, p. 221). Here I hypothesize that the key to creating and sustaining a positive social context for meaningful interaction is students’ conceptualizations of their "social presence" (Liang & Carey, in press). In FtF situations, when people meet each other for the first time, they create social presence or a degree of interpersonal contact (Gunawardena & Zittle, 1997) in order to ‘break the ice’ and create a comfortable situation for dialogues. Similarly, social presence plays a crucial role in students’ perception of their virtual community. Social presence is "the ability of participants in a community of inquiry to project them-
selves socially and emotionally, as a ‘real’ person (i.e., their full personality), through the medium of communication being used” (Garrison & Anderson, 2003, p. 49). Researchers (Aragon, 2003; Gunawardena, 1995; Stacey, 2000; Tammelin, 1998; Tu, 2000a, 2000b, 2001) suggest that students’ social presence is important in creating and sustaining a facilitative social context for meaningful interaction. Moreover, social presence plays an important role in reducing L2 students’ inhibition and encouraging participation.

Today, instructors strive for high quality social interaction in CMC, and activities like writing and sharing language/culture/identity narrative could be an effective strategy. High levels of social presence could facilitate a learning community that is called a knowledge community in Craig and Olson’s (2002) terms, and knowledge communities are supposed to be places for narratives:

Knowledge communities are expected to be safe, storytelling places where educators narrate the rawness of their experiences, negotiate meaning, and authorize their own and others’ interpretations of situations. They take shape around common places of experiences (Lane, 1988) as opposed to around bureaucratic and hierarchical relations that declare who knows, what should be known. (p. 116)

Narrative has been used widely by scholars of various disciplines to gain understandings of social life and human interaction (Bruner, 1986; Bruner, 1990; Riessman, 1993; Steinfield, 1986). Narratives are individual interpretations of life-stories and aim to reveal the “truths of our experience” (Personal Narratives Group, 1989). The focus of attention is on the tellers’ interpretations, contexts that shape the storytellers’ worldviews, stance and the meanings of the experience. Rossiter (2002) suggests that narratives make information easier to be remembered because they involve the audience in the actions and
intentions of the storyteller. This becomes an active meaning-making process (Bruner, 1990). In a knowledge community, participants engage in personal public exchanges: the tellers together with their audiences explore their experience, “making their practice transparent and their knowledge public...In these personal public exchanges, profound meaning in instructors’ everyday experiences can be found” (Craig & Olson, 2002, p. 117). The audiences or students then actively learn from the public exchanges. Aragon (2003) also suggests that students should feel comfortable sharing their personal stories and experiences, and the process of sharing establishes social presence among students and with the instructor.

Given all these, there is a need for research that explores how language/culture/identity narratives could promote students’ social presence, and in turn contribute to active participation and effective learning.

1.3 Statement of the Purpose and Research Questions

This study aims to gain an in-depth understanding of how using language/culture/identity narratives online affects students’ (both native and non-native English-speaking) development of social presence. The online collaborative activity for the current study involves sharing and discussing group members’ autobiographies about learning a L2 and focusing on their language/culture/identity development experiences. The activity could be a useful task for developing a quality virtual learning environment. Autobiography is the “discourse of identity” and it “structures our living” (Eakin, 2004). Narrative interaction by sharing autobiography and reflecting on the life experience of someone encourages articulations of experiences and critical reflections (Akin, 2002; Lyons & LaBoskey, 2002). Moreover, relevant personal vignettes, anecdotes, descriptions
of personal experiences promote trust among participants, reduce anxiety, enhance motivation, creativity, brainstorming, and risk-taking (Hillman, 1999). I further hypothesize that a language/culture/identity narrative activity could enhance group cohesion, trust, building social relationships and ultimately, social presence or sense of belonging to the virtual community.

The purpose of the study is to understand the effects of language/culture/identity narrative interaction on students’ development of social presence, including relationship-building between its participants and with the instructor, perspectives toward social presence and using language/culture/identity narratives and CMC for collaborative learning. The objective of the analyses for this study is to answer the following research questions focusing on the effect of language/culture/identity narrative interactions in a network-based environment rendered in mixed-mode courses:

1. Does writing and sharing language/culture/identity development autobiography online contribute to students’ social presence?

2. How do the students describe their understanding of social presence from this activity?

3. How do the uses of language/culture/identity narrative, CMC and collaborative learning promote the development of social presence among graduate students in education?

1.4 Significance and Rationale

CMC influences language learning by its flexible control of recorded information and unique learner interactions. Consequently, the use of networked technologies makes the context for learning very different from the pre-networked period. The nature and
context of online interactions rendered in CMC are very important for building virtual communities for learning (Brown, 2001). Research shows factors that influence participants’ gaining a sense of community in Web-based courses are social relationship, group cohesion, trust and belonging (Wegerif, 1998). These elements contribute to the important foundation for Web-based collaboration, i.e. building a community (Gunawardena, 1995; Kreijns et al., 2004; Wegerif, 1998) and participants’ social presence. However, hitherto none to my knowledge any researchers have focused on the impact of language/culture/identity narrative interaction on students’ social presence in mixed-mode courses. Research studies (e.g. Gon & Hamp-Lyons, 2004; Zafeiriou, Nune, & Ford, 2001) suggest that more qualitative studies are needed to understand the social contexts or climate that are affecting students’ participation and interaction in online learning environments. Moreover, research is heading toward a more robust theory of social presence (Biocca, Harms, & Burgoon, 2003). This study hopes to contribute to a more thorough understanding of students’ social presence in mixed-mode courses. In addition, the use of multiple methods may add to the existing social presence theory (de Greef & Ijsselsteijn, 2001). As such, this research study seeks to inform educators and researchers about the essences of promoting and sustaining students’ social presence, especially in online learning environments.

1.5 Personal Perspective

The studies of Breen (2001a) and Roberts (2001) about perceiving the classroom as an experimental laboratory, especially viewing the classroom as an interactive, socially dynamic, culturally differentiated discourse context, have strongly influenced my views about language teaching. From these perspectives, I could understand language teaching
socially. In other words, researchers and teachers cannot explain language teaching without understanding the implicit meanings and values embedded in the classroom interaction, discourse and culture. Particularly, understanding each classroom is composed of its own culture is very crucial in examining the cognitive and social variables each learner perceives in classroom realities. Therefore, as reflective practitioners, teachers can try to understand, think about and negotiate the nature of the classrooms, such as being interactive, differentiated, highly normative and asymmetrical.

My views about language teaching provoked my curiosity about how teachers might facilitate positive social dynamics of online-networked environments that ultimately contribute to active participation. I was first introduced to the Web course tool (WebCT) in 2000 at the California State University, Los Angeles when I took a mixed-mode course with my previous thesis supervisor Dr. Lia Kamhi-Stein, one of the pioneers in using CMC for instructional purposes. My engagement in CMC was very pleasant and meaningful, but nonetheless I did not notice the reasons for such success. Later, I met Dr. Edward Rogers¹ who has rich experiences in teaching mixed-mode courses, and he lit up my passion for technology-enhanced teaching and learning. Dr. Rogers’ unique perspectives on technology and language learning inspired me while I was studying the CMC literature, particularly on social presence. I came to realize the commonalities of both mixed-mode courses taught by Dr. Rogers and Dr. Kamhi-Stein that had contributed to the success; the social aspects of the course were well respected and facilitated. I had developed a strong social presence from interacting with my peers and instructor online throughout the courses. I actually felt I belonged to the learning community that developed online.

¹ The names of all participants in this study are pseudonyms.
Social presence is important online as well as in FtF learning. I realized how important the sense of belonging meant to me as an English learner for more than fifteen years. I experienced the lack of belonging when I first became an international student in Australia at the age of thirteen. I was placed in a regular seventh grade class when I was just learning Basic English vocabulary as an English as a second language (ESL) student back in China. The atmosphere was intimidating and unwelcoming. While other students participated in class discussions and activities, I was busy flipping my English-Chinese dictionary and trying to understand just a little bit of what was going on in class. It was extremely frustrating. My peers looked at me differently because of my inability to socialize with them in English. I thought I did not belong to that learning community at all. I felt I should be placed in a sheltered course where I would not feel ashamed and frustrated. As a result, my feelings and emotions hindered my learning. I did not want to open my mouth to speak because my use of words and pronunciation often seemed ridiculous to my peers who did not seem to understand what I was going through. Only when I was with 'understanding' people and knew that I would be respected, did I speak wholeheartedly. Thus, I speculate that a major factor that is inhibiting language learners from developing a strong drive to communicate could be their lack of social presence.

Likewise in a CMC environment, without positive social presence, participants' interaction could just be instrumental, for the sake of getting marks for 'artificial exchanges' in Biesenbach-Lucas's (2003) terms. To me, a positive social context is where communication is encouraged and participation is intrinsically motivated. Thus, I wanted to look into a successful mixed-mode course in-depth in order to explore how students develop a strong social presence through the use of language/culture/identity narratives.
1.6 Dr. Rogers' Course Design

Dr. Rogers' experience over the past decade with CALL, his philosophy of teaching, and his reasons for course design (see Appendix A, Course Syllabus) gave me confidence in this selected course as a successful mixed-mode course facilitating high levels of social presence. Dr. Rogers is one of the pioneers in using WebCT for mixed-mode instruction, and has rich experience in incorporating language/culture/identity narrative and WebCT in instruction since 1997. He has taught a dozen courses with this kind of course design.

Dr. Rogers emphasizes that the mixed-mode approach requires more time and work from the teacher because an additional 40 hours (on average) of online activity is required to supplement the 40 hours of class seminar. However, he foresees the potential of the approach that works toward constructivist and individual learning, and deeper processing of information. The goals are to enable students to discuss and reflect on cultural and identity commonalities and differences, get to know each other, promote students' social presence and build a successful learning community. Even more, this kind of self-reflection and analysis encourages personal learning, and in-depth or critical thinking.

Moreover, Dr. Rogers believes that the mixed-mode course design should include both structure and flexibility or sense of freedom for students to express their ideas and opinions. Students need this dual sense of structure and freedom to interact and pursue interests. Eventually, students feel they are valued members of the community, find their online interaction to be rewarding and are able to acquire valuable and relevant knowledge (Carey, 1999a, 1999b, 2000, 2002a, 2002b, 2003, 2005).
1.7 Structure of the Research

This study is organized into five chapters. Chapter 2 provides a review of relevant literature on community building, social presence, norms, identity and narrative interaction. It points to a need to look into students’, especially language learners’ social presence and lays out the foundation for the combined use of CMC and language/culture/identity narratives for promoting social presence.

Chapter 3 describes the research methods used for this study. The first part of the chapter is the description of the general theoretical assumptions of the study. The second part presents the social presence measurements and the quantitative approaches used in previous research. The third part presents the research methods adopted for this study, including a review of literature legitimizing the use of the methods. The fourth part presents the research design, research sites, participants, data collection, and analysis. The chapter ends with a discussion of the trustworthiness of the findings.

Chapter 4 presents the findings corresponding to the three research questions. It aims to identify a way of establishing social presence that is unique to educational cyberspace. The goal is to provide understanding of the factors that could facilitate students’ participation in mixed-mode courses, and to reveal implications for computer-assisted instruction and design. It presents the process of constructing a theoretical social presence model illustrating the development of social presence. Finally, Chapter 5 discusses the theoretical and practical implications of the research and presents the conclusion of the study.


1.8 Definition of Terms

Throughout this study, I introduce several terms to readers, and these terms are noted in the literature in the various fields such as Human-Computer Interaction, Educational Technology and Communication. The following are the operational definitions of the terms I have used in this study:

Asynchronous communication – communication occurs at different times, such as email and bulletin board (BB) interaction.

Bulletin Board (BB) - participants post their messages on the bulletin board, and the messages are stored on the server in a hierarchical directory. Other participants can read or respond to the messages.

Community – while the term referred primarily to a geographically localized group of people until between the 17th and 19th centuries, it has expanded to refer to a group of people who hold something in common (as in a community of interests) or who share a common sense of identity even if they do not live in a single locale and are globally dispersed (Cole, 2002).

Computer Mediated Communication (CMC) - refers to any form of interpersonal communication that uses some form of computer technology to transmit, store, annotate, or present information that has been created by one or more participants. CMC tools include email, conferencing, groupware, chat rooms, desktop videoconferencing, BB and Internet-based audio applications (Wolz, Palme, Anderson, & Chen, 1997).

Computer supported collaborative learning (CSCL) - research in educational technology that focuses on the use of information and communications technology (ICT) as a mediational tool within collaborative methods (e.g. peer learning and tutoring, recip-
rocal teaching, project- or problem-based learning, simulations, games) of learning (Wasson, 1998).

*English as a second language (ESL)* - English as a second language (ESL) refers to the learning of English in a setting where the language is used outside the classroom, as the means of communication in the community (Ellis, 1994).

*English as a foreign language (EFL)* - English as a foreign language (EFL) refers to the learning of English in a setting where the language is not widely used outside the classroom. English is not the means of communication in the community (Ellis, 1994).

*Face-saving* - or to avoid losing face, one of the most notable Chinese traditions. People strive to maintain the personal images that they wish to project. For example, Chinese L2 students make an effort in writing online messages in order to avoid giving the instructor a bad impression (Tu, 2001).

*Identity* – is the set of behavior or personal characteristics by which an individual is recognized as a member of a group. A person could pertain multiple identities due to his/her multiple roles. In philosophy, identity is the quality of “being the same as” (Farflex, 2004).

*Immediacy* - is a measure of the psychological distance that a communicator puts between himself or herself and the object of his/her communication (Gunawardena & Zittle, 1997, p. 9).

*Interactivity* - the activities in which CMC users engage and the communication styles they use such as continuing a thread, quoting from others’ messages and asking questions (Tu, 2001).

*Intimacy* - is a function of variables including eye contact, proximity, topic of conversation and their interactions. Changes in one will produce compensatory changes
in others. Level of intimacy also depends on factors such as physical distance, eye contact and smiling (Short & et. al., 1976).

*Intrinsic motivation* - the motivation that is based within the individual to satisfy personal needs (McGroarty, 1996) as opposed to extrinsic motivation which is for external rewards.

*Mixed methods* - a mixed methods study involves the collection and analyses of both quantitative and qualitative data in a single study in which the data are collected concurrently or sequentially. The analyses involve the integration of the data at one or more stages in the process of research (Creswell, Clark, Gutmann, & Hanson, 2003).

*Language socialization* - the linguistic and interactional processes that mediate newcomers’ participation in dominant routine cultural practices, such as language and literacy activities, and facilitate their developing competence and membership in discourse communities (Duff, 2002, p. 290).

*Motivation* - the combination of desire and effort made to achieve a goal; it links the individuals’ rationale for any activity such as language learning with the range of behaviors and degree of effort employed in achieving goals (Gardner, 1985).

*Native speakers (NSs) or L1 speakers* - Native speakers (NSs) are traditionally defined as people who have acquired a language, i.e., English in this study, as their home language. Native speakers/students of English usually have expertise and intuitions about its pronunciation, grammar, and usages, and identify with the community in which the language is spoken (Johnson & Johnson, 1999).

*Non-native speakers (NNSs) or L2 speakers* - Non-native speakers (NNSs) are people who have acquired a language, i.e., English in this study, after childhood.
Norm - is defined as a typical protocol for interaction (Shumar & Renninger, 2002). It is consisted of local conventions for building social identities through the particular forms of online participation, interaction, acts and stance displays. In the area of communication, these kinds of social acts and stances are called social norms.

Second language (L2) - Second language (L2) refers to linguistic and sociolinguistic competence in a language other than the first language.

Second language acquisition (SLA) - Second language acquisition is defined as the process of acquisition of a language other than the first language in a setting where the second language is learned/acquired through usage in a second language setting.

Social acts - any socially recognized, goal-directed behavior, such as making a request, contradicting another person, or interrupting someone which includes a display of a socially recognized point of view or attitude (Ochs, 1993).

Social presence - the ability of participants in a community of inquiry to project themselves socially and emotionally, as a ‘real’ person (i.e., their full personality), through the medium of communication being used (Garrison & Anderson, 2003, p. 49) as opposed to a limited or narrow communicative role.

Synchronous interaction - communication occurs at the same time, such as Web-based chats, ICQ, MSN instant messages as opposed to asynchronous interaction.

Target language - the language that learners intend to acquire.

Teacher immediacy - is defined as the nonverbal behaviors that reduce physical and/or psychological distance between teachers and students (Anderson, 1979).

Virtual community - “people in virtual communities do just about everything people do in real life, but we leave our bodies behind. You can’t kiss anybody and nobody
can punch you in the nose, but a lot can happen within those boundaries” (Rheingold, 1994, p. 5).

*WebCT Bulletin Board* is an e-learning system that comprises an asynchronous online forum or online bulletin board (BB). On the BB, participants engage in online discussions by posting and responding to each other’s messages.

*ZPD (Zone of Proximal Development)* - 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 with adult guidance or in collaboration with peers (Vygotsky, 1986, p. 86).

### 1.9 List of Abbreviations

ATD: Asynchronous Threaded Discussion  
BB: Bulletin Board  
CALL: Computer-Assisted Language Learning  
CMC: Computer-Mediated Communication  
CSCL: Computer-Supported Collaborative Learning  
EFL: English as a Foreign Language  
ESL: English as a Second Language  
FtF: Face-to-Face  
L1: First Language  
L2: Second Language  
NSs: Native Speakers  
NNSs: Non-native Speakers  
QCA: Quantitative Content Analysis
SLA: Second Language Acquisition

WebCT: Web Course Tool
Chapter Two: Review of Literature

In this chapter, I focus on the literature review of the study. This study used a grounded theory approach which could better reflect the data and make no *a priori* assumptions about equivalence (Gales, 2003; Strauss & Corbin, 1990). As indicated on the Application for Behavioral Ethical Review, this study is mainly based on online data, and was initiated with Interviewing Online Students as the title of the research proposal. Thus the literature review was written as 'open-ended' as possible. The review covers relevant literature on community building, social presence, norms, identity and narrative interaction. The goal of this review is to provide a research-based foundation for the combined use of CMC and narratives for instructional purposes.

2.1 Introduction

Due to the advance of computer technologies, CALL has gone through three stages of changes in history: Structural, Communicative and Integrative CALL.

The intervention of the printing press in the 15th century and the emergence of the personal computer in the late 20th century have both created new environments for literacy practices. Eisenstein claimed that a print culture creates unique characteristics in texts pertaining to “standardization, dissemination, and fixity” (Johns, 1998, p. 10), and caused a significant change in literacy practices. Similarly, the invention of the personal computer in the late 20th century also brought about different ways of communication and language education. According to Warschauer (2000a), CALL has gone through three major stages in history. The first stage is Structural CALL in the 1970s-1980s. It mainly used drills and practices concentrating on accuracy. The second stage is Communicative CALL in the 1980s-1990s. It was based on communicative exercises that performed as
ways of practicing in a target language or L2 to achieve fluency. Through interaction, learners can develop their L2 as an internal mental system, and the importance lies in structuring interactions that help provide input to the learner.

The third stage is Integrative CALL in the 21st Century. CALL pedagogy has evolved to the stage of Integrative CALL that engages learners in interactions of meaning-making and authentic discourse via multimedia and the Internet. The recent change in CALL comprises the perspective that evolved from perceiving the computer as a supplementary tool for communication practice between the 1980s-1990s, to perceiving the computer as a catalyst for changes in the whole context of language teaching and learning in the 21st century. The learning contexts created by the use of computers have become very important. New frameworks are adapted into CALL pedagogy and research, and the prominent one is the socio-cognitive approach (SCA). It perceives integrating CALL in language learning as a process of apprenticing L2 students into new discourse communities. Interactions aim to help students to socialize into new genres and discourses, making the content of the interaction and the nature of the community extremely important (Warschauer, 2000a). Thus it is not enough that the L2 students participate in computer-mediated interactions, they also need to be involved personally in meaningful tasks. According to Integrative CALL and the SCA, the nature and content of the interactions involving the use of computers are vital in leading the students to enter new communities and becoming familiar with new genres and discourses.

The relevant recent changes in CALL theory and pedagogy are due to the changing purpose of using technology in education. In the 1980s-1990s, Structural CALL's purpose of using the computer as a tool was for learning a L2, such as English per se. In the 21st century, because most information technologies and the contents of the World
Wide Web (WWW) have originated from English speaking countries such as the United States, the goal of learning English, especially in the non-English-speaking countries, becomes to learn and use the information technologies such as multimedia and the Internet. Moreover, online tasks such as conducting online research and reading online documents require computer users' familiarity with the online “critical literacy” (Warschauer, 2000a), which comprises critical judgments and critical decision-making. In other words, there is more than just acquiring linguistic skills with CALL; language learners master electronic communication to develop their critical thinking and enhance their knowledge of online critical literacy. The goal of CALL is extended to helping language learners “to perform real-life tasks and solve real-life problems in a community of peers or mentors” (Warschauer, 2000a, p. 65), such as conducting an international research project on issues or creating an Internet web site for a local organization.

The computer could be perceived as a powerful tool for establishing student agency which is defined as the satisfying power to take meaningful action and see the results of our decisions and choices (Murray, 1997). Thus establishing agency is crucial to make “their stamp on the world” (Warschauer, 2000a, p. 65). The claim echoed with Kramsch, A'Ness and Lam's (2000) finding that students gained authenticity and authorship through the communicative approach and CMC. They contributed to students' “agency and identity and the presentation of self” (Kramsch, A'Ness & Lam's, p. 78). By participating in authoring in a virtual community with electronic articles and multimedia documents, L2 learners gain a sense of agency.

Among various aspects of CALL, CMC-based CALL has become prevalent, especially in the last five years, and it is deemed to have the greatest impact on language learning (Warschauer, 1996b). With CMC, language learners could enjoy direct, cheap,
and convenient communication with other learners or speakers of the target language. CMC allows sending and receiving messages, text documents and various visual, audio or multimedia materials. Furthermore, language learners could gain self-agency and ownership of their knowledge, and ultimately they could make an impact on the world (Warschauer, 2000a). The focus of this review is on CMC-based CALL. CMC refers to a text-based, computer-mediated and online human interaction systems that involve communicating with one or more computer users (Warschauer, 1997). CMC enables easy transmission, storage and evaluation of information exchanged over the Internet. CMC can also be CALL-based and facilitates language learning through online interaction. It can be rendered in various formats using different computer software programs or online databases, such as email, internet chat rooms, Internet Relay Channel (IRC), Multiple-use Object Oriented domains (MOOs), listservs, WWW sites and online conferences (Kamhi-Stein, 2000). The discourse evolved from CMC by two or more computer users can be obtained and examined in either synchronous or asynchronous mode. The influence of Integrative CALL makes it insightful to examine the effectiveness of asynchronous CMC in language teaching and learning from the interactional, discourse and social perspectives.

CMC-based CALL in current practices focuses on the use of the asynchronous mode for learning and construction of meaning in this type of environment. Creating an organic knowledge-building environment within an asynchronous learning context has been advocated by researchers (Moller, Prestera, Harvey, Downs-Keller, & McCausland, 2002). The concept is developed from the architect Frank Lloyd Wright’s organic philosophy, and its goal is “to create a harmonious and seamless environment where people were protected yet not isolated from life outside the walls” (Moller et al., 2002, p. 47).
Likewise in using technology for teaching and learning, educators aim to provide a facilitative learning environment in which individuals are protected but not isolated from the community they belong to. These mixed senses of isolation and consolidation can be ‘blended’ in naturally if individual participants are aware of the unique characteristics of the environment. In asynchronous communication mode, in addition to allowing more time for reflections and generations of ideas than synchronous mode, it offers a ‘more comfortable’ environment for participants to communicate and learn from each other at their own pace.

While traditional instructions do not always encourage learning, an asynchronous environment can promote transformative and generative learning processes (Moller et al., 2002). The goal of organic-knowledge building is to create a more student-centered instruction, so that, learning becomes an ongoing process outside of the classrooms. More time and opportunities for sharing of knowledge and experiences are created in this ‘space’. In addition, an asynchronous networked environment can provide a variety of resources, experiences and interactions for learners. Individuals can bring their own knowledge, ideas, experiences and concerns into the community and extract new ideas and knowledge from their discussions. Overall, an asynchronous environment has the potential to create a context that is rich, open and alive with opportunities for exploration and meaning-construction (Moller et al., 2002).

The text-based orientation of asynchronous CMC has the potential to create a lively and highly interactive class discussion (Carey, 1999b). The construction of meaning in text is a result of collaboration and group effort. It is through dialogues or conversations that knowledge is constructed socially as we explore our experience of the world (Breen, 2001a). Individuals are involved in the network interaction called “sampling” termed by
Sirc and Reynolds (1993, as cited in Peyton, 1999). By definition, the construction of meaning is built upon a blend of one’s own ideas, others’ ideas, and material one has read or heard in discussion. Individuals have the choices of initiating topics of discussion, expressing their ideas and thoughts or building on or ignoring the ideas of others. In the process of discussion, individuals are involved with meaning-construction in which they continuously adjust their perspectives and invent new ideas. Jonassen (2000) argues that "no tool better facilitates reflective thinking and knowledge construction than CMC, because it supports reflection on what ones knows and, through communication of that with others, may lead to conceptual change" (p. 166). Also, construction of meaning from the sociocultural perspective is tied to specific contexts and purposes, and discourse is the shared ways of responding to patterns and features in particular context (Wilson & Meyer, 2000). Thus researchers cannot examine meaning-construction without understanding its context, purpose and discourse.

Wilson and Meyer (2000) see meaning construction as a social activity. Discourse and culture have significant impacts on meaning construction. Individuals make sense of their immediate situations in reference to past situations that they see as having relevance. In other words, participants’ perspectives of immediate situations are informed by references to their history and associated groups. In effective learning communities, members are encouraged to exchange knowledge and experiences (Moller et al., 2002); from the acts of exchange, individuals construct their own meaning and understanding of information and knowledge. A ‘picture’ of how meaning is constructed becomes evident to the students through ‘networks of connections’ as illustrated below:

We interpret a text or a situation in part by connecting it to other texts and situations that our community or our individual history has made us see as relevant to
the meaning of the present one. Our community, and each of us, creates networks of connections (and disconnections) among texts, situations and activities... These networks of connections that we make, and that are made in the self-organizing activity of the larger systems to which we belong, extend backwards in time as well [as] outwards into the social-material world (Lemke, 1997, p. 50).

2.2  **Asynchronous CMC and Language Learning**

The concept of tightly integrating CMC into practices to create a new learning environment has been emphasized in research since the 1990’s. However, the use of threaded, asynchronous discussions has been criticized for not producing the perceived benefits (de Bruyn, 2004). Further, the research on asynchronous CMC in language learning shows inconclusive findings (Kreijns et al., 2004). Finally, the students’ negative reflections toward asynchronous threaded discussion (ATD) in Biesenbach-Lucas’s (2003) study mainly resulted from the vague evaluation criteria. This result contradicts the viewpoint that CMC discussion creates in-depth analysis and critical reflection due to its independence from time and place. And that the nature of an asynchronous learning environment allows more sophisticated ideas to form (Warschauer, 1997). However, in Biesenbach-Lucas’s study, the lack of clear explanations of reflective postings and sample models from the instructor may have curbed the development of critical thinking in ATD. The evaluation criteria may have significantly affected the students’ attitudes and performance in ATD. For instance, the students may have become overly concerned about “form and correct responses,” and using “big words and confusing yet intellectual sentences” (Biesenbach-Lucas, p. 34).
Another factor leading to the students' negative attitudes toward ATD was the strict rules for engagement. Biesenbach-Lucas (2003) insisted on “having rules of engagement” (p. 28), and stated that they should help to set the scene for novice online users, and to facilitate the learning process. However, the strict evaluation on posting seems to be the major cause of failure in using ATD. Evaluation criteria included the following:

1. students had to post to the web board within their group at least once a week...so lurking and non-contribution would not be an issue; (2) the messages needed to address course related matters but the specific topics could be selected by the students and their groups---this would prevent the high amount of “unproductive social interaction” found in asynchronous discussion; (3) the messages needed to discuss and reflect critically on course content; and (4) students had to respond explicitly to previous contributions by other students in their groups. (Biesenbach-Lucas, p. 29)

The assumption for (3) and (4) was that to continue the content discussion of the previous postings both linguistically and semantically could increase the depth of discussion and prevent digression. However, the findings showed that the students felt constrained by the requirement to build on previous postings by other students in their groups. They did not always feel interested in continuing the topic of the other students. To the students, it undermined their freedom of topic selection, and ATD in this sense became “an artificial exchange” (Biesenbach-Lucas, 2003, p. 33). Consequently, the requirement created a barrier against natural and effective learning.

Furthermore, the evaluation criteria lowered the level of critical thinking because the majority of students did not reflect critically about course material due to their preoccupation with making the connection with the previous posting. Another factor leading to the negative attitudes toward ATD is the lack of instructor's prompts throughout the se-
mester. Although the students were allowed to select their own course-related discussion topics with their group members, the students did not feel democratic about imposing their ideas on others. This phenomenon reflected the possible difficulties of collaborating in CMC, for example, decision-making and reaching consensus (Warschauer, 1997). Thus more efforts may be needed to reach successful in-group communication. In addition, the explicit prevention of “unproductive social interaction” could also have prevented productive social interaction. Social interaction is the means by which “…critical thinking, mutual understanding, and deep learning are possible” (Kreijns & Kirschner, 2004, p. 223).

2.2.1 Impediment of Productive Social Interaction

The inconclusive findings of the discussed studies in this research could be the results of “impediment of social interaction”. More importantly, social interactions are usually taken for granted by educators and researchers (Kreijns et al., 2004; Kreijns & Kirschner, 2004). Educational researchers have paid little attention to students’ social experience in a CMC networked environment. Recently, a number of researchers have recognized that the effectiveness of asynchronous collaborative learning depends on whether a “sound social space has emerged” (Carey, 1999a, 1999b; Carey & Morgan, 2005; Kreijns et al., 2004; Liang & Carey, in press); in that space, productive social interactions can be generated. The emerging perspectives suggest the need to approach the virtual communities socially because its participants are human beings and at the same time, social creatures (Jonassen & Land, 2000; Moller et al., 2002). Social creatures need to interact and socialize with others to establish and maintain social relationships. They rely
on feedback and responses from peers to recognize their existence and verify their personal beliefs.

Some researchers (e.g. Breen, 2001b; Roberts, 2001) suggest perceiving the classroom as an interactive, socially dynamic, culturally differentiated discourse context. However, these perspectives have not always been considered in examining virtual learning communities. In other words, researchers and teachers cannot explain a teaching and learning process in any environment without understanding the implicit meanings and values embedded in the interactions, discourses and its cultures. Particularly, it is important to understand that the virtual community is composed of its own culture (Shin & Cho, 2003). As defined by social constructivists, culture is sharing ways of symbolic meaning making that are negotiated among members of a social community (Jonassen & Land, 2000; Reeder, Macfadyen, Roche, & Chase, 2004; Scollon & Wong-Scollon, 2001). What unknown is the role social presence plays in constructing the different aspects of its culture such as being interactive, differentiated, highly normative and asymmetrical.

Learning lessons are 'co-production' and 'socially constructed' events (Slimani, 2001), and the social nature influences the matches between teaching and learning outcomes. In a learner-centered environment where students have some control over their learning (Egbert, Chao, & Hanson-Smith, 1999), the learning outcomes are unpredictable due to learner differences and the social context. Learners do not learn in the same way, at the same rate and for the same purposes. Breen (2001c) and Slimani (2001) show the unpredictable learning outcomes within the interactive discourse.

Breen (2001c) further explained that second language acquisition (SLA) is shaped by the social situation and social relations within that event, and therefore is never so-
cially neutral. In other words, the social context shapes the learning dynamics. Because learners are always going through the process of negotiating with the social context by participating in socially constructed and situated activities, researchers need to perceive and examine thoroughly students' learning activities from socially situated perspectives. In addition, teacher and students continue constructing and reconstructing their social roles and identities by making investments (Norton, 2001; Norton Pierce, 1995) into the target language community and culture (Duff, 2002; Reeder et al., 2004). This continuing effort would influence the idiosyncratic dynamics of interaction and identity construction.

2.2.2 Social Spaces in Virtual Communities

The Internet provides spaces for students to construct many learning communities outside the classroom. It is an arena for a redefined sense of community. Internet communities are built based “on knowledge and information, on the common beliefs and practices of a society abstracted from physical space” (Jones, 1995, p. 19). They are called virtual communities, and are often built for sharing information and constructing knowledge online. The notion of co-constructing a virtual reality plays a significant role in the process of building a community. Researchers (Chapelle, 1997; Kramsch & Thorne, 2002; Wegerif, 1998) suggest seeing the digital spaces comprising various virtual communities as unique social spaces. In these social spaces, “a nexus of connectivity, social interaction and community-building, albeit in novel formations” (Kramsch & Thorne, 2002, p. 85). Moreover, these novel formations require new perspectives and approaches to build a holistic framework (Chapelle, 1997). This holistic framework should encounter the impacts of social connectedness or social networking that gives new meaning to social interaction and community-building in CMC.
As L2 students go through a language socialization process into their virtual communities, they need to socialize with their peers in both academic and non-academic environments in which the learners can concentrate on negotiating intended meanings (Kramsch, 1987). Understanding students’ language socialization process at the global and local contexts helps to gain a better understanding of the complexities of L2 teaching and learning in virtual communities. In order to examine social interaction and socialization rendered in CMC-based learning communities, researchers need to approach the atmosphere as any other language-learning system that is complex (van Lier, 2001).

2.2.3 Community

2.2.3.1 Imagined Community

The concept of community has been redefined due to advanced technology. The term “community” had been expanded from referring to a geographically localized group of people in the fourteenth century, to including the idea that a group of people who share something in common, e.g. interest or identity, even though they do not live near each other as in the seventeenth century (Cole, 2002). In distance education, the term “community” is defined as “a group of individuals who belong to a social unit such as students in a class” (Picciano, 2002, p. 22). With CMC, communities are built both globally and locally, and are driven by people’s needs to create new communities technologically (Jones, 1995). People put efforts into building communities online for various social, academic and professional purposes. Every member has an image of the community to which they aspire to belong. For example, the imagined community is the origin of nationalism. The community “is imagined because the members of even the smallest nation
will never know most of their fellow-members, meet them, or even hear of them, yet in the minds of each lives the image of their communion” (Anderson, 1991, p. 6).

Imagination plays a role in the communities of practice (Wenger, 1998), and imagination is defined as “creating images of the world and seeing connections through time and space by extrapolating from our own experience” (p. 173). Individuals’ connections to virtual communities are based on their imagination about the communities (Shumar & Renninger, 2002), and that imagination is social. Researchers (Chapelle, 1997; Kramsch, 2002; Warschauer, 1997) suggest perceiving a virtual community as a dynamic social place. Similarly, the social constructivists (Jonassen, 2000; Jonassen & Land, 2000; Vygotsky, 1978) view knowledge as socially and culturally constructed, and learning as a social process. Thus a community is also a social space that is “a combination of physical and virtual interaction, social imagination, and identity” (Shumar & Renninger, 2002, p. 1-2). Usually, the virtual members of imagined communities seek to fulfill a need for social identity. People aspire to various imagined communities because they want social recognition, support and mostly meaningful exchange of ideas, experiences and future planning. For many, their communities provide an escape from isolation and loneliness. While traditional images of a community were sometimes based on love and close emotional ties, many people in the 21st century tend to build their imagined community almost “in a utopian version” (Shumar & Renninger, 2002, p. 5). People may even keep an image of the loving and close community, which builds an intimate personal relationship and bonds of caring.

Dagenais (2003) applies the construct of imagined community to explore immigrant parents’ decisions in enrolling their children in French Immersion program. Parents make investments in immersion education because they imagine knowing French will
enable their children to gain membership in particular language communities in Canada and elsewhere (Norton, 2001). It is hoped that the investments can bring about better career opportunities. Norton argues that different learners in different circumstances will conceptualize their own three communities in different ways: their biographical-historical community, the learning community they may choose to enter and the wider speech community they seek to join. Individual members of a community construct an image of each community (Dagenais, 2003; Wenger, 1998), their relation with that community, the roles they play in each particular community, and possibilities for their future. Norton and Toohey (2001) argued that the proficiency of a good language learner would be bound up not only in what they did individually, but also in the possibilities their various communities offered them. Online community would be one of their communities for learning.

2.2.3.2 Great and Ideal Community

Tracing backwards, the notion of ‘belonging’ plays a crucial role in L2 students’ language socialization process as stated by John Dewey (1927) almost eighty years ago:

Many are the conditions which must be fulfilled if the Great Society is to become a Great Community…. The highest and most difficult kind of inquiry and a subtle, delicate, vivid and responsive art of communication must take possession of the physical machinery of transmission and circulation and breathe life into it. When the machine age has thus perfected its machinery, it will be a means of life and not its despotic master. (p. 147)

It seems important that students feel belonging to their learning environment, in Dewey’s terms ‘Great Community’. The concept of Great Community is in line with the idea of
imagined community: its participants are the social actors in maintaining the “highly fluid and multifaceted” (Shumar & Renninger, 2002) nature of the community.

On the Internet, many people strive for an ideal community. The flexibility and durability provided by online interaction contribute to the essential qualities of the imagined community (Anderson, 1991). The Internet offers dislocations of time and space, and offers fluidity of boundaries and flexibility for a redefined sense of community; in turn, this community becomes a function of social imagination (Shumar & Renninger, 2002). An ideal community promotes people’s incentives for investments, social imaginations and social interactions. The ideal community is a social environment that is deemed to provide rich resources and information, encourage expressions of ideas and opinions and eventually expand upon dreams of a more ‘democratic space’. In parallel, Rourke (2000) found that students perceived the ideal social environment of a computer conference as friendly, warm, and trusting, personal and disinhibiting. As mentioned earlier, while traditional images of a community were not always based on love and close emotional ties, most people in the 21st century tend to build their imagined community “in a utopian version” (Shumar & Renninger, 2002, p. 5). People keep an image of the loving and close community, building intimate personal relationship and bonds of caring. Luo (2004) used the systemic functional linguistic theory (Halliday, 1994) and language socialization theory (Schieffelin & Ochs, 1986) to explore CMC interaction for language and content learning. The results showed that the student participants were deeply concerned about building social relationships with their peers in the course: “By whatever means, online or face-to-face, the student participants were searching for and trying to set up a good relationship with their classmates” (Luo, p. 165). In summary, members of
communities are implicitly seeking cognitive and affective connections and the traditional values of communities rather than spatial connections.

2.2.4 CMC and Community

Through CMC, L2 students can build their learning communities outside of their classroom. CMC allows the learners to experience the process of apprenticing into new online discourse communities (Warschauer, 2000b). Particularly, CMC-based CALL can facilitate the formation and development of learning communities through online collaborative learning (Brown, 2001; Curtis & Lawson, 2001; Edelstein & Edwards, 2002; Kim & Bonk, 2002; Kreijns et al., 2004). In mixed-mode courses, L2 students encounter different ways of learning. They participate and learn in their virtual CMC community in addition to learning in their traditional FtF learning mode. SLA research studies have long acknowledged the importance of FtF interaction. According to Ochs (1993), “the interactions are the means through which social identities are constructed and socialized” (p. 301).

2.2.4.1 Shared Construction of Meanings

Communication exchange is the form of interaction in CMC. Online communication consists of the attributes of the language used online and the applications of online language. However, L2 students’ identity does not relate directly to language, but is mediated by their understandings of conventions for doing particular social acts and stance and these understandings are resources for structuring social identities (Ochs, 1993). In other words, cognitively, L2 students must connect the utterances with the appropriate action, and the action follows the interactive rule of communication that leads to construction of their identity. According to social psychologists, communication is possible
only when participants' expectations are acknowledged by each other; and some common grounds of shared beliefs are established, and the interactive rules that serve to keep the developing conversation on track are accepted (Clark & Schaefer, 1989). Different from FtF communication, CMC creates a novel concept of communication. It takes accounts of the cooperative component and the reciprocal responsibility for successful interaction. Thus communication is a *shared construction of meanings* (Kraut & Streeter, 1995). Text-based CMC is the communicative exchange through which participants are able to understand each, influence each other's action and together create the nature of their communication and interaction. This reciprocity could induce higher levels of intimacy and complex discourse which people could reach in online communities compared to those in physical communities (Shumar & Renninger, 2002).

### 2.2.4.2 Social Actors

When CMC is used for instructional purposes, the differences between CMC and FtF conversation are relevant. Mantovani (1996a) pointed out the two typical features of FtF conversation that are missing in CMC: (1) the collaborative commitment of participants and the co-formulation of the message; (2) the feedback which allows the social meaning of the message to be processed immediately. Nonetheless, participants can overcome the communication 'barriers'. They are in fact *social actors* (Mantovani, 1996a; Mantovani, 1996b; Stasser, 1992) who act according to their interpretation of the situation, their purposes, and the social norms. More importantly, they act according to their understanding of the social context. Tu (2001) claimed that social context includes task orientation (Steinfield, 1986), privacy (Champness, 1972; Steinfield, 1986), recipients/social relationship (Argyle & Dean, 1965; Walther, 1992) and social process, set-
tings and purposes (Walther, 1992). Social context is conceptual, cultural, unstable and constantly being modified by participants’ actions and choices (Mantovani, 1996a). Online experience is more of the interplay between the subjects and their context. According to Mantovani (1996b):

We cannot know actors without their context, in the same way that we cannot know context without its actors: Cultural order is achieved by action, which allows situations to be interpreted, which in turn allows artifacts (computer systems included) to be used in specific applications. (p. 265)

Moreover, they have the choices of which messages to read and respond to, whether to continue or terminate the interaction, and this makes up the asymmetrical co-constructed reality. Overall, the interaction via CMC is reciprocal and situational, and the social actors are constantly altering the social context. As a result, human-human interaction seems to play a more significant role than technology.

2.2.4.3 Medium

The computer in many aspects resembles other venues of communication such as the telephone, television and even FtF communication, and has both strengths and limitations. Like other venues and FtF communication, CMC, as the medium of communication has the potential of producing a sound social space (Kreijns et al., 2004) in which realizations of multiple identities can be created and negotiated, and CMC becomes an equalizing medium due to its reduction of non-verbal contextualized cues (Warschauer, 1997). On the other hand, CMC can “easily create boundaries and hierarchies” (Gunawardena, 1995, p. 156) because individuals can easily insert their power, control and agency in the form of text. Thus the social dynamics of CMC are determined by us-
ers. Initially, users imagine the expected norms of the community, and then later, they adjust and readjust their participation according to the norms emerging. It has been believed by some individuals that the medium is cold and impersonal because people are individuated in CMC. However, Gunawardena (1995) suggested that even though CMC is a text-based medium, social interaction and senses of communities created can make participants perceive CMC as a "social" medium. Thus CMC may be far from cold and impersonal; instead, it could be highly engaging and even intimate (Postmes, Spears, & Lea, 1999). More equal participation could be found in CMC classes than in FtF classes (Warschauer, 1996a). Given the above, the differences between FtF and CMC due to the availabilities of non-verbal cues need different intervention strategies in facilitating the social dynamics of CMC.

2.2.4.4 Norms and Identity

Outside of school, many students' communities are mediated by their FtF interactions as it is by their computer-mediated interactions (Davidson & Schofield, 2002). Social imagination for the connection between the community and its participants is enabled and constrained by norms that in turn provide the basis for an imagination about what are the possible and appropriate words and action (Shumar & Renninger, 2002). L2 students gain their knowledge of local conventions for building social identities through the particular forms of online participation, interaction, acts and stance displays. Similarly, in the area of communication, these kinds of social acts and stances are called social norms. As defined by Postmes, Spears and Lea (2000), social norms emerge out of their online interaction, and in turn shape their construction of social identity.
Castells (1997) defines "identity" as socially constructed; it is "people's source of meaning and experience" (p. 6). Individuals' identities are multiple and fluid because they are constantly making conscious choices in action that alters the social context and situation (Castells, 1997). However, Riva and Galimberti (1998) suggest that in normal situations, the repertoire of possible selves is a combination of the subjects' personal experience, and the living and communication environments they are familiar with. In public forums, anonymity allows participants to take on a different or false identity online, and provides a 'free space' for expressions of desire and fantasy (de Blanco, 2003). However, students in mixed-mode courses, under normal circumstances know each other by name. Thus, participants' identity is tied with the norms of the community because their relationships are interdependent. Postmes et al. (2000) used networked analysis of group structures and found that norms define communication patterns, and conformity to group norms increases over time. Norms are socially constructed over time and are restrained by social identities. Members of an online community continue projecting their identities (Gunawardena, 1995) in parallel with the norms that emerge from interaction; thus, normative influence plays a significant role in members' participation.

2.3 Learning via CMC

There are many ways to create learning communities on the Internet, such as via the network-based asynchronous mode. Warschauer (1996c) stated that learning is one of the common factors of student motivation for using CMC. In the area of communication, researchers (Postmes et al., 2000; Short, Williams, & Christie, 1976; Sproull & Kiesler, 1986) question the potential of the asynchronous, text-based mode of communication for quality social interaction due to its lack of non-verbal social cues. However, Rourke
(2000) argues that members are still able to find ways to convey paralinguistic emphasis and emotion. CMC users’ personalities and emotions can still be expressed and communicated through the medium. This suggests that the medium of communication may not be the barrier for quality social interaction.

2.3.1 Motivation

Motivation plays an important role in online learning. Motivation is a means instead of an end to learning (Cornell & Martin, 1997). Keller’s (1983) motivational-design model for Web-based instruction is comprised of four categories: interest, relevance, expectancy, and satisfaction. Interest refers to learner’s curiosity and arousal; relevance refers to the linkage of learning to the need and motives of the learner; expectancy refers to the causes that an individual attributes to his or her behavior, and satisfaction refers to continuing motivation, the desire to continue in the pursuit of similar goals. One of the causes for a lack of student motivation is due to “interpersonal difficulties between the student and the instructor or peers” (Cornell & Martin, 1997, p. 95).

I think the heart of the motivational problem could be more complex. As in FtF situations, there are possibilities that students participate in discussion or post messages on an electronic BB without the feeling of belonging to the community (Picciano, 2002). Without the sense of belonging, students can find their online communication becomes “an artificial exchange” (Biesenbach-Lucas, 2003). Students may not actually have the motivation, in other words, be intrinsically motivated about their learning in CMC. As a result, their participations may not be highly interactive or producing the effective learning outcome as evidenced in a number of research studies (e.g. Biesenbach-Lucas, 2003; Sengupta, 2001). The inconclusive findings in these studies suggest the importance of
examining students’ feelings of belonging to the community in relation to their interaction.

The same motivational problem applies to research on FtF communication; many CMC researchers and educators take successful communication for granted. CMC has the potential of facilitating successful communication; however, “achieving that potential is not automatic, easy, or necessarily enduring. Like freedom, it is a fragile accomplishment that must be constantly worked at and watched over” (Cole, 2002, p. xxv). Therefore, building and sustaining a learning community online requires extra time and efforts from both the instructor and students. What has been taken for granted is the social context that facilitates quality online participation. According to Mantovani (1996a), social context is a shared symbolic order in which action becomes meaningful, and so generates additional meaning. Thus social context is necessary for effective interaction and communication online.

2.3.2 Social presence

The community of inquiry has been emphasized by researchers (Garrison & Anderson, 2003; Lipman, 1991) because it comprises both rationality and freedom. Thus, students could gain control of their learning:

Students listen to one another with respect, build on one another’s ideas, challenge one another to supply reasons for otherwise unsupported opinions, assisted each other in drawing inferences from what has been said, and seek to identify one another’s assumptions. A community of inquiry attempts to follow the inquiry where it leads rather than being penned in by the boundary lines of existing disciplines. (Lipman, 1991, p. 15)
Some of the components of the community of inquiry include cognitive presence, social presence and teacher presence. Cognitive presence is the condition of critical thinking and learning. Teacher presence is instructor’s participation, online interaction with students, course design, facilitation and direction that encourage the cognitive and social processes for learning (Garrison & Anderson, 2003). Social presence needs to be established and developed for learning. As Aragon (2003) stated, “social presence...is one of the first components that must be established in order to initiate learning in an online environment” (p. 58), and is the focus of this study. Since network-based learning focuses on the human-to-human social interactions (Kern & Warschauer, 2000), researchers suggest that participants’ sense of belonging to their community impacts their online participation (Stacey, 2000) and social interactions (Gunawardena, 1995; Shumar & Renninger, 2002; Tu, 2000a, 2000b; Tu & Corry, 2002; Tu & McIsaac, 2002).

The success of network-based interaction depends on the creation and maintenance of the facilitative social context that underlies the specific virtual community. My thesis is that good L2 learners learn and can adapt to the use of networked technologies in facilitative social contexts. Unfavorable social context or climate could render L2 students in a site of internal conflict and frustration. Here I hypothesize that the key to creating and maintaining a positive social context is L2 students’ concept of “presence”. In distance education, the term presence refers to students’ sense of being in and belonging in a course and the ability to interact with other students and an instructor although non-verbal cues are not available (Picciano, 2002). Presence is fundamentally a social phenomenon and manifests itself through interactions among students and instructors (Picciano, 2002). In FtF situations, when people meet each other for the first time, they create social presence or a degree of interpersonal contact (Gunawardena & Zittle, 1997).
in order to ‘break the ice’ and create a comfortable situation for dialogues. Online, social presence also plays a crucial role in students’ perception of their virtual community. Thus, social presence is important in creating and maintaining the social context for social interactions (Aragon, 2003; Gunawardena & Zittle, 1997; Gunawardena, 1995; Liang & Carey, in press; Tammelin, 1998).

2.3.2.1 The Evolution of the Definition of Social Presence

The definition of social presence has gone through several stages or changes over the last twenty years. Short, Williams and Christie (1976) first defined the concept of social presence as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (p. 65). Social presence comprised both objective and subjective qualities of a communication medium. Social presence was initially defined as the objective quality of the communication medium itself: the more channels available to communicate non-verbal cues, the higher level of social presence the medium users experience (Kreijns & Kirschner, 2004). For example, video conferencing was rated with a higher level of social presence than telephone conferencing. However, Short et al. (1976) stated: “We conceive of Social Presence not as an objective quality of the medium, though it must surely be dependent upon the medium’s objective qualities, but as a subjective quality of the medium” (p. 27).

Years later, researchers (Garrison, 1997; Gunawardena & Zittle, 1997; Tammelin, 1998) redefined the concept of social presence not only as a quality of the communication itself, but a person’s feeling of “belonging to the community,” “socially present” and “socially together” in the network-based environment. The redefinition connects the issue to the concept of social context pertaining to social interaction, attitudes, motivation and
social equality. Garrison (1997) defined social presence as the degree that individuals project themselves through the medium, and emphasized that social presence is an important concept in understanding the social context of a virtual community. Later, Rourke, Anderson, Garrison and Archer (2001) extended the definition further in distance education and defined social presence as the ability of learners to project themselves socially and emotionally in a community of inquiry. This study used Rourke et al.’s definition of social presence. In other words, social presence is learners’ feelings of ‘belonging’ to the virtual community, ‘socially engaged’ or ‘involved’ with their learning community.

The evolution of the social presence definition suggests that students’ social presence is complex and there is much room for subjectivities. According to Tu (2001), the perception of the level of social presence varies among users, and it depends on the characteristics of the medium and the users’ perception about the medium. Features of CMC can shape ways for communication and hence the users’ social behavior, which is called social affordance (Kreijns & Kirschner, 2004). Moreover, the level of social presence varies over time and depends heavily on the interaction and context. In other words, students’ social presence is basically composed of their perceptions about new technologies, familiarity with the usages of computer, and the interaction with other community members.

2.3.2.2 CMC Users’ Social Presence

Users from different cultural backgrounds have different learning experiences and learners’ perceptions about technology are deemed to cause diverse perceptions of social presence. There are two concepts associated with social presence, intimacy and immediacy. CMC was perceived as low in intimacy or impersonal due to its lack of nonverbal
cues (Gunawardena & Zittle, 1997); however, later researchers found that CMC could facilitate effective communication if a proper amount of interaction time is provided (Markus, 1994; Tu, 2001). College students often perceive CMC as sociable and personal (Gunawardena, 1995), and some individuals perceive the medium as hyper-personal (Baym, 2003; de Blanco, 2003; Jones, 1995).

2.4 Interaction

Interaction is the avenue for negotiation of meaning and co-creation and co-construction of knowledge from a constructivist perspective. Gunawardena, Lowe and Anderson (1997) provided a new definition of CMC interaction from a constructivist perspective: “the participants in a computer-mediated conference are interacting to produce new knowledge or to arrive at new understandings of meaning” (p. 410). In this research study, assembling a patchwork quilt block was used as an analogy of constructing knowledge. Through interaction, each member of a community contributes to “the whole texture and color of thought, just as every scrap of fabric forms a distinctive elements in the overall pattern” (Gunawardena & Zittle, 1997, p. 411). For example, two types of constructions of knowledge for learning were identified during the interaction of debating: (1) “learning by accretion” or pooling, participants were active in each other’s learning processes only by providing additional examples of concepts which in essence were already understood; (2) participants adjust their ways of thinking to accommodate new concepts or beliefs inconsistent with their pre-existing cognitive schema (Gunawardena & Zittle, 1997). Further, interaction is the process of co-creating and co-construction of knowledge, and can be analyzed in five phases: sharing/comparing, dissonance, negotia-
tion/co-construction, testing tentative constructions, and statement/application of newly constructed knowledge.

Participants’ perception of interaction through CMC provides their sensation of social presence. Gunawardena (1995) examined the social presence theory and its implication for analyzing interaction, communication, collaborative learning and the social context of CMC in two studies conducted in 1992 and 1993. In the first study, Gunawardena and his colleagues used a questionnaire containing 17 five-point bipolar scales, such as stimulating-dull, personal-impersonal, sociable-unsociable, sensitive-insensitive, and solicited student reactions on a range of feelings toward the medium of CMC. On the second study, a comparison of two university student groups’ experiences with using a “listserv”\(^2\) for computer conferences was conducted. Interaction analysis of the conferences indicated a shifting social dynamic of online discussion: both conferences started as very task oriented then gradually become more social oriented dynamics toward the middle and end of the studies. In turn, incidental learning took place because the topics of discussions expanded into group and personal interests, and use of humor and social messages increased.

### 2.4.1 Instructor/Moderator

Gunawardena and Zittle (1997) emphasized that the key to quality social interaction is not solely based on the characteristics of the medium:

In spite of the characteristics of the medium, student perception of the social and human qualities of CMC will depend on the social presence created by the instructor/moderators and the online community. Characteristics often associated

---

\(^2\) Listserv is a large electronic distribution list (Gunawardena, 1995).
with CMC—interactivity, collaboration, and reflectivity—are not inherent within the medium but can result based on design, moderator roles, participation patterns, and involvement. It is these skills and techniques, rather than the medium that will ultimately impact student perception of interaction and social presence. (p. 23-24)

The social presence created by the instructor/moderator initially is crucial in promoting community members’ social presence. It is the kind of interaction that takes place among the members and the sense of community that is created that could impact participants’ perceptions of CMC (Gunawardena, 1995). The medium, on the other hand, does not play as significant a role as the instructor. Aragon (2003) stated: “Instructors play a significant role in establishing social presence for online environments” (p. 63). Moreover, the skills and techniques to create social presence also serve as the establishment of teacher presence by facilitating students’ cognitive and social processes.

Social presence can be created and cultivated by moderators (Gunawardena, 1995) to create a positive sense of online community and make space for social interaction to take place. Therefore, positive teacher immediacy such as addressing students by name, smiling, and complimenting students’ work increases instructional effectiveness (Gunawardena, 1995). Also, instructors need to make decisions on how much they should be involved with the discussion: some researchers (e.g. Aragon, 2003) suggest that instructors should not be passive, but should be actively involved in the discussion; other researchers (e.g. Rovai, 2001) suggest that instructors need not reply to all student postings, but students should feel that their comments are being read. Moreover, instructors need to balance between their involvement and leaving opportunities for other students to
respond to the postings and think for themselves. This sense of timing is an important characteristic of a successful online instructor (Aragon, 2003).

A successful learning community, whether it is FtF or online, requires collaboration between both the instructor and students to foster social presence. Without students' familiarity with the learning strategy and online learning environment, the instructor is very likely to encounter difficulties in creating a sense of learning community (de Bruyn, 2004). For example, some students do not contribute to online discussions; instead, they only visit and read messages, which is labeled as social "loafing" or "lurking". As a result, these loafers or lurkers are not truly engaged in learning. De Bruyn (2004) found that the reason for this behavior is that students have not managed their time well for participation or are afraid of repeating what other students have already said. Greater instructor immediacy can improve the quality and quantity of student participation, such as making links between online discussions with learning objectives and providing more time for scaffoldings in FtF meetings. Overall, de Bruyn (2004) suggests that only enthusiastic and committed instructors, who model social presence factors and monitor and moderate interactions, would be successful in facilitating the combined FtF and CMC-based learning environment.

2.4.2 Effects of Social Presence

According to Tu (2001), the level of social presence affects students' online learning, user satisfaction and interpersonal relationship. First, social presence is deemed to be a strong predictor of student satisfaction in an online environment (Gunawardena & Zittle, 1997; Richardson & Swan, 2003). In Gunawardena and Zittle's (1997) study, Likert-scale items were used to assess self-report measures of student satisfaction, social pres-
ence, barriers to participation, etc. The results of the study suggest that social presence alone is a strong predictor of students' satisfaction with the course. In line with Gunawardena (1995), social presence increases as online discussion progressed, more social and personal messages were posted toward the latter part of the conference than during the initial stages. Richardson and Swan (2003) explored the role of social presence and its relationship with students' perceptions of learning and satisfaction with the instructor. The results of the correlation analysis found that students with high overall perceptions of social presence also scored high in terms of perceived learning and perceived satisfaction with the instructor. More importantly, social presence contributed to students' overall perceived learning.

Second, members of an online community “need to be understood on their own terms as well as relating to one other” (Farlex, 2004). Research on social presence has focused substantially on comparing CMC with the FtF conversation; however, this does not provide much information on how interpersonal relationships develop (Mantovani, 1996b). Participants' sense of social presence does not only emerge from feeling toward the medium used, and their ongoing social interactions but also building of interpersonal relationships with other members of the community. Psychologists such as Piaget (1977/1995) and Vygotsky (1978) came to some common understanding of the social system that “should be seen as a network of relationships providing the space in which cognitions are elaborated” (Riva & Galimberti, 1998, p. 4). The level of social presence varies among CMC users because it depends on the characteristics of the medium and the users' perceptions about the medium (Tu, 2001); more importantly, it depends on users' experience of interacting with other members of the community, “the degree of salience of another person in an interaction and the consequent salience of an interpersonal rela-
tionship” (Tu, p. 46). That is, by ongoing exchanges of information and ideas and fostering relations (Downes, 2004), members of the community gradually develop their social presence from their ongoing interaction.

As a result, social presence influences group commitment, cooperation with others, and satisfaction with group efforts. When social presence increases, interpersonal relationships among users increase; vice versa, when social presence lowers, messages become impersonal and fewer non-verbal cues are revealed (Tu, 2001). Gunawardena and Zittle’s (1997) study showed that when social presence increases, the use of emoticons and user satisfaction of the communication medium increase.

2.4.3 Group Cohesion

Social presence and group cohesion are closely related because they both contribute to the social dimensions of the online environment. The social aspects become more substantial due to the formation of the “closely knit, socially cohesive group” (Gunawardena, 1995, p. 162). Group cohesion refers to members’ attraction to the group (Hogg, 1992). Group cohesion can overcome the seemingly ‘lean’ media over a period of time. Established norms and relationships enable individuals to exchange complex and equivocal information via relatively lean communication media (Yoo & Alavi, 2001), such as the text-based CMC. This implies that group cohesion could “influence the way group member perceive communication media” (Yoo & Alavi, p. 374). The relevance is that group cohesion is the psychological string that ties members together. Moreover, Yoo and Alavi argue that group cohesion influences both socio-emotional and task-related aspects in the group process. In addition, in established groups, group cohesion

---

3 Groups have a history of interactions (Yoo & Alavi, 2001), i.e. considerable time of interaction.
can increase members’ social presence and participations, and group cohesion can even have greater influence on social presence than media conditions. Thus social presence and group cohesion are two interdependent variables affecting each other via interactions.

2.4.4 Ideal Social Presence and CSCL

A rich social presence could enable participants to redefine and re-imagine their community and perceptions of identity through experience. As illustrated in Renninger and Shumar’s (2002) Math Forum, community evolves and it continues to shifts as participants’ vision and imagination of possibilities expand. Also shifting attitudes about technology, online- learning and teaching are paralleled with their experience in the shifting community. Next, participants need to be identified with the shifting community by which they find relevance between their identities and the activities in the community. In turn, this identification expands their sense of possible selves (Markus & Nurius, 1986).

Social presence is the kind of identification that participants need for intrinsic motivation for their participation in the virtual communities. Therefore, educators intend to establish the ‘ideal’ social presence: i.e., social presence that is conducive to learning is crucial in CMC learning environments, especially in computer-supported collaborative learning (CSCL) environments. CSCL is an interdisciplinary research area that focuses on how collaborative learning, supported by technology, can enhance peer interaction and work in groups, and how collaboration and technology facilitate sharing and distributing knowledge and expertise among community members (Lipponen, Hakkarainen, & Paavola, 2004). Researchers (e.g. Kreijns & Kirschner, 2004) emphasize that while cognitive process is thought to be important for CSCL, educational research encounters two pitfalls: taking social interaction for granted, and ignoring or neglecting group forming
and group dynamics. CSCL systems are fundamentally social systems because the technology should be designed specifically to mediate and encourage social acts that constitute group learning and lead to individual learning (Suthers, 2005). Thus students need a sociable CSCL environment for learning. Nonetheless, students’ social and emotional needs that include achieving their ideal social presence have been overlooked or ignored.

### 2.4.5 Subjective Awareness

Researchers (Polhemus, Shih, & Swan, 2003; Stacey, 2000; Tu, 2000a, 2001) suggest that instructors may use various strategies to increase the level of social presence. Some of the techniques that can be used to foster a sense of presence and community building include: complimenting student, self-disclosure, warmth, and activity that build and sustain a sense of group commitment (Rourke et al., 2001). In addition, students’ subjective awareness of feeling accepted by their instructor and peers plays an important role in their social presence. The level of social presence is affected by the attributes of the different CMC system, users’ subjective perceptions of the social context, and how the students are engaged in online communication.

Researchers suggest that the three dimensions of social presence, namely social context, online communication and interactivity, are important for building online community and enhancing student interaction (Durlak, 1987; Tu, 2001; Tu & Corry, 2002; Tu & McIsaac, 2002). Users have different levels of social presence depending on “how users perceive and utilize a CMC system” (Tu, 2001, p. 57). As shown in Tu’s study, Chinese students’ perception of social presence on the three different CMC systems, i.e. email, BBS and real-time chat, is mainly rendered within the stated three social dimensions. With respect to social context, the study showed that Chinese students experienced
difficulties with CMC due to their unfamiliarity with the communication form, culture conflict, social relationship, face-saving, rapid pace of online conversation and nervousness about unexpected chat invitations and task. With respect to online communication, Chinese students encountered difficulties due to their language competence, writing styles, lack of computer literacy, inability to use paralanguage and to catch up with the train of thought of other students in online discussions. With respect to interactivity, Chinese students felt frustrated when they encountered slow responses from instructors or other students. In addition, they became worrisome when they received lengthy messages, and felt others ignored their threads of discussion and a lost of privacy.

As described above, Tu (2001) implied the unique characteristics in the Chinese students' use of CMC systems. However, I argue that these characteristics are not exclusive to Chinese students; students of any ethnicity may go through the same experience of using CMC, and show similar characteristics, especially for L2 students who have various language and learning backgrounds. L2 students create their social presence by projecting their identities and building online communities through social interactions. This process is part of the complex negotiation processes of identity that L2 students go through in language socialization. The ongoing social interactions and building of interpersonal relationships are relevant to development of social presence and identity projection. Thus, exploration of students' development of social presence could help to understand the nature of interaction, the attributes of the medium, the use of the online communication, relationship building and identity projection. Picciano (2002) stated, “the success of many online courses is dependent upon the nature of student to student and student to faculty interaction” (p. 33). Ultimately, social presence affects individual stu-
students' interaction, socialization, identity construction and learning in a network-based learning community.

2.5 Narrative Interaction

Interactions in a virtual environment can be rendered among people or between people and artifacts. The focus of the study is on the interaction among people, (i.e. network-based), which brings about the following experiences:

- Allows the joint construction and distribution of experience and insights
- Enables social construction of stories and narration shared by the members.
- Supports feedback and review mechanisms among members of the user groups.
- Technology allows participants to use many modes of representations (e.g. simulations) to construct new understanding that leads to conceptual change. (Conkar, Noyes, & Kimble, 1999, p. 390)

As illustrated above, CMC provides spaces for social construction of stories and narratives, which suggests the effective use of narratives for the purposes of learning. There are various strategies in building a community online (Shumar & Renninger, 2002). The task of narrative interaction, i.e. the act of sharing stories, can be a useful task for developing quality virtual learning environments. In this learning environment, participants have a strong sense of social presence. Their interactions are affecting their identity construction and maybe their pre-conceived concepts.

Today, some instructors strive for high quality social interaction in CMC, and activities like writing and sharing narratives could be effective. Social presence is to facili-
tate a learning community that is called a knowledge community in Craig and Olson's (2002) terms. A knowledge community is supposed to be a place for narratives:

Knowledge communities are expected to be safe, storytelling places where educators narrate the rawness of their experiences, negotiate meaning, and authorize their own and others' interpretations of situations. They take shape around common places of experiences as opposed to around bureaucratic and hierarchical relations that declare who knows, what should be known. (Craig & Olson, p. 116)

Narrative has been used widely by scholars of various disciplines to gain understandings of social life and human interaction (Bruner, 1986; Bruner, 1990; Riessman, 1993). Narratives are individual interpretations of life-stories, and aim to reveal the "truths of our experience" (Personal Narratives Group, 1989). The focus of attention is on the tellers' interpretations, contexts that shape the storytellers' worldviews, stance and the meanings of the experience. Rossiter (2002) suggests that narratives make information easier to be remembered because they involve the audience in the actions and intentions of the storyteller. This becomes an active, personal and meaning-making process. In knowledge communities, participants engage in a personal public exchange: the teller together with their audience explore their experience, "making their practice transparent and their knowledge public...In these personal public exchanges, profound meaning in instructors' everyday experiences can be found" (Craig & Olson, 2002, p. 117). The audience or students then actively learn from this public exchange. Aragon (2003) also suggests that students should feel comfortable sharing their personal stories and experiences, and the process of sharing establishes social presence among students and with the instructor. Clough (2002) stated, "Narrative is useful only to the extent that it opens up (to
its audiences) a deeper view of life in familiar contexts: it can make the familiar strange, and the strange familiar” (p. 8). Rossiter (2002) also emphasizes that the power of narratives is stimulating empathic responses:

 It is the particularity of the story—the specific situation, the small details, the vivid images of human experience—that evokes a fuller response than does a simple statement of fact. This detail provides the raw material for both cognitive appreciation and affective response to the experience of another person. (p. 3)

2.5.1 Experience

Experience is crucial for individual’s identity construction. Clandinin and Connelly (2000) skillfully illustrated the relationships among people, their experience and telling of stories:

“experience is the stories people live. People live stories, and in the telling of these stories, reaffirm them, modify them, and create new one. Stories lived and told educate the self and others, including the young and those such as researchers who are new to their communities. (p. xxvi)

Individuals construct and reconstruct their self through their narratives because narratives are “constructed, creatively authored, rhetorical, replete with assumptions, and interpretive” (Riessman, 1993, p. 5). It is through narratives among members of the community that members construct their social identity as shown in infant or small child’s construction of social identity in his or her childhood. Blake, Blake and Tinsley (2001) also showed that narrative can be a useful tool for constructing identity. Through narrative interaction or exchange of stories, individuals go through a process of self-discovery, in which they rediscover their own selves. Also, by exploring and describing the particular
contexts in which narrative and story were used, 'pictures' of how individuals construct knowledge and self-identity are painted.

One of the benefits of narratives is allowing the storyteller to pause and make sense of their actions. In Akin's (2002) research study, the author wrote about her experiences as an instructor in her own classroom in order to make sense of her teaching. The stories she wrote about her teaching reveal significance in conceptualizing herself and her role as an instructor. Via narratives, Akin inserts herself more fully into a vision of her teaching. Writing became an act of articulation and reflection of past experiences and situations. Through articulation and expression, the perceived world becomes validated. Without narratives, existing perceptions can easily lose their voice/saliency and be forgotten due the facing of different challenges in continuing practices. Moreover, in Akin's narratives, the conscious choices she makes on conceptualizing herself and her role also enable her to "contest, resist, and revise, and reconceptualize herself" (Akin, p. 68). For example, Akin recognized her struggles with her expectations of her classroom and teaching as the theme that ran throughout her narratives. As she continued writing, she became more focused on related issues; she realized where they came from and then re-framed them. Narratives enable teachers to put themselves back into the context of teaching and learning. This act of re-imagination enhances their sense of ownership of their work, their ability to focus, their confidence in taking control over their teaching and learning. However, Akin saw sharing her narratives with others as a huge risk. Her fears include being deemed inadequate, breaking the institutional silence and exposing to close scrutiny in a hostile environment.
2.5.2 Narrative Practices

In teacher education, narratives have been used extensively between teachers in training and their mentors. Narratives seemed to be especially useful in capturing the situated complexities of teachers’ work and classroom practice; narratives construct the action and consciousness or emotional landscapes simultaneously (Lyons & LaBoskey, 2002). Moreover, people tend to construct meaning of their everyday lives in the form of narrative; thus it makes sense that narratives are used to understand other aspects of lives or experiences. Teachers in training produce stories, then share and discuss them with other group members. This practice engages the participating members “in a process of reflective restorying wherein their collective and individual knowledge of teaching is constructed and reconstructed” (Lyons & LaBoskey, p. 44). This reflective “restorying” enables the teachers in training to realize that they are always embodied and act upon their experiential knowledge. Narratives create inner dialogues between the perceptions of theory and practice, and among past, present and future practices. The ways the stories are told influence how the storytellers “perceive, remember and prepare for future events” (Daiute & Lightfoot, 2004, p. x). Teachers in training negotiate with their experiential knowledge and current issues, then re-imagine for future adjustments in their practices.

Lyons and LaBoskey (2002) offered an example of narrative practice. Lyons and LaBoskey who were the instructors of a graduate course found that group discussions were not stimulating, and as more instructor interventions were used, the worse it seemed to get. Thus the assignment had been changed from originally writing systematic case analysis to storytelling. The teachers in training were offered two choices for storytelling: (1) conducting observations and interviews in two different classrooms, and writing a
story to retell something that actually happened in those classrooms; (2) using their imagination to write a fictional story of classroom practices. The goal was to generate an open-ended, nonjudgmental and unbiased conversation. The interactive storytelling process creates "texts that bring things into view---one’s actions and values, what is important in teaching---and they bring into consciousness the teachers’ own beliefs, ones he or she may have acted upon even subconsciously" (Lyons & LaBoskey, p. 45). As a result, the teachers in training were able to reflect on their practices and make changes in their classrooms.

2.5.3 Power of Narrative

Narrative has the potential to raise the voice of the ones who have been in ‘disadvantage’ or ‘silenced’ (Blake et al., 2001). Such as when documenting the history of women, oral history projects, women’s diaries, travel writings and journals as illustrated in the Internet Websites, (e.g. the website named History of Woman⁴) are ways of sharing women’s experiences. When other women read and respond to these documents, they think about, redefine and re-imagine their own identity as a woman. As a result, women’s identity shifts as they learn about other women’s life experience. Moreover, the online interactions involve sharing thoughts and feelings enable women to display similarities and match experiences, and ultimately enhance relationship building (Davidson & Schofield, 2002). This implies that narrative has the potential to raise the voice, enhance the confidence and transform the identity of the L2 students who seem to be at a ‘disadvantage’ due to their English proficiency.

⁴ http://www.lib.washington.edu/subject/History/tm/women.html
Narrative is not just storytelling; it is the means of socialization into cultural values and beliefs (Celinka, 2004), as children often practice in their first language (L1). The constant interactions with the caretakers "socialize infants into how they should think about people around them and provide them with models of how they themselves might use affective displays to create, transform, or destroy relationships and other social identities" (Ochs, 1993, p. 292). For instance, children come into understanding the past history and identity of the family as the outcome of the jointly constructed narrative interactions at dinnertime. The culture of narrating or storytelling seems to be universal across generations. As Reissman (1993) stated, "the impulse to narrate is natural and universal" (p. 54). Children construct and reconstruct personal narratives that are important factor in developing their self-concept (Celinka, 2004). Further, through narrative interactions, children construct their own identity. Thus it might be stated that each of us constructs and lives a narrative and this narrative represents us, our identities (Eakin, 2004; Sacks, 1993). Individuals write narratives that are composed of memory and anticipation over time.

Narratives provide the powerless with imaginative new powers of identification and personal voice, which are believed to bring about transformative learning (Anderson-Patton & Bass, 2002). For instance, Solis (2004) learned from the Mexican women of illegal immigrant status in New York who orally narrated their life experiences. These women learned how to voice their ideas, how to communicate with others as equals, and they became members of a community organization. The women's dialogues illustrated how their discourse strategies served to construct a common narrative of gaining self-confidence in the process of learning to speak as members of experiences. As a result, the
women transformed from non-speakers and nonmembers to speakers and active participants in the community organization.

### 2.5.4 Autobiography

Narrative activity in the form of autobiography is an identity activity because autobiography is the “discourse of identity” and it “structures our living” (Eakin, 2004). Writing an autobiography embodies the authors in articulating their perceptions and speculations, making reflections upon their experiences and imagining their future actions. Moreover, narrative interactions of sharing autobiography and reflecting on the life experience of someone may promote self-disclosure, critical reflection and social relationship building. If social presence aims to facilitate the building of trust and self-disclosure (Aragon, 2003), narrative interactions may contribute to participants’ perceptions of social presence. Narratives seem to be useful in capturing the situated complexities of the learning process, such as learning a L2. The process is likely to be filled with cultural shocks, confusions and self-doubt. Also, narrative interaction may enhance group cohesion, trust and belonging to the virtual community, and these elements may constitute participants’ sense of social presence and their identity construction. Sharing autobiography online may display tremendous immediacy and make up self-narration and life writing; it may also increase L2 students’ social presence and even affect their perspectives and identity construction. Luo (2004) found that sharing personal stories and experiences built a strong social bonding among the students but she did not discuss the details of how that social bonding developed. I hypothesize the combined use of language/culture/identity narrative in the form of autobiography and CMC for instructional purposes. This study intends to explore the effects of language/culture/identity narrative
2.6 Summary

In the 21st century, many people hope to find ideal community and social spaces via networked communication. The essence is that positive social context and social interactions need to take place, which depend on levels of social presence. This study hopes to gain understandings of the impact of social presence on students’ interaction, community-building and identity construction. I intend to explore how students’ social presence influences their online interactions between students and teacher, students and students, and their interactions in FtF classroom settings. The discursive interactions in virtual communities are constantly redefining participants’ identity, and shared understanding of norms and structures (Shumar & Renninger, 2002). According to Ochs (1993), “social identities evolve in the course of social interaction, transformed in response to the acts and stances of other interlocutors as well as to fluctuations in how a speaker decides to participate in the activity at hand” (p. 298). A network-based learning environment provides a space for researchers to look into L2 students’ interactions and identity constructions that are socially and culturally situated processes.

Though researchers agree that positive social contexts encourage positive learning outcomes, hitherto very few studies have focused on language learners’ social presence that is substantial in facilitating social contexts and interactions. How social presence contributes to the social norms that form identity construction in an asynchronous learn-
ing environment needs further investigation. Writing and sharing the lan-
guage/culture/identity narratives in an online learning environment can bring about dif-
ferences in a social context. The study of the combined use of the lan-
guage/culture/identity narratives and CMC in education hopes to reveal a 'clearer picture'
or understanding of students, including L2 students' development of social presence in
mixed-mode courses.
Chapter Three: Methods of Inquiry

3.1 Introduction

This chapter provides the description of the methodology of inquiry used in this study. As mentioned earlier, this study employed grounded theory to explore student participants’ social presence in an intensive mixed-mode course. Through examining the quantitative and qualitative data, the study revealed insights into students’ development of social presence.

This chapter begins with the general assumptions of the study. First, based on these assumptions, the theoretical paradigm and the measurements and quantitative approaches employed in relevant literature are discussed. Second, justifications for using the method for this study are presented. Third, descriptions of the context of the study are presented, including the research site and the participants. Fourth, I describe the types of data sources of the study including BB transcripts, interview transcripts, field notes, students’ assignment and the course documents. The method of analysis is two-fold. Quantitative content analysis (QCA) is used to investigate students’ level of social presence, and this data is integrated into the next level of data analysis using a grounded theory approach. With the use of grounded theory method, a theoretical model of social presence has emerged from the data. The process of generating the theoretical model is described along with the emerged themes and patterns. At the end, the trustworthiness of the study and a summary of the chapter are presented.

3.2 General Theoretical Assumptions of the Study

This study is a qualitative case study that involves detailed examination of a single group of students in a “natural setting” (Borg & Gall, 1989; Denzin & Lincoln, 1994;
Merriam, 1998; Stake, 1995; Yin, 1984). A qualitative approach was used because the goal of this research was to “study things in their natural settings, attempting to make sense of, or interpret, phenomena in term of the meanings people bring to them” (Denzin & Lincoln, 1994, p. 2). From Lincoln and Guba’s (1985) Naturalistic Inquiry Model, 10 characteristics of qualitative research have been identified by qualitative researchers across various disciplines. And these characteristics well match with the nature of my study which looks into the subjectivities of students’ social presence (Borg & Gall, 1989). The Naturalistic Inquiry Model emphasizes holistic inquiry in a natural setting, human characteristics which include bias and subjectivity in data collecting, and focuses on social processes and the meanings that participants attribute to social situations. Overall, a qualitative research method is a means through which more educational insights into the research subjects and sites may be explored. Moreover, this study intended to uncover the nature of persons’ experience with a phenomenon (Strauss & Corbin, 1990), therefore a qualitative approach was employed.

A case study can be useful for studying students’ multiple perspectives and subjectivity in social presence research. Yin (1984) suggests that there are at least four applications of a case-study approach, and thus it has a distinctive place in evaluation research. The four applications include being able to try to explain the causal inks in real-life interventions that are too complex for the survey or experimental strategies; describe the real-life context; provide description and illustration of the intervention itself; and explore the situations in which the intervention being evaluated has no clear or a single set of outcomes. A case-study methodology has been used extensively in the areas of research including clinical psychology and the studies of individual differences (Borg & Gall, 1989).
Thus, a case study is suitable for this social presence research that looks into the individual subjectivities and differences, which have no clear or a single set of outcomes.

### 3.3 Constructivist Paradigm

This qualitative case study is defined within the constructivist, more specifically the social constructivist paradigm. The constructivist paradigm "assumes a relativist ontology (there are multiple realities), a subjectivist epistemology (knower and subject create understandings) and a naturalistic (in the natural world) set of methodology procedures" (Denzin & Lincoln, 1994, p. 13). Constructivism is defined as a theory of knowledge construction that is based on learners' building on their prior knowledge and experience to shape meaning and construct new knowledge (Lambert & Walker, 1995). The process is called *meaning making* (Bruner, 1990). Constructivism respects individual differences and subjectivities. Because prior knowledge and experience are variables in constructing meaning, learners' understanding of any experience cannot be entirely identical. Constructivism is concerned with learners' subjectivity in their interpretations of the world and understanding of knowledge and beliefs. Though constructivism agrees with objectivism on objective reality, "there is a real world that we experience" (Duffy & Jonassen, 1992, p. 3); constructivists believe that human beings impose different meanings on the world, and in turn, there are various meanings or perspectives for any event or concept. In other words, the one 'correct' meaning should not be the ultimate purpose of any learning experience.

A constructivist environment is built to "support multiple perspectives or interpretations of reality, knowledge construction, and context-rich, experience-based activities" (Duffy & Jonassen, 1992, p. 137). In particular, social constructivism could be a good
theoretical framework for social presence research. The Russian psychologist Lev Semenovich Vygotsky (1896-1934) is a very important thinker in social constructivism. The psychologist pays great attention to the social context and the social process of learning. In accordance with the cognitive constructivist, Jean Piaget (1896-1980), Vygotsky identifies the cognitive abilities of the learner and claims that children create their own concepts through active use of learned facts. However, Vygotsky also pays greater attention to the social context in which the learning takes place and stressed the social process of learning. Vygotsky (1978) suggests that cognitive development is the results of historical, cultural and social interaction. The essence of learning is advancing the zone of proximal development (ZPD), which is possible “when the child is interacting with people in his environment and in cooperation with his peers” (Vygotsky, 1978, p. 90). As such, students who participate in computer-supported collaborative learning (CSCL) interact with each other extensively to advance their ZPD and co-construct new knowledge.

The hypothesis is that one of the important factors of successful CSCL is whether students feel they belong to their online community. The education philosopher John Dewey’s (1859-1952) emphasis on the relationship between communication, community and democracy indicates that “all human experience is ultimately social: that it involves contact and communication” (Dewey, 1938, p. 38). Moreover, the insights of human experience become more meaningful when they are shared among community members. Bruner (1990) stated: “By virtue of participation in culture, meaning is rendered public and shared” (p. 12-13). Nonetheless, sharing would not be meaningful without social presence because only when students feel they belong to the community, do they become willing to share. Social presence thus facilitates CSCL that aims to create a shared experience.
Social constructivists are mainly interested in meaning-making activities that make up a large portion of social phenomena, and how these activities shape action (Denzin & Lincoln, 1994). This study looks into the language/culture/identity narrative activity which is a meaning-making activity and how it impacts students' interaction. Moreover, students' social presence impacts their social interactions (Gunawardena & Zittle, 1997; Gunawardena, 1995; Shumar & Renninger, 2002; Stacey, 2000; Tu, 2000a, 2000b, 2001; Tu & McIsaac, 2002). The hypothesis is that social presence could be the key to developing a facilitative learning community. It could either facilitate or constrain knowledge and identity constructions. Thus the characteristics of social presence fit under the social constructivist perspectives. As mentioned above, the social constructivists view knowledge as socially and culturally constructed, and learning is a social process. Social constructivists concern the nature of social interaction/exchange, social context and social relationships in a learning community:

knowledge is grounded in the *relationship* between the knower and the known. Knowledge is generated through social intercourse, and through this interaction we gradually accumulate advances in our levels of knowing. (Kanuka & Anderson, 1998, p. 3)

Gergen (1994) stated: "It is human interchange that gives language its capacity to mean, and it must stand as the critical locus of concern" (p. 263-264), thus meaning is "made coherent by various forms of relations" (Schwandt, 2003, p. 307). In addition, social constructivism is currently the most accepted epistemological position associated with online learning (Kanuka & Anderson, 1998). Similarly, the social constructivists view knowledge as socially and culturally constructed, and learning is a social process (Jonassen, 2000; Jonassen & Land, 2000; Vygotsky, 1978; 1986).
3.4 **Social Presence and Social Constructivism**

Social presence is important in developing an imagined and ideal community. The flexibility and durability provided by online interaction contribute to the essential qualities of the imagined community (Anderson, 1991). Imagination is defined as “creating images of the world and seeing connections through time and space by extrapolating from our own experience” (Wenger, 1998, p. 173). Also, imagination plays an important role in a community of practice (Lave & Wenger, 1991; Wenger, 1998). Individuals' connection to virtual communities is based on their imagination about the communities (Shumar & Renninger, 2002), and the imagination is also social. Depending on levels of social presence, people contribute to their imagined community differently. Social presence contributes to students' ideal online learning communities. Rourke (2000) found that students' perceptions of the ideal social environment of a computer conference as friendly, warm, and trusting, personal and disinhibiting.

In this study, the online interaction involves sharing and discussing group members’ autobiographies about learning a L2 in terms of SLA, which focus on their language/culture/identity development experiences. This activity aims to support and facilitate CSCL. It becomes a co-construction of meaning and public bodies of knowledge from a social constructivist perspective. Everyone learns from each other's experience, and shares their thoughts, ideas and feelings. Through agreeing or disagreeing on various issues, the students co-construct some common beliefs and views about language and culture learning, and at the same time their individual perspectives on how to learn and teach a L2. By reading and responding to each other's postings, together they could scaffold and expand on their ZPD. The online BB allows this joint construction of knowledge and collective development. In addition, cooperative activities such as sharing autobiography
in CMC could promote group members’ knowledge and identity construction, emotional involvement, and building social relationships. As such, the activity is deemed to contribute tremendously to members’ levels of social presence and construction of knowledge and identity in a learning community. To L2 students, a high level of social presence reduces their feelings of inhibition and encourages active participation.

3.5 The Measurements and Research Design

The measurements of social presence have been claimed problematic by researchers (Garrison & Anderson, 2003; Tu & Corry, 2002) in Distance Education. The source of the problem is its previous narrowly defined concept. Researchers extended Short et al.’s (1976) narrow definition that social presence is the qualities of the communication medium, by including a person’s feeling of “belonging to the community,” “socially present” and “socially together” in a network-based environment (Gunawardena & Zittle, 1997; Rourke et al., 2001; Tammelin, 1998). Due to the broadened conceptualizations of social presence, social presence research is demanding a more robust theory and measure of social presence (Biocca et al., 2003).

The social presence measurements of Short et al. (1976) and Tu (2000a) focused mainly on the qualities of the medium, and failed to provide insight into the subjective and attitudinal natures of social presence. Tu (2000b) and Tu and McIsaac (2002) used multiple procedures in their social presence research. Compared with previous quantitative studies (e.g. Gunawardena & Zittle, 1997) and qualitative studies (e.g. Tu, 2001), the use of multiple procedures brought about richer data and insight about students’ social presence. The findings suggested that social presence is complicated, and the current so-
cial presence instruments (Short et al., 1976; Tu, 2000a) must be revised to include additional variables.

The limitation of the quantitative approach is that it does not reveal much detailed insight about individual social presence. The use of a quantitative approach solely could lead to misinterpretation of a social phenomenon (Angeli, Bonk, & Hara, 1998); however, “the use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question” (Denzin & Lincoln, 1994, p. 2). The combination of multiple methods and data in a single study could add “rigor, breadth, and depth to any investigation” (Denzin & Lincoln, p.2). Moreover, using a method triangulation may provide more insight about students’ social presence; one method can be combined with another method to provide insight into different levels of analysis (Creswell, 2003; Mathison, 1988).

This study uses mixed methods to answer the research questions. The quantitative approach is embedded or nested within the predominant grounded theory method. According to the concurrent nested research design (Creswell et al., 2003), a quantitative method could be embedded or nested within a predominant qualitative method (see Fig. 3-1). This study design serves the same purpose as Morse (1991); the primarily qualitative design is embedded with some quantitative data to enrich the descriptions of the studied phenomenon. Quantitative and qualitative data were used to obtain varied perspectives. Given that, QCA that produces numerical findings contributes to the researchers’ theoretical sensitivity that are the ways of thinking about data in theoretical terms during the coding process (Strauss & Corbin, 1990). The frequency of a performance, the number of social presence instance in this study, and how they are carried out and expressed give the generated theory specificity.
Grounded theory allows me to use a qualitative method to understand students' experience in a mixed-mode course. Grounded theory was first developed by the two sociologists, Barney Glaser (1930- ) and Anselm Strauss (1916-96), for health-related research (Glaser & Strauss, 1967). Grounded theory involves inductive data analysis and systematic procedures to build theory out of data. That is researchers try to develop understanding and to draw generalizations after data is collected (Borg & Gall, 1989). When a theory is emerged from or grounded in data (Creswell, 2003; Gales, 2003; Strauss & Corbin, 1994), it could better reflect the data and make no a priori assumptions about equivalence (Gales, 2003). In other words, without making hypotheses, the generated theory better reflects the phenomenon.

Grounded theory builds descriptive theory that is "grounded" in real-life situations (Merriam, 1998) and is "discovered" through direct contact with the social world (Locke, 1996). In addition, it allows extending the existing theory and attempts to explore
how it applies to new and varied situations (Bryant, 2002; Strauss & Corbin, 1990). This study intends to extend social presence theory that is originally applied to distance education courses to mixed-mode courses. The use of grounded theory will amend, add, and modify the existing theory to fit the particular situations.

3.6.1 Philosophical Orientation

According to Biocca et al. (2003), theories of social presence have roots in symbolic interactionism which also is the philosophical orientation of grounded theory. Thus, a grounded theory approach could be appropriate for the study of social presence because they both have the same philosophical underpinning. Symbolic interactionism was developed by the prominent philosopher George Mead (1863-1931), whose philosophy is that consciousness arises through interaction with others in a community or society. Human beings live in a world of common meanings and “meaning is socially generated and sustained” (Mead, 1938, p. x). Individuals belong to a community which represents an organized set or responses to certain situations, and the individuals can take these responses over into their own nature, and call them out by means of the symbol or word in the social response. In other words, individual consciousness develops from this mental process and its inner structure is “taken from the community to which he belongs” (Mead, 1934, p. 270). As a result, individuals recognize their memberships in a community because they take the attitude of those concerned, and control their own acts in terms of common attitudes.

Moreover, symbolic interactionism recognizes the importance of building social relationship via interactions. Mead’s (1934) notion of “blessed community” and the community of universal religion rests on co-operative activities. The person who is a
stranger in need could call out a helpful attitude in other people and vice versa because they belong to the same community in which co-operative activities are expected. These co-operative activities encourage the development of social relationships that bring people together, so that people can take the attitude of the other in their various life-processes (Mead, 1934). Thus, interpersonal interactions and social relationships are important for the construction of a community, such as a learning community in an online environment.

3.6.2 The Procedures of Grounded Theory Research

The essence of grounded theory analysis is the coding procedure that includes open, axial and selective coding. There are more procedures and techniques used in analyzing data, including theoretical comparison, flip-flop, systematic comparison, waving the red flag, linking and developing categories and theoretical sampling (Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1994). Nonetheless, the key of this method is researchers’ facilitating openness and flexibility throughout the whole research process. Observation, data collection and organization, and generating theory are conducted simultaneously.

For examples, the constant comparative method of analysis involves making constant comparisons and asking questions. The constant comparative process involves three types of comparisons (Glaser, 2004). First, incidents are compared to incidents to establish underlying uniformity and its varying conditions, and the uniformity and the conditions become generated concepts and hypotheses. Second, concepts are compared to more incidents to generate new theoretical properties of the concept and more hypotheses, and finally, concepts are compared to concepts. The purpose of the constant comparative method is to generate a theory through systematic procedures. The method
makes the researcher focus on the emerging theory and maintains theoretical sensitivity. The research literature, professional and personal experiences and the analytical process are the sources of theoretical sensitivity. In this study, from pre-existing social presence theory, the researcher was able to develop and maintain the "attribute of having insight, the ability to give meaning to data, the capacity to understand, and the capability to separate the pertinent from that which is not" (Strauss & Corbin, 1990, p. 42).

Moreover, the openness and flexibility of the grounded theory method are found in the procedures of asking research questions throughout the research process. There are steps for asking questions from research data (Strauss & Corbin, 1990). First, the researcher asks the research questions that allow flexibility and freedom in order to develop theory from in-depth exploration. Second, the initial questions that start out broadly become narrow and more focused as research progresses. Finally, the researcher keeps generating new research questions following the action and the process of research. The relevance of the research questions in grounded theory study is that they are statements that could identify the social presence phenomenon.

3.6.3 The Four Criteria

The theoretical model that emerged in this thesis adhered to the four criteria identified by Glasser and Strauss (1967). The four criteria were to ensure the quality of the generated theory: fit - the categories within the theory must directly relate to the data; work - the theory should explain and interpret what is taking place within the context; relevance - the theory is relevant for allowing the core problems and processes to emerge from the data, and modifiability - the theory must be adaptable and modifiable (Glaser & Strauss, 1967; Strauss & Corbin, 1990, 1998). The goal is to strive for a valid theory that
“corresponds to the phenomena in the area under study” (Lomborg & Kirkevold, 2003, p. 198). *Fit* ensures the external validation of research; *work, relevance* and *modifiability* support the validity of theory, workability of research and the dynamic of social reality.

### 3.6.4 The Application of Grounded Theory Research in Education

Grounded theory has been used to understand students’ perceptions and individual differences in education. The following research studies used grounded theory and successfully captured participants’ perception or subjectivity, and in turn, detailed attitudinal insight was obtained.

Zafeiriou, Nune and Ford (2001) used grounded theory to elicit students’ perceptions of participation in a CMC environment. The study identified the related factors that affect students’ participation in text-based CMC, focusing on *students’ own perceptions* of participation. Data was compared to construct concept and generate theory following Strauss and Corbin’s (1990) approach. Using axial coding procedures, the research found that students’ participations were affected by Contextual Conditions and Intervening Conditions. Contextual conditions used quality and quantity as the two parameters for online participation assessment. Intervening conditions included a number of intervening factors that were found to either facilitate or constrain online group participation, for example, familiarity with the computers, familiarity with the subject, typing skills, level of interest and technical problems. The research demonstrated the usefulness of qualitative approaches in educational online research. Zafeiriou et al. (2001) suggest that more qualitative research is needed to explore the social issues in CSCL. It becomes increasingly evident that grounded theory purports to offer insight into students’ participation thus providing researchers with a more in-depth understanding of the social phenomenon.
Gon, Humphreys and Hamp-Lyons (2004) used grounded theory method to understand individual difference factors, language learning psychology and processes of the foreign language learners in China. The research aimed to provide an understanding of the potential attitudinal/behavioral differences between successful and unsuccessful Chinese EFL tertiary-level students. Six categories emerged from the analysis of the data:

(a) conceptualizing English language learning; (b) perceptions of the College English Course; (c) learning and practicing strategies; (d) self-management; (e) internal drive; and (f) English proficiency tests. (Gon, Humphreys & Hamp-Lyons, p. 234)

The study showed similarities and differences between successful and unsuccessful students’ conceptualization of language learning process. Both groups of students thought that learning means accumulation of language knowledge and developing practical language skills. Learning a language means learning its culture, developing and maintaining language sense, and learning by using. Moreover, successful students tend to favor both the incremental/quantitative (e.g., viewing English as collection of linguistic bricks) and integrative (e.g., learning English means developing language sense) conceptions, and use multiple approaches or multiple learning strategies. On the other hand, the unsuccessful students tend to favor mainly the incremental/quantitative conception. This suggests their relatively limited view of English learning. As shown, grounded theory provides detailed understandings of the context and students’ perceptions, which could be overlooked if a quantitative approach was employed.

Burck (2004) has been one of the pioneers who combined grounded theory with other approaches and gained unique understandings. Burck used the combined grounded theory and discursive approach to explore issues of bilingualism and multilingualism.
The study intended to understand participants’ perspectives of differences in their different languages and how they construct their views. The study was informed by social constructivism, and the data were transcripts of the semi-structured interviews and pertinent extracts from the autobiography. The mixed methods allow the researcher to make reference to participants’ past events, ideas and beliefs, and understand how they construct meaning and identity about being bilingual or multilingual. Seven categories emerged from the data: (1) different experience of self, (2) L1s, (3) L2/subsequent languages, (4) what languages allow and compel, (5) language encode different notions of personhood, (6) socio-political meanings of language speaking and positioning, and (7) being positioned in language. Moreover, the participants’ autobiographies mostly revealed their experience of a ‘double world’ when they switch between two languages. To emphasize, the combination of a grounded theory approach and autobiographical analysis provided a more holistic view about participants’ experience of hybridization in daily life.

In summary, although the above studies do not have the same research objectives, they suggest the usefulness of a grounded theory approach in understanding the subjective and attitudinal natures of social presence. Zafeiriou et al. (2001) and Gon et al. (2004) demonstrated that using grounded theory provides rich and detailed insight into students’ subjectivity and social learning processes which other approaches may not be able to achieve. The use of mixed methods in Burck’s (2004) study confirmed the research findings and gained in-depth and unique understandings of the social phenomenon. Thus combining quantitative and qualitative approaches could add insightful dimensions to this social presence research. QCA of the online BB transcripts, even with its limitations, could provide quantitative descriptions of social presence. Examinations of content of online conference transcripts could reflect the social and interactive dimen-
sions of online exchanges. Therefore, combining grounded theory with other method(s) 
(Burck, 2004) purports to provide more insight and understanding about students’ social 
presence. In grounded theory analysis, documents could be quantified for various pur-
poses and integrated into the coding process (Strauss & Corbin, 1998). Finally, using 
grounded theory and the quantitative approach may enable research to better reflect the 
social presence phenomenon. De Greef and Ijsselsteijn (2001) suggest that combining 
methods could provide different but complementary types of insight about social pres-
ence.

3.7 Research Site

3.7.1 Setting

This study examines an intensive graduate seminar offered in mixed-mode at a 
Canadian university. The university is one of North America’s leading research 
universities and one of the largest in Canada. The university is located in an urban city on 
the western coast. WebCT is used in both distance courses and mixed-mode instructions. 
WebCT has become an important component in these courses. Moreover, there are a 
large number of international students studying in this Canadian university. Over 3,900 
international students and exchange students from over 120 countries (approximately 
nine percent of the entire student population) are studying in various undergraduate and 
graduate programs. Also, due to the large number of immigrant population arriving to 
Canada each year, many NNS students are enrolled in the classes. These NNS students 
intend to improve their English and ultimately to achieve academic success in North 
America. Therefore, both language- and content- learning are essential to these students.
This study explores how students, including NS students and NNS students, participate in online discussions. As mentioned earlier, the course instructor was Dr. Rogers, a professor of education, who has been teaching mixed-mode and distance courses for over 10 years. Dr. Rogers revealed that he was impressed with NNS students' intelligence and hard-working attitudes toward studying. These students are mainly from Mainland China, Korea, Japan and Taiwan. However, many NNS students showed passive participation in FtF classroom discussion. NNS students encountered difficulties in their FtF participation perhaps due to their lack of tacit knowledge and subtle skills of classroom interaction; the lack of training in critical thinking; and the lack of confidence about their non-native status (Morita, 2000). Thus, Dr. Rogers strived to increase students' interest in the course content and motivate their participation by using WebCT.

The course under study was a mixed-mode seminar offered in the summer of 2004, and was focused on Asia-Pacific narrative and L2 learning as indicated in the course syllabus (see Appendix A). The course was an intensive three-week course ranging from July 26 to August 13, 2 ½ hours per day, Monday to Friday. In total, students spent 40 hours of FtF in class meetings plus a comparable time spent in online discussions (20-60 hours). The requirements for BB participation included: students were expected to post a minimum of two thoughtful messages on the BB forum each day, and the maximum number of postings for any student each day shouldn’t be over five messages for a balanced, inclusive and well-formed discussion. Each student participants' online participation was counted as 20% of the final mark. More importantly, Dr. Rogers informed the students that their online participation was evaluated both quantitatively and

5 Intensive summer courses are offered in three weeks as opposed to the thirteen-week regular semester courses.
qualitatively “to encourage participation, interaction, cooperative learning and above all to encourage dialogue which is interesting to each participant”, as stated on the course syllabus (see Appendix A).

3.7.2 Participants

There were 12 students in the course, and all agreed to participate in the study. The participants were selected based on one criterion: students who both participated in the BB discussions and completed their assignments for the course. The purpose was to ensure that the participants were the students who went through the same mixed-mode experience: meeting their peers both FtF and online and reflecting on their experience in their assignments. To note, the two students who did not meet the criterion were exempt from the study. One student did not participate in the same BB discussions with this specific group of students due to administration reasons, but participated in the BB discussions of another section of the same course; the other student was a researcher-participant who did not write the assignments. The researcher participant, however, participated in the online BB discussion. The data included her messages to avoid interruption to the flow of the online discussions.

The participants were 12 graduate students (nine females and three males; nine NSs and three NNSs) and their instructor. Among the participants, I was a researcher and at the same time, a full participant in the course. The participants were informed from the beginning of the course about the confidentiality of their identity, and that the interviews would be conducted only after all their grades were submitted to the registrar.

The participants were all graduate students in the Faculty of Education working toward their master’s or PhD’s. All the NSs participants have rich professional teaching
experience. Some were English teachers in public schools and taught immigrant ESL students, and some have EFL teaching experience. Although the NNS student participants did not have any teaching experience, they have many years of ESL/EFL experience as learners. The Table 3-1 shows a summary of the demographic information of the participants.

Most participants accessed Internet at home and some used the school lab. Eddie and Tim used the school lab more often than other participants because they try to concentrate on schoolwork while they were at school, and to concentrate on family matters when they went home. Email was the most popular CMC system the participants used on a daily basis. Tracy, an international student from Mainland China, was the only one who used ICQ. Half of the twelve participants reported having taken an online or a mixed-mode course before taking this course. The other half of the participants were first-time users of CMC for learning, and were open to learn about the effectiveness of using CMC for instruction.

All the participants submitted their signed consent forms (see Appendix B) and reply cards (see Appendix C) before the data collection process began.

---

6 ICQ stands for I Seek You. It is an instant messenger and a synchronous communication system.
Table 3-1 Demographic information of the student participants

<table>
<thead>
<tr>
<th>Name* (Country)</th>
<th>Gender</th>
<th>Age Range</th>
<th>Degrees</th>
<th>Internet Access</th>
<th>Online experience</th>
<th>Have taken an online or mixed-mode course before</th>
<th>Professional experience</th>
<th>Approximate Years of Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ada</td>
<td>Female</td>
<td>26-30</td>
<td>MED in Modern Language Education</td>
<td>Home, School Lab</td>
<td>Email</td>
<td>No</td>
<td>Elementary school teacher</td>
<td>3</td>
</tr>
<tr>
<td>Belinda</td>
<td>Female</td>
<td>51-55</td>
<td>MA in English literature</td>
<td>Home</td>
<td>Email,</td>
<td>No</td>
<td>EFL teacher in numerous countries</td>
<td>15</td>
</tr>
<tr>
<td>Betty</td>
<td>Female</td>
<td>31-35</td>
<td>MED in Literacy Education</td>
<td>Home</td>
<td>Email</td>
<td>Yes</td>
<td>Elementary school teacher</td>
<td>7</td>
</tr>
<tr>
<td>Denny</td>
<td>Male</td>
<td>31-35</td>
<td>MED in Literacy Education</td>
<td>Home &amp; School Lab</td>
<td>Email</td>
<td>No</td>
<td>High school English teacher</td>
<td>8</td>
</tr>
<tr>
<td>Eddie</td>
<td>Male</td>
<td>31-35</td>
<td>MED in Literacy Education</td>
<td>Home &amp; School Lab</td>
<td>Email</td>
<td>Yes</td>
<td>High school English teacher</td>
<td>13</td>
</tr>
<tr>
<td>Mandy</td>
<td>Female</td>
<td>26-30</td>
<td>MED in Literacy Education</td>
<td>Home</td>
<td>Email</td>
<td>Yes</td>
<td>Elementary school teacher</td>
<td>5</td>
</tr>
<tr>
<td>Margie</td>
<td>Female</td>
<td>41-45</td>
<td>MED in Literacy Education</td>
<td>Home</td>
<td>Email</td>
<td>Yes</td>
<td>High school English teacher</td>
<td>7</td>
</tr>
<tr>
<td>Mona</td>
<td>Female</td>
<td>36-40</td>
<td>MED in Literacy Education</td>
<td>Home</td>
<td>Email</td>
<td>No</td>
<td>Elementary school teacher</td>
<td>8</td>
</tr>
<tr>
<td>Tim</td>
<td>Male</td>
<td>41-45</td>
<td>MED in Adult Education</td>
<td>Home &amp; School Lab</td>
<td>Email</td>
<td>No</td>
<td>College teacher of EFL in Japan</td>
<td>12</td>
</tr>
<tr>
<td>Jenny (Korea)</td>
<td>Female</td>
<td>26-30</td>
<td>PhD in Education Curriculum &amp; Instruction Studies</td>
<td>Home</td>
<td>Email</td>
<td>No</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Kristy (Participant Researcher, Mainland China; U.S.)</td>
<td>Female</td>
<td>26-30</td>
<td>PhD in Language Education</td>
<td>Home</td>
<td>Email</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Tracy (Mainland China)</td>
<td>Female</td>
<td>21-25</td>
<td>MED in Modern Language Education</td>
<td>Home</td>
<td>Email/ICQ</td>
<td>Yes</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

7 All the participants' names used in this study are pseudonyms.
3.8 Data Collection

Multiple data sources were used to strengthen the trustworthiness of the research findings (Merriam, 1998). Data sources were gathered over a period of a summer intensive semester. After the course terminated and the students' grades have been submitted, multiple methods and sources of data were used for the examinations of students' social presence:

The asynchronous text-based conference transcripts on the BB in WebCT, the semi-structured interviews, participants' assignment and participant observations served as the major data sources.

- Online BB Discussion Transcript

The conference transcript contained two areas of discussion:

a. Students' discussions on each other's past language experiences presented in the autobiography. Each student wrote an autobiography (in 2-3 parts) about their experiences of language learning, culture and identity (language/culture/identity development), and posted their developing autobiographies on the BB.

b. Students' discussions about their assigned text chapter. Each student summarized and made an individual online presentation of his/her assigned text chapter, and posted three questions to initiate discussions on the BB.

- Semi-structured Interviews

A total of twelve semi-structured one-hour interviews with the students were conducted after the course was over and the students' grades were submitted. The interviews took place in a private and quiet office at the university campus. The interviews were au-
dio taped. A high level of respect and non-judgmental perspective were shown to the participants by establishing a confidential environment from the beginning of the interview. Due to my researcher participant identity, I became quite familiar with the participants over the course. As a result, a high level of rapport was established. The nature and detail of the experiences being discussed had indicated that I provided an appropriate and non-threatening environment. The participants were relaxed and open in discussing their opinions and feelings about their experience in the seminar.

The open-ended interview questions with the student participants (See Appendix D) were adapted with modifications from Picciano's (2002) and Tu's (2001) questionnaires. Semi-structured interviews were conducted with a fairly open framework that encourages focused, conversational, two-way communication. Relevant topics (such as social presence and community) are initially identified and the possible relationship between these topics and the issues such as interaction, social relationship and media become the basis for more specific questions. The interviews were informal, relaxed one-to-one discussion based around social presence. Open-ended questions allow participants to give freer responses (Riessman, 1993). From the open-ended questions, the participants were free to talk on course related topics in order to obtain greater breath of data. Also, semi-structured interviews allow the researcher more flexibility to ask the right kind of questions (Mishler, 1991) adjusting to the responses of individual participants. In addition, the researcher played a somewhat directive role (Fontana & Frey, 2003) as the two-way communication went on. The questions aimed to determine what, when and how the participants experience social presence online while engaged in language/culture/identity narrative interaction.
Participants' Written Assignments Comparing Online and Conventional Modes of Learning

In addition to the individual interviews, participants' assignments also served as a primary data source. Toward the end of seminar, participants' wrote on this topic (also see Appendix A, Course Syllabus):

Evaluate the effectiveness of online discussions and learning as compared with conventional FtF seminars for language/content teaching.

The participants wrote about their mixed-mode experience and their thoughts and opinions in the assignments. Thus, the written assignments served similar purposes as journal writing on narrative practices and were effective tools for self-expression and critical reflection. As previous research has shown, narrative practices seem to be especially useful in capturing the situated complexities of teachers' work and classroom practice; narratives construct the action and consciousness or emotion landscapes simultaneously (Lyons & LaBoskey, 2002). Participants' written assignments were carefully transcribed and coded using the qualitative data analysis software program ATlasti\(^8\), version 4.2.

Participant Observations

Other sources of data collection included participant observation and artifacts such as the course syllabus, the course Web site of resources and the computer-generated records of participation. Computer-generated records of participation are valuable sources of data as Strauss and Corbin (1998) stated that documents could be quantified for various purposes. In this study, the records showed students' access information including the

---

\(^8\) ATLAS.ti is a software program designed for qualitative analysis of large bodies of textual, graphical, audio and video data.
data and time of their login, numbers of messages read and posted. The analysis of the data provided information about students' levels of participation.

For participant observation, I, as a participant observer engaged fully in the narrative activities being studied, and was also known to the participants as a researcher. The advantages of participant observation include the ability to gain insights and develop relationships with participants that cannot be obtained as an external or non-participant observer (Gay & Airasian, 2003). Moreover, participant observation contributed to gaining the trust and confidence of the participants to interact freely and openly with the researcher thus minimizing the Hawthorne effect. That is the effect on the participants when they know that they are part of a research study (Borg & Gall, 1989). In turn, a participant observer could obtain more information about participants' opinions, attitudes and emotional states. In this study, participant observation allowed me to capture participants' patterns of engagement with narrative interaction online. In addition, the student participants did not treat my presence any differently than other students due to my full engagement like all the other students in the seminar.

Nonetheless, I was aware of the drawback of participant observation in that the researcher may lose objectivity and become emotionally involved with the participants. Pragmatically, I did not have difficulty in participating and taking detailed field notes simultaneously. I first wrote my field notes with key words and short phrases and later filled in with the detailed descriptions. To stay objective, I always stepped back and related the field notes and other data to the research literature.
3.9 Data Analysis

The text-based asynchronous conference transcript of online BB provides valuable sources of data for researchers. QCA could be a viable method of BB transcript analysis. QCA has been proven to be a valuable research method in many research disciplines such as mass communication and political sciences (Holsti, 1969; Krippendorff, 2004). The method was first used in analyses of documents in mass communications at the beginning of the 20th century. It was called quantitative newspaper analysis for measuring volumes of coverage of various subjects, and later it became propaganda analysis during World War II to identify ‘propagandists’ by extracting information from the propaganda. Content analysis has been an important means of categorizing all forms of content in analyzing media messages. It could be effective in understanding the differences in psychological or social gratifications of users gained from media use, such as escape from boredom and sense of being connected to what is going on; differences in cognitive images people developed and retained, such as the state of the economy (Riffe, Lacy, & Fico, 1998). Media content thus reflects the different views of the user experience.

By definition, QCA is a systematic examination of symbols of communication, which have been assigned numeric values according to valid measurement rules. The analysis of relationships involves those values using statistical methods to describe the communication, draw inferences about its meaning or infer from the communication to its context (Riffe et al., 1998). Guided by context and theory, the researcher examines the data and infers the meaning and what might have contributed to the content’s form and meaning. Content analysis is useful when the communicator’s language use is critical and that reflects psychological or social gratifications of users gained from media use (Riffe et al., 1998).
Content is crucial for collaborative learning in Web-based courses (Duchastel, 1997). The message texts could reflect the attributions of media users’ attitudes, intentions and “belongingness” and provide evidences of social relationships and public behaviors. The content of productive groups’ messages contain higher frequencies of indicators of building social relationship and belongingness such as greetings, vocatives and complimenting (Rourke & Anderson, 2002). Thus QCA is viable in addressing “social reality that are rooted in the kinds of conversations that produced the texts being analyzed” (Krippendorff, 2004, p. 77). In addition, researchers (Holsti, 1969; Krippendorff, 2004) argue the validity of the distinction between quantitative and qualitative content analyses because analyses of texts are substantially qualitative. Analyses of texts should be considered qualitative even when characteristics of texts are transformed into numbers (Krippendorff, 2004).

I used QCA for the BB transcript analysis. QCA involves quantifying qualitative data, i.e. texts: code qualitative data, assign numbers to codes, and record the number of times codes appear as numeric data. The quantitative results confirm the relationship between variables: using language/culture/identity narrative and students’ level of social presence. Following Rossman and Wilson’s (1991) strategy of corroboration that seeks convergence in findings by confirming the established results, this study used QCA data to identify the mixed-mode course with significant levels of social presence and then reviewed the qualitative data to assess convergence. The quantitative data drove the selection of the seminar for this case study and the qualitative data were used to show convergence with the initial quantitative data.

Next, the results of the quantified findings were integrated with the emerged theory (Strauss & Corbin, 1990). Thus the quantitative findings were compared with the
emerged theory as verification of students' social presence level and conditions. The conference transcripts provided information about the social constructions of meaning and knowledge in an online learning environment. A number of researchers (Henri, 1991; Newman, Webb, & Cochrane, 1999; Rourke et al., 2001) suggest that one of the promising research methods for analysis of conference transcripts is QCA.

Moreover, the data were analyzed to describe the typical patterns and characteristics associated with students' development of social presence. Henri (1991) suggests that content of online messages are related to the quality of the messages. The examinations of content could reflect the social and interactive dimension of conference interchanges, students' application of cognitive skills and their metacognitive skills. The BB transcripts were analyzed according to Rourke et al.'s (2001) social presence template. The messages were analyzed under three categories and twelve indicators as verification of students' social presence level. The social presence indicators were integrated into the major categories that emerged from the grounded theory analysis. Rourke and Anderson (2002) used multiple methods of data collection that combines QCA with in-depth interviews to corroborate the results and ensure validity. In this study, QCA was used first to determine students' level of social presence, then it was combined with interview transcripts and field notes which were structured to further address students' perspectives toward the level of social presence. Finally, the data from each method were then triangulated.

3.9.1 Analyzing the Online BB Discussion Transcript

This study used Rourke et al.'s (2001) social presence template to assess participants' level of social presence found on the online BB transcripts. Rourke et al. devel-
oped a more inclusive social presence template using QCA compared to the models of Short et al. (1976) and Tu (2000a). The researchers developed most of the categories and indicators from a broad range of areas including research literature in social presence, media capacity, teacher immediacy, group cohesion, and additional categories and indicators were developed later from their analysis. As a result, twelve indicators constituting three broad categories of communicative responses emerged. The categories mainly contain variables of emotions, building interpersonal relationships and group cohesion, which could “provide a good idea of the level of social presence” (Garrison & Anderson, 2003, p. 54). The social presence measurement calculation was proven reliable by inter-rater reliability. The following description of indicators and categories are adapted from Garrison and Anderson (2003).

1. **Affective Responses**

   They refer to expression of emotion, feelings and mood. Affective responses are comprised of three indicators: (1) expression of emotions, (2) use of humor and (3) self-disclosure.

2. **Interactive Responses**

   They refer to building and sustaining relationships, expressing a willingness to maintain and prolong contact, and indicating personal support, encouragement, and acceptance of the initiator (Rourke et al., 2001). The indicators of interactive responses are: (4) continuing a thread, i.e. using the ‘reply’ feature to post message, (5) quoting from others’ messages, (6) referring explicitly to others’ messages, (7) asking questions, (8) complimenting expressing appreciation and (9) expressing agreement.

3. **Cohesive Responses**
They refer to building and sustaining a sense of group commitment. The indicators include: (10) use of vocatives, i.e. addressing or referring to participants by name, (11) address or refer to the group using inclusive pronouns such as addresses the group as we, us, our group, and (12) use of phatics and salutation, such as greeting and closure which serve purely social functions.

Rourke et al. (2001) stated that the calculated density of social presence indicators in online messages provides important quantitative descriptions of social presence in an online environment. The 12 indicators of the three categories reveal the level of social presence. Low frequencies indicate that the social environment is cold and impersonal. In that case, the communications are ‘artificial exchanges’, participants only engage in pragmatic exchanges of information to fulfill their course requirement. High frequencies indicate that the online environment is warm and collegial. In this environment, participants are intrinsically motivated to participate in discussions, and they tend to post more ideas and offer more critiques of others’ hypotheses. Disagreement and critical evaluation can only emerge from groups with strong bonds (Eggins & Slade, 1997). In turn, the quality of interactive exchanges is revealed. In addition, as mentioned earlier, the computer-generated records of participation that showed students’ access information were calculated for each student’s frequency of reading and posting messages. The data provided information about students’ levels of participation.

In this study, the unit of analysis is combining thematic unit and syntactic unit. Unitizing is identifying the segments of the transcript that will be recorded and categorized (Garrison & Anderson, 2003). Thematic units are the most commonly used units. It is a ‘unit of meaning’, a single thought unit or idea unit that is extracted from the content.
(Budd & Donohue, 1967). The weakness of the thematic unit is that it resists reliable and consistent identification (Rourke, 2000; Rourke et al., 2001). Syntactical units such as the sentence or the paragraph allow for consistent identification, but they are artificial and arbitrary, and are violating the logic of the indicators. Thus, Rourke et al. (2001) suggests that the most appropriate unit of analysis is combining thematic unit and syntactic unit; the thematic unit allows coders to capture a unit in its natural form, with the reliable identification attributes of the syntactical unit.

3.9.2 Analyzing the Interview Transcripts and Assignments

The interviews were carefully transcribed, including words, emotion and pauses. An electronic copy of participants’ assignments was obtained with participants’ consent, and then I saved the assignments on a disk. Next, I analyzed the interview transcripts and the assignments with the three coding processes: open coding, axial coding, and selective coding (Strauss & Corbin, 1990, 1998). Using constant comparative methods of analysis, I identified and coded the main themes from one interview and compared with other participants at subsequent interviews. I used the same procedure in analyzing the assignments. The purpose was to look into the similarities and differences or identify variations in the patterns among the data (Strauss & Corbin, 1998).

The first step was open coding which includes labeling phenomena, discovering categories and naming categories (Strauss & Corbin, 1990, 1998). I first read each interview transcript and assignment to gain the main ideas, and then I re-read the data line-by-line to group concepts around them. I grouped and labeled the concepts that seem to pertain to the same phenomena into the initial categories. The concepts could be one or two sentences or a short paragraph in length. This process is repeated in analyzing all the in-
terview transcripts, the online BB transcripts, participants' written assignments and my field notes.

The second step was axial coding. It involved making connections between categories that emerged from the open coding process (Strauss & Corbin, 1990). I adapted Ronaldson’s (2004) color-coded system: I identified categories that denoted similar condition, strategy, property or consequence in successive interview transcripts and assignments. Then I used Microsoft’s ‘find’ feature to color-code the categories, and major categories emerged. When I noticed certain “patterns” (repeated relationships between properties and dimensions of categories), I grouped the data accordingly to give the theory specificity. Moreover, in building categories during axial coding, integration could occur (Strauss & Corbin). The key words and themes emerged from the QCA were integrated into the major categories that denoted similar conditions.

The third step was selective coding. The process involved selecting one core category from the emerged major categories and relating it to other major categories (Strauss & Corbin, 1990). The goal is to integrate the core categories and relate with other major categories to form a grounded theory. I formulated and committed myself to a story line, ‘explicating the story line’ and finally was able to identify the story (Strauss & Corbin). Sampling procedures were used in the three coding procedures. The literature helped me develop a confident level of theoretical sensitivity. Thus I was able to recognize the indicators, concepts, evidences that supported the emerging themes, categories and patterns of interaction during the coding process. The following example illustrates the application of the coding process and the arrival of the theoretical mode, Cyber-Narrative Mediated Connectedness.
During the interview process, I directed the participants to focus on their language/culture/identity narrative experiences in CMC. Themes identified from participants' views included initiating connectedness (with fellow members of the community), building connectedness, strengthening connectedness and appreciating connectedness. Connectedness emerged as a theme in the open coding and constant comparison process. Kramsch and Thorne (2002) suggest that a virtual community is a nexus of connectivity. Social presence is a person's feeling of belonging to the community (Gunawardena & Zittle, 1997; Tammelin, 1998) and the participants inferred that connectedness linked to (their sense of) belonging to a community, i.e. their social presence. According to Smith and Mackie (2000), human's pursuit of connectedness is a motivating principle, and this fundamental need for belonging and connectedness promotes social relationships. The literature enabled me to develop a considerable degree of theoretical sensitivity and understandings of participants' social presence experience.

All the participants stated that sharing the language/culture/identity narratives helped them get to know each other and establish a strong sense of comradery and collegiality; thus more information and experiences were learned from each other. Disclosure was identified as beneficial to social presence, as it increases trust and confidence in building social relationships. The participants inferred that social presence was intimately linked to connectedness. Connecting, therefore, was individually and collaboratively built and sustained. During the axial coding process, connecting was further identified as constructed connectedness, containing properties similar to that of self- constructor of connectedness to others and co- constructor of connectedness. During the selective coding process, constructed connecting is identified as a core category and one of the five manifestations of connecting that established the theoretical model, Cyber-Narrative Mediated
Connecting. Constructed Connecting is a process by which the participants showed evidences of their developing social presence in the course. It was recognized by the participants as building a sense of social presence individually and with others in a facilitative mixed-mode environment. The coding process of this example is displayed in Figure 3-1 below. Further details of the coding process of other core categories of connecting are illustrated in Chapter 4.
<table>
<thead>
<tr>
<th>Units of Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>It was a good tool (the language/culture/identity autobiography) to make people talk about themselves.</td>
<td></td>
<td></td>
<td>Self-interest</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Connecting</td>
</tr>
<tr>
<td>Just by doing the autobiography I got to know someone better.</td>
<td></td>
<td></td>
<td>Building Self-</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Connectedness</td>
</tr>
<tr>
<td>When I see people were sharing to the depth online and class, then I say, why won’t I?</td>
<td></td>
<td></td>
<td>Constructed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Connecting</td>
</tr>
<tr>
<td>I guess I learned commonalities between me and my colleagues in terms of learning language.</td>
<td></td>
<td>Learning</td>
<td>Building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecting</td>
<td>Connectedness with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Others</td>
</tr>
<tr>
<td>Good Luck!</td>
<td></td>
<td>Emotion/Feeling</td>
<td>Building</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecting</td>
<td>Connectedness with</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Others</td>
</tr>
<tr>
<td>I found them all to be sincere, kind, intelligent, experienced teachers and most of all, funny!</td>
<td></td>
<td>Humor</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecting</td>
<td></td>
</tr>
<tr>
<td>When we went to class, he (the instructor) talked about the postings that we posted online, saying that &quot;hey, I was reading this, I am understanding this, let's talk about this more...&quot; That was good.</td>
<td></td>
<td>Teacher</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Connecting</td>
<td></td>
</tr>
</tbody>
</table>

**Figure 3-2 Example of the Coding Process, Constructed Connecting**
3.10 Trustworthiness of the Study

Trustworthiness is the level of trust in the reported outcomes showing the validity of the study (Lincoln & Guba, 1985). Triangulation and member checks are the main sources used in this study.

3.10.1 Triangulation

This research study uses triangulation to explore the social phenomenon of students’ mixed-mode course experience. According to Denzin and Lincoln (2003), “the use of multiple methods, or triangulation, reflects an attempt to secure an in-depth understanding of the phenomenon in question” (p. 8). Through multiple representations, triangulation is an alternative to validation and is “a strategy that adds rigor, breadth, complexity, richness, and depth to any inquiry” (Denzin & Lincoln, p. 8). In this research study, QCA and grounded theory approaches were used. The rationale is that the use of one method can overcome the deficiency of another (Mathison, 1988), and linking quantitative and qualitative data could confirm or corroborate each other (Rossman & Wilson, 1984). Thus the combination of two or more methods can achieve greater validity. Moreover, multiple methods of data collection such as the interviews, participant observation, BB transcripts and student assignments provided various points of view and ways of knowing. The convergence of the major themes, patterns and categories from multiple data sources lend strong credibility to the findings (Maykut & Morehouse, 1994).

Moreover, multiple methods of data collection could be used to corroborate the results of QCA in order to provide validity of the findings (Rourke & Anderson, 2004). In Rourke and Anderson’s (2002) study, the results from the questionnaire and open-
ended questions corroborated the findings of QCA. The questionnaire items and inter­views were developed addressing the same indicators of social presence. Data from each of the methods were triangulated. The researchers found that most of the indicators that showed a high frequency of occurrences were the same ones perceptible to the student participants. In addition, the segments of the BB transcripts that were rated high by using the QCA were the same ones that were rated high by the participants. Thus validity was obtained for the social presence indicators and the findings. In this study, multiple methods of data collection were used to corroborate the results of QCA. Using Rourke and Anderson’s (2001) social presence protocol and the in-depth interviews, which both address students’ level of social presence could contribute to the trustworthiness of the findings. Even more, using the existing social presence protocol could contribute to the accumulating validity of the existing procedure, and be able to compare the results with the growing catalog of normative data (Rourke & Anderson, 2004). Figure 3-3 is the diagrammatic representation of the methodology for this study.
<table>
<thead>
<tr>
<th>Participants</th>
<th>Instrumentation</th>
<th>Data Sources</th>
<th>Analysis First Phase</th>
<th>Analysis Second Phase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rourke et al.’s (2001) social presence template</td>
<td>Online BB transcripts</td>
<td>Q.C.A. (Quantitative Content Analysis)</td>
<td>Categories</td>
<td></td>
</tr>
<tr>
<td>12 graduate students majoring in education (11 participants and 1 researcher-participant)</td>
<td>Computer generated participation record</td>
<td>Statistical analysis</td>
<td>Grounded Theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Interviews</td>
<td></td>
<td>Categories</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Participant observation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Students’ assignments</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Field notes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Course documents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Literature</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 3-3 Diagrammatic Representation of my Methodology

3.10.2 Member Check

Member check is the process of asking research participants to verify whether the researcher has accurately described their experience (Lincoln & Guba, 1985). I was aware of my researcher participant identity, and my position added to my perspectives and perceptions in my reports of the study. The challenge was “to combine participation and observation so as to become capable of understanding the program (setting, participants) as an insider while describing the program for outsider” (Patton, 1990, p. 128). Thus, I assumed an unobtrusive presence and become almost ‘invisible’ to the participants due to my participation in all the ongoing activities in the course as other partici-
pants. On the other hand, I tried to keep an open and objective attitude toward participants’ perspectives.

Member check is a strategy that could reduce researcher bias (Lincoln & Guba, 1985; Maykut & Morehouse, 1994; Miles & Huberman, 1994). An on-going member check was conducted: participants were asked if my verbal descriptions, paraphrases and summarization of their experiences using key words were accurate during the interview process; periodically (one and three months after the interviews), the participants were again asked if my written summary of their views were correct via electronic communication or in the follow-up interviews. If discrepancy arose, the participants clarified or provided more information about their views, and then I repeated the summarization process. Moreover, the major and core categories that emerged from the study were verified with the participants in the follow-up interviews. According to Lincoln and Guba (1985), when findings are shared with the participants, the data collection and analysis are validated. Thus, when I showed my descriptions and the emerged categories to the participants, they agreed with the findings. In addition, an audit trail (Lincoln & Guba, 1985; Maykut & Morehouse, 1994) was conducted. The Online BB and interview transcripts and field notes were maintained in file cabinets and organized in categories. My doctoral committee checked the coding process of other parts of analysis periodically. Thus it could be stated that I was able to ‘walk people through’ my work (Maykut & Morehouse, 1994).

3.11 Summary

This chapter provided the details of the research methodology in this study. It provided the general assumptions of the study by defining it as a qualitative case study under
the social constructivist paradigm (Dewey, 1927; Vygotsky, 1978) and symbolic interac-
tionism (Gergen, 1994; Mead, 1934, 1938). Thus data were collected from various
sources and through multiple lenses focusing on the social context, social interaction and
building learning communities and social relationships. Next, measurement and the pre-
vious quantitative approaches to social presence were discussed in order to justify the use
of grounded theory in this study. Grounded theory serves as the principle method of
analysis in this study. It is a systematic set of procedures to amend, add and modify the
existing theory to fit the particular situations. In this study, the purpose is to add to the
existing social presence theory to fit the mixed-mode situations. Grounded theory better
reflects the phenomenon by its flexibility and openness, especially in exploring individual
subjectivities (Zafeiriou et al., 2001). Also, integrating QCA into grounded theory analy-
sis could provide different but complementary types of insight about social presence (de
Greef & Ijsselsteijn, 2001). At the end, the background and procedures of grounded the-
ory were highlighted. The findings of the research are reported in the following two chap-
ters.
Chapter Four: Research Results

Chapter four presents the results of this study. As discussed in Chapter 2, this study aims to generate theory from the data, which would add to the current social presence theory. This chapter reports the interpretation of the data collected and how the theoretical model has been constructed. This study identified a way of establishing and developing social presence that is unique to educational cyberspace. As a result of employing a grounded theory process, Cyber-Narrative Mediated Connecting emerged as a preliminary theoretical model of a way of connecting, which involved a process that consciously shapes connectedness. It evolved when individuals immersed in a cyberspace, interacted with others about the language/culture/identity narratives and perceived a true sense of social presence. A mediated dialogue that involved the discussions of the language/culture/identity narratives was examined.

As indicated previously, the findings presented here are derived from online BB transcripts, interview transcripts, participants' assignments on the comparison of online and conventional modes of learning and my field notes. As shown on Table 4-1, a number of key words or concepts such as polite/nice, complimenting/appraising, disclosing, agreeing, cohesive emotion, humor, comfortable, and trusting are identified as major themes important in the participants' narrative experience. Connecting appears as a prevalent pattern that bonds these themes, emerging as a core category of the preliminary theoretical model. Patterns were identified with supporting data that established the preliminary theoretical model, Cyber-Narrative Mediated Connecting. Each manifestation of connecting and related process is explained in greater detail in the next section.
4.1 Framework for Organizing the Findings

The themes and patterns are organised within a framework by referring back to the research questions that guided this grounded theory study and as illustrated in Table 4-1. As indicated in the table, several themes and patterns applied to more than one question. Excerpts from the BB discussion transcripts, interviews and students’ assignments were used to illustrate points. Among them, some excerpts were used more than once to illustrate different points.

Table 4-1 Organizational Framework for Reporting the Results

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Themes</th>
<th>Descriptors/Patterns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Does writing and sharing language/culture/identity development autobiography online contribute to students’ social presence?</td>
<td>Polite/Nice</td>
<td>• A high level of social presence</td>
</tr>
<tr>
<td></td>
<td>Complimenting/Appraising</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disclosing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agreeing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cohesive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Emotion</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Humor</td>
<td></td>
</tr>
<tr>
<td>How do the students describe their understanding of social presence from this activity?</td>
<td>Comfortable</td>
<td>• A change in instrumental motivation to intrinsic motivation</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>• Increasingly active participation</td>
</tr>
<tr>
<td></td>
<td>Supportive</td>
<td>• Increased feelings of being connected to the community</td>
</tr>
<tr>
<td></td>
<td>Necessary</td>
<td>• Increased connectedness of online and FtF components</td>
</tr>
<tr>
<td></td>
<td>Encouraging</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Genuine</td>
<td></td>
</tr>
</tbody>
</table>
How do the uses of the language/culture/identity narratives, CMC and collaborative learning promote the development of social presence among graduate students in education?

| Familiarizing | Disclosing/Learning | Circular/Complementary | Reciprocal | Thought-Provoking | Authenticity | Experiential | Empowered | Time | Trusting |

- Achieving a more ideal community
- A transference of the rich social presence online to a rich social presence in FtF meetings
- Increased feelings of freedom of expression
- Increased articulation, reflection and commenting on authentic experiences
- Increased knowing others 'in person'
- Increased desire to use technology for instruction
- Increased feelings of empowerment as bilingual speakers with rich language and culture experiences

4.2 Research Question 1

Does writing and sharing language/culture/identity development autobiography contribute to the students' social presence?

On the online BB, NS and NNS students found more time and opportunities to communicate and discuss with each other outside of the classroom. Because no strict participatory rules were given, the participants were 'free' to initiate and discuss any topics of their interests. It appeared that the students adopted a responsible and scholarly attitude to their postings. The computer-generated record of participation displaying participants'
numbers of hits, messages read and posted during the seminar, was summarized in Table 4-2.

**Table 4-2 Numbers of Messages Read and Posted by Individual Participants**

<table>
<thead>
<tr>
<th>Student Participants</th>
<th>Hits* of the BB</th>
<th>Items read</th>
<th>Messages posted</th>
</tr>
</thead>
<tbody>
<tr>
<td>NNSs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jenny</td>
<td>775</td>
<td>705</td>
<td>35</td>
</tr>
<tr>
<td>Kristy</td>
<td>1142</td>
<td>985</td>
<td>100</td>
</tr>
<tr>
<td>Tracy</td>
<td>801</td>
<td>597</td>
<td>86</td>
</tr>
<tr>
<td>NSs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tim</td>
<td>1183</td>
<td>919</td>
<td>155</td>
</tr>
<tr>
<td>Mona</td>
<td>1355</td>
<td>1206</td>
<td>69</td>
</tr>
<tr>
<td>Mandy</td>
<td>1207</td>
<td>1137</td>
<td>71</td>
</tr>
<tr>
<td>Belinda</td>
<td>1489</td>
<td>1198</td>
<td>65</td>
</tr>
<tr>
<td>Betty</td>
<td>1253</td>
<td>1154</td>
<td>54</td>
</tr>
<tr>
<td>Margie</td>
<td>848</td>
<td>588</td>
<td>134</td>
</tr>
<tr>
<td>Denny</td>
<td>888</td>
<td>793</td>
<td>62</td>
</tr>
<tr>
<td>Ada</td>
<td>958</td>
<td>792</td>
<td>96</td>
</tr>
</tbody>
</table>

Note: *Hits are the computer recorded times of students’ logging in the BB.

**Table 4-3 Class Participation**

<table>
<thead>
<tr>
<th></th>
<th>NNS Participants</th>
<th>NS Participants</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
</tr>
<tr>
<td>Number of hits</td>
<td>906</td>
<td>204.8</td>
<td>1147.66</td>
</tr>
<tr>
<td>Number of Messages Read</td>
<td>762.33</td>
<td>200.25</td>
<td>973.38</td>
</tr>
<tr>
<td>Number of Messages Posted</td>
<td>73.67</td>
<td>34.21</td>
<td>88.25</td>
</tr>
</tbody>
</table>

The analysis of participation as shown in Table 4-3 suggests that the level of class participation was high. In general, every participant read all the posted messages each day. And since the average numbers of messages read and posted per student everyday were 45.93 and 4.23 respectively, this indicated a relatively high level of participation. The two-tailed t-test was used to compare the average participation between NS and NNS.
students. The result showed that the difference was not statistically significant. Compared to others, the NNS participant Jenny seemed to be less active online, but Jenny revealed in the interview that the main reason was that she was busy taking another intensive three-week course simultaneously. Though she was motivated and wished to spend more hours in posting messages, she had to allocate half of her time to the other course. More details about Jenny's participation are discussed in response to research question 3.

In order to answer research question one, the BB transcripts were analyzed using Rourke et al's (2001) social presence template because it could provide a good idea of the level of social presence (Garrison & Anderson, 2003, p. 54). According to the template's 12 indicators of the three major categories, I identified the indicators of social presence in the BB transcripts and calculated the number of occurrence of the indicators (see Table 4-4).
Table 4-4 Number of Occurrence and Examples of Social Presence Indicator

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Affective Responses: Expression of emotion, feelings and mood</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>Expression of emotion</td>
<td>682</td>
<td>I was very touched by your sharing of many aspects of our life.</td>
</tr>
<tr>
<td>Self disclosure</td>
<td>676</td>
<td>While I read your story, one of my observations was occurred to me.</td>
</tr>
<tr>
<td>Use of humor</td>
<td>40</td>
<td>Cheers - Cheerio</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Interactive Responses: Build and sustain relationships</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>Quoting from other's message</td>
<td>4</td>
<td>In response to your question, &quot;Does learning a language like English help if your native language is closer in origin?&quot; Yes...</td>
</tr>
<tr>
<td>Referring explicitly to other's message</td>
<td>50</td>
<td>Your discussion of how you felt like you did not really belong to any community-school, Italian or Hispanic, reminded me of...</td>
</tr>
<tr>
<td>Asking questions</td>
<td>622</td>
<td>What role does Croatian heritage play in your construction of identity?</td>
</tr>
<tr>
<td>*Expressing curiosity</td>
<td>63</td>
<td>Thoughts anyone? - Just throw them out - I am very curious.</td>
</tr>
<tr>
<td>Expressing agreement, *disagreement</td>
<td>189</td>
<td>I really agree to what you mentioned as following: Life really does not mean much if you don't understand who you are.</td>
</tr>
<tr>
<td>*Expressing similar experience or perspective</td>
<td>45</td>
<td>I was also placed in classes with native speakers.</td>
</tr>
<tr>
<td>Continuing a thread</td>
<td>962 used Reply function</td>
<td></td>
</tr>
<tr>
<td>Complimenting, appreciation</td>
<td>431</td>
<td>Wow! Denny, that was powerful and so well described.</td>
</tr>
<tr>
<td>*Provoking thought</td>
<td>40</td>
<td>Your autobiography made me think of our cultures are now in a state of fusion and I wonder what the future holds.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Category Name</th>
<th>Cohesive Responses: Build and sustain a sense of group commitment</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td></td>
</tr>
<tr>
<td>Use of phatics or salutations</td>
<td>419</td>
<td>See you in class.</td>
</tr>
<tr>
<td>Using inclusive pronoun</td>
<td>111</td>
<td>But I think we should definitely discard those practices we hated as students in our teaching practice.</td>
</tr>
<tr>
<td>Use of vocative</td>
<td>103</td>
<td>Your observations about first Nations English language usage and the very real cultural differences I find fascinating, Betty.</td>
</tr>
<tr>
<td>*Expressing support to other members</td>
<td>111</td>
<td>I hope we can help you to contribute to the discussions in a way that makes you feel comfortable.</td>
</tr>
</tbody>
</table>

Note: *The addition indicators identified in this study.
The BB transcripts contained 4,548 occurrences of social presence in 1,011 total posted messages containing 73,460 words. This result is significantly higher than Stacey’s (2002) investigation of a course that was also three weeks, a total of 489 occurrences of social presence were obtained. In summary, the average occurrences of social presence per message were 4.50, and the average length of a message was 72.66 words. The aggregate social presence density resulted in 61.91 occurrences per 1000 words which was relatively high comparing to the density in Rourke et al.’s (2001) study which yielded 33.54 and 22.83 occurrences per 1000 words. Thus it could be claimed that the course under this study obtained a high density of social presence. The result of the QCA using Rourke et al.’s (2001) social presence template implies that students in this course gained a high level of social presence through sharing the language/culture/identity development autobiography. Moreover, the number of occurrence of social presence indicator gradually increased toward the end of the course. This finding supports Gunawardena’s (1995) claim that social presence increases as online discussion progressed, more social and personal messages were posted toward the latter part of the conference than during the initial period of the course.

![Figure 4-1 Occurrences of social presence July 23-Aug 15, 2005](image-url)
As shown on Figure 4-1, the occurrence of social presence increased significantly in the second week of the course in which 42.73% of total occurrences was identified. In addition, the second and third weeks contained more social presence than the first week of the course. Please note that lower numbers of social presence were found on days of weekends with the exception of the Saturday, August 7 (543 occurrences) of the second week. As shown on the BB transcripts, the exceptional high level of social presence was related to the interesting topics of discussions: “Names,” “Identity,” “Identity Myths,” “Identity Envy” and “What is in a name?” The significant numbers of social presence was due to the participants’ raising interest in discussing the issues of identity.

The QCA was not meant to be extensive because as mentioned earlier, the indicators and categories were integrated into forming ‘a story’ (Strauss & Corbin, 1990) and developing a theoretical model. The indicators and categories helped to gain theoretical sensitivity during the grounded theory coding process. Moreover, the convergence of the major themes, patterns and categories from multiple data sources could lend strong credibility to the findings (Maykut & Morehouse, 1994). The following section includes brief discussions of the indicators and how they enhanced my theoretical sensitivity.

4.2.1 Affective Responses

The findings showed that there were 1398 occurrences of Affective Responses, including indicators of expression of emotion, feelings and mood. Examining participants’ Affective Responses enhanced my theoretical sensitivity about the characteristics of community members with a high level of social presence. The student participants used both conventional (443 occurrences) and unconventional expressions of
emotions: emoticons (61 occurrences), conspicuous capitalizations (63 occurrences) and colloquial expressions (115 occurrences). Moreover, a significant number of humorous messages were obtained (40 occurrences). The following are examples of affective responses on the BB postings:

p.s. i guess gilmore elementary was named after your relatives on your mom’s side, wow. –Colloquial expression

:) Anyway, thank your for your encouragement. –Use of emoticon

GREAT story it made me laugh out loud for a few minutes ;o)... Prince Philip comes to mind when i think of your uncle-in-law too funny. –Use of emoticon, conspicuous capitalizations and humor

The frequent expressions of emotions, feelings and mood implied that students felt they were valued members of the community. Their strong ability of projecting their intellect and personality through the medium indicated a high level of social presence. Humor contributed to the feeling of ‘humanness’ as I wrote in my assignment:

My peers like Margie, Belinda, Ada and the instructor showed strong sense of humor both in class and online which enhanced group cohesion and increased social presence. The jokes implied that my peers are understanding and considerate human beings, and could be communicated at ease. Thus I think humor increases social presence.

Among the indicators of affective responses, significant numbers of self-disclosure (676 occurrences) were found throughout the posted messages when the participants started sharing their autobiographies online. Self-disclosure (Gunawardena, Nolla Wilson, Lopez-Islas, Ramirez-Angel, & Megchun-Alpizar, 2001) constitutes members’ social presence, which is vital for the creation of a learning community. The
ongoing reflections on each other's life experience promoted further self-disclosure, critical reflection and social relationship building. On the BB, the participants who demonstrated high levels of disclosure received more responses and support from peers, such as Tim and Eddie. They were very open to discuss details of life that include sensitive topics expressing vulnerability and personal feelings, but they took the risks in this community. Tim revealed his struggles with various identity issues, and Eddie revealed the difficult times when his mother dealt with bipolar depression and the death of his mother-in-law. The revelations were filled with emotions and integrity. As a result, much appreciation and empathy were gained from other community members. Below is what Eddie wrote about his experience of disclosing, which did not only help the other community members getting to know him but also his wife who was interested and was attentively reading his postings everyday throughout the course:

Message no. 5709[Branch from no. 5699] Posted by Eddie on Wednesday, July 28, 2004 10:02pm Subject: Dear Margie

by doing this (writing and sharing the language/culture/identity development autobiography), i was able to maintain an open line of communication, even though by the early 90's she (Eddie's mother) was unable to carry on a conversation with anyone in the family. Mona, thanks for asking your questions about my journaling. i hope that helps you know me better. i know writing this down has helped my wife to know me better tonight. -- blessings, Eddie

More discussions on self-disclosure are in the latter part of the chapter.

Moreover, as mentioned above, the high level of presences of humorous banter and joking (40 occurrences) indicated high levels of social presence, especially near the end of the course. The finding supported researchers' view that humor could reduce
social distance, contribute to group cohesion and ultimately to learning (Christenson & Menzel, 1998; Sanders & Wiseman, 1990). The benefits of using humor in language teaching include releasing tension, enhancing motivation, providing authentic cultural information, developing creative thinking and building bridges between cultures (Medgyes, 2002). Gradually, the students gained distinct impressions of certain individuals from the affective responses appeared during the ongoing communications. Finally, the significant numbers of indicators of affective responses such as expression of emotions and self-disclosure suggested that they should be integrated into the coding process of grounded theory.

4.2.2 Interactive Responses

The QCA showed that there were 2406 occurrences of interactive responses that were evidences of building and sustaining social relationships. Examining participants' Interactive Responses enhanced my theoretical sensitivity about the interactivity that indicated a high level of social presence. According to Rourke et al. (2001), the indicators of interactive responses related to interaction should be viewed as a continuum ranging from weak to strong levels of interaction. For instance, the indicators such as 'quoting from other's message' and 'continuing a thread' were realized through software features; 'asking questions' (622 occurrences) and 'showing curiosity' (63 occurrences) which were additional indicators identified in this study, however, indicated more conscious effort of the participants to interact with other students. Also the large number of occurrences signaled participants' increasing curiosity or interest through the language/culture/identity narrative interaction. Thus a high level of interaction emerged as the result of increased interest.
Other interactive indicators like 'expressing agreement' (175 occurrences) and 'expressing similar experience or perspective' (45 occurrences) indicated a high level of 'sameness' or commonality in participants' perspectives and past experiences. Key words or phrases, like 'agree', 'also', 'your experience made me think about ...(past experiences)' and 'same,' were found in the process of sharing the language/culture/identity narratives. For example, Tim showed agreement with the other’s perspective, “I also think you're right on about individually tailoring the learning to the student and responding to them”. Mandy wrote on the BB, “Eddie, I cannot agree more…” The students were able to resonate with other’s experiences and perspectives. Eddie wrote on the BB:

Message no. 5659[Branch from no. 5621] Posted by Eddie on Wednesday, July 28, 2004 8:05am Subject: Re: Ada's biography (second try)

What resonated the most with me in your account was the difference that the one teacher made in your entire outlook towards your learning.

Christenson and Menzel (1998) found that the use of personal examples and personal anecdotes contribute to affective learning. The authenticity of personal experiences induced tremendous interest that led to intrinsic motivation and participation. Half of the participants showed disagreement in subtle ways because they tried to avoid showing blunt or dominating attitudes in the public forum, which was similar to Luo’s (2004) finding. Transitional words like ‘however’, ‘but’, ‘although’, ‘on the other hand’, ‘nonetheless’ were used for expressing different perspectives, for example:

Message no. 5825[Branch from no. 5817] Posted by Tim on Friday, July 30, 2004 10:56pm Subject: Re: part 2 of Belinda's language education
I could never fully put myself in their shoes and deeply empathize with them sufficiently; however, I do feel that I can take things from them...

On the other hand, the other half of the participants was uninhibited in any way. Several motivated participants like Belinda, Tim, Denny and Margie revealed that they did not feel the inhibition that they often felt in other courses. They did not feel restrained from expressing their ideas and opinions. Tim wrote in his assignment:

In other courses I was often holding back on my personal enthusiasm and contribution for fear of dominating the discussion. I did not feel inhibited in that way this time.

Moreover, the presence of critical statements and disagreement indicated the strong bonds the participants shared with each other as Eggins and Slade (1997) suggested. For example, the participants responded to each other with obvious words of disagreement (14 occurrences) but with polite manner:

Message no. 5911[Branch from no. 5833] Posted by Denny on Monday, August 2, 2004 2:56pm Subject: Re: Tracy's Autobiography

I would have to disagree a little here in that poetry is highly valued in education as a tool for expression. I teach a creative writing course...

Message no. 6206[Branch from no. 6203] Posted by Margie on Friday, August 6, 2004 4:43pm Subject: Re: OUR BIASES

You can be biased in favor or against something. Thus, I do not think that you could say that bias has necessarily only a negative connotation. Margie

With regard to the other indicator ‘complimenting, appreciation’ (431), a significant number of complimenting or appraisals expressing appreciation were found throughout all the BB messages. A significant number of statements of complimenting
come from the instructor, demonstrating a high level of teacher immediacy (Anderson, 1979). Teachers’ complimenting students’ work increases instructional effectiveness (Christenson & Menzel, 1998; Gunawardena, 1995). For example, Dr. Rogers wrote on the BB, “Great autobio.” You certainly had a home environment that strongly encouraged literacy skills from an early age”. As a result, the participants felt encouraged by the instructor’s positive comments as Mandy revealed on the BB: “Dear Dr. Rogers, reading your comment encouraged me to think more deeply regarding my life”. Even more, a few participants like Belinda revealed that Dr. Rogers’ messages could guide their thinking.

The participants used many words of complimenting and appreciation to each other:

Denny, I loved how you began your autobiography with your experiences traveling with your wife in Cambodia...

I enjoy reading your autobio. As you said in it...

I appreciate your understanding of the Japanese culture of communication.

The complimenting and appreciating revealed participants’ strong affinity to ‘a code of online etiquette’ (Conrad, 2002b). The participants were “being nice” to each other in order to create a comfortable, tolerable, harmonious, warm and caring community. Since the beginning of the course, the participants tried to establish and maintain a habitable environment by showing friendly attitudes. This community matched with the concept of an ideal community which is the ideal social environment of a computer conference, and that should be friendly, warm, trusting, personal and disinhibiting (Rourke, 2000). Among the indicators of Interactive Responses, ‘asking questions’, ‘expressing agree-
ment', ‘complimenting, appreciation’ were integrated into the coding process of grounded theory.

4.2.3 Cohesive Responses

There were 744 occurrences of cohesive responses identified in the BB messages. Among them, most of the occurrences were phatics and salutations (419 occurrences), indicating that the online social environment was friendly and welcoming. The frequent use of phatics and salutations indicated that the students were being nice and polite to each other, and a high level of respect was shown toward each other. As mentioned earlier, the participants appeared to be well aware of the online etiquette (Conrad, 2002b) since the beginning of the course. The students showed tremendous respect and appreciation toward each other’s language and cultural background. This respect and appreciation was nurtured more thoroughly when they shared their language/culture/identity development autobiography as the course progressed. As a result, the respect and appreciation grew stronger and that combined with the feelings of ‘sameness’ in experiences and perspectives (see Interactive Responses), thus the participants felt they become cohered as a group and community. The uses of inclusive pronouns (111 occurrences) in the second and third weeks of the course, such as “our”, “we” and “everyone”, and vocatives (103 occurrences) indicated that the students gained a strong sense of the community.

The cohesive indicator that was identified in this study was ‘expressing support to other members’ (111 occurrences). For example, the following messages were written to encourage Tracy who was absent for a class and later revealed that it was due to her feeling depressed over some personal matters. The other community members posted con-
cerned messages that were filled with a lot of emotional support to encourage Tracy to stay positive about life and continue with the course:

Message no. 5803[Branch from no. 5774] Posted by Ada on Friday, July 30, 2004 1:06pm Subject: Re: I like the way it works!
I admire your honesty and I hope that all is well. Also, your contributions in class today were very insightful...

Message no. 5868[Branch from no. 5774] Posted by Jenny on Sunday, August 1, 2004 6:11pm Subject: Re: I like the way it works!
I think our life has two different sides as coin. Sometimes positive, sometimes negative, in the circle of up and down!!...

Margie even provided strategies for getting out of depression:

Message no. 5804 Posted by Margie on Friday, July 30, 2004 1:08pm Subject: Dear Tracy
I am really pleased to hear that you are feeling better. Well, we all go through it one way or another. Depression is at times hard to escape...But we get depressed also because life gets lonely. Are you going to be able to see your family any time soon? Or are they perhaps coming over for a visit? Take a deep breath and TRY TO RELAX. Go see a nice move. If you are not yet sick of reading, read something just for fun. You could also visit an outdoor swimming pool!

Take care, Margie

Dr. Rogers also used explicit expression of support to Tracy, demonstrating a high level of teacher immediacy:
Message no. 5787[Branch from no. 5774] Posted by Dr. Edward Rogers on Friday, July 30, 2004 6:54am Subject: Re: I like the way it works!

Yes, I missed you in class. Now that you are back I really look forward to your messages and in-class participation.

Near the end of the course, some students felt stressed and overwhelmed from the intensiveness of the course, but they showed strong supportive and encouraging behavior toward each other on the BB; for example:

Message no. 6597[Branch from no. 6591] Posted by Tracy on Wednesday, August 11, 2004 6:12pm Subject: Re: 10x10=20 Yeah, baby, yeah!

Hi Margie, I'm trying hard!!! But it seems a little overwhelming. I slept the all afternoon--too tired to stay clear! Anyway, let's keep going! ^!^ Tracy

Message no. 6600[Branch from no. 6597] Posted by Margie on Wednesday, August 11, 2004 6:38pm Subject: Re: 10x10=20 Yeah, baby, yeah!

Tracy, if you slept all afternoon, that is all the sleep you will need for today. Now, rise and shine and answer those postings. They are calling your name! Margie

QCA produced numbers that indicated students' development of social presence on a continuum, from low to high level of social presence. The key words and themes include: polite/nice, complimenting/appraising, disclosing, agreeing, emotion, cohesive and humor. As claimed, the analysis showed students' levels of social presence (Rourke et al., 2001). The results of the QCA contributed much to theoretical sensitivity during constant comparison and theoretical sampling (Strauss & Corbin, 1990). The emerged key words and themes enhanced theoretical sensitivity for conceptualizing and categorizing data in the grounded theory coding process. As noted, looking at frequency of performance such
as indicators of social presence gave specificity to the social presence phenomenon. The following sections illustrated how grounded theory was used to obtain the insight into the subjective and attitudinal natures of social presence.

4.3 Research Question 2

How do the students describe their understanding of social presence from this activity?

*Valuable Connecting* is identified as the first core category that produced *Cyber-Narrative Mediating Connecting*. *Valuable connecting* is a process by which the study participants described their overall experience while engaging with the language/culture/identity narrative interaction via CMC. *Valuable connecting* is recognized by the participants as the necessary condition to feel comfortable about sharing information and contributing to their learning community.

During the interview process, I directed the participants to focus on their experiences while engaged with narrative interaction online. All the participants acknowledged having a working definition of social presence (Rourke et al., 2001); however, what constitutes people’s social presence is open to subjectivity. It was up to the participants to reflect on their social presence while engaged in the language/culture/identity narrative interaction.

4.3.1 Quality Connecting

From the examinations of the transcribed interviews, the BB transcripts and the comparison assignments, social presence was predominately defined as the sense or feeling of belonging to a community. Key words from the participants’ view included (inter)-connectedness, togetherness, belonging, text-based, comfortable, participation, under-
standing, positive, acceptance and respect. Most participants revealed that social presence is based on one's sense of 'being together', 'be able to relate to-' and 'feel connected with' other members of the community. Participant Eddie defined social presence as the feeling of comfortable about working together and being heard:

Things are being shared for the sake of working together and making everyone feel that they are being heard; they are contributing to their understanding and development of those other people's experience. Together they are feeling that they are creating and bringing something they couldn't otherwise bring about on their own... Everybody needs to be comfortable and interceptive with speaking, or else just not going to do it (feel socially present). (Eddie, interview)

All the participants indicated that they felt positive social presence or 'quality connectedness' by sharing their language/culture/identity development autobiographies on the BB. They saw that they actualized building social presence through the online discussion. At the beginning of the course, the participants felt they were led by their preconceived assumptions that based on their perceptions using the communication medium in general. After a few days, through reflection, the participants realized that social presence is more complex than perceiving the medium itself. At the end of the course, the participants' own definitions of social presence became multi-faceted, which echoed Biocca et al.'s (2003) definition. Social presence is related to the medium and the interaction, and is pertained to individual user. However, the participants showed divergent focuses: some participants focused more on the effect of the medium on their connectedness, but most of the participants focused more on building social relationships among community members; in other words, they were concerned more about building psychological connection pertaining to the concept of co-presence (Nowak, 2001). The participants tended
to achieve the "sense that they are close enough to be perceived in whatever they are doing, including their experiencing of others, and close enough to be perceived in this sensing of being perceived" (Goffman, 1963, p. 17). The medium, nonetheless, does not play a determining role on the participants' connectedness.

Five participants characterized social presence more as the effects of the medium: social presence is mediated through textual dialogues, and it depends on the quantity and quality of postings. Participants like Margie and Tim revealed that without the various paralinguistic and non-verbal back channeling cues in CMC, students' social presence online is mediated through text and their social presence becomes solely performance-driven. Tim stated, "Online, no postings, no social presence". Participant Belinda also found it much easier to create a social presence FtF because of her familiarity with the culture of the classroom, whereas she felt like 'a relative neophyte' in the online discussion setting. Moreover, when the participants related social presence to text, their concepts about social presence were narrowed down to the perceptions about their writing skill as Belinda revealed in her assignment:

When I participate online, my whole person seems to be reduced to my ability to write. As a student who has a varied relationship with writing, I find this worrisome. I am motivated to be silent, in much the same way that some people will not speak up in class, but talk freely with friends, and family.

These participants who emphasized their social presence became "an agglomerate of different presences" (online versus FtF) as stated by Tim in the interview. They saw their different level of social presence being affected by the use of the medium and how the medium is usually perceived.
These perceptions of social presence showed that almost half of the participants were inclined to view social presence in a manner that closely represented Short et al. (1976) and Gunawardena (1995). Short et al. (1976) defined the concept of social presence as “the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationships” (p. 65). Social presence was perceived as a quality of the communication medium itself, and that the medium has the constant effect on the interaction.

In contrast, seven of the twelve participants characterized social presence more as co-presence and the product of building connectedness, especially the NNS participants. The NNS participant Jenny stated: “To feel socially present is to feel interconnected with each other”. This supports Smith and Mackie’s (2000) claim that the need for belonging and connectedness which social relationships is human’s fundamental need. Also, Jenny’s definition indicated participants’ intention for building connectivity among community members and constructing their virtual learning community because it is a nexus of connectivity (Kramsch & Thorne, 2002). The NS participant Mandy revealed:

As this course has progressed, the sense of group cohesion has grown stronger, and I feel I truly know the members of this class and feel comfortable with them. In fact, on one level I feel I know many almost as well as I know some of my best friends. I am truly grateful for this experience. (Mandy, assignment)

The other NNS students like Tracy seemed to be more concerned about gaining respect and acceptance from fellow members:

I think it’s a sense of belonging, respect get from members from the community. You are cautious about how you behave, or you are deemed/looked at/regarded by the community. (Tracy, interview)
This indicated that the NNS students were concerned about their non-native status that could make them marginalized or even be excluded from the community. Their needs to feel belong to the community seem to be greater than the NS students.

4.3.2 Necessary Connecting

Moreover, the participants were aware that their social presence online was different from FtF when they wrote their assignments reflecting on the two modes of learning. However, it is vital to establish and develop that nexus of connectivity regardless through which communication channel. To illustrate, I wrote on the BB:

Message no. 6072[Branch from no. 6013] Posted by Kristy on Wednesday, August 4, 2004 10:35pm Subject: Re: Social Presence

Yes, time is always limited, but communicating with others and building social relationships are necessary to make me feel I belong to this family or any other group/community. I think human beings need connections with each other, and time and effort are certainly needed to make the investment.

Even more, participant Ada compared social presence to food to emphasize its importance to learning as she wrote on the BB:

Message no. 6108[Branch from no. 6013] Posted by Ada on Thursday, August 5, 2004 1:18pm Subject: Re: Social Presence

I don't know if you maintain social presence. I think that it is like food. We all need it. That is, to feel happy and self fulfilled. Maybe, this day in age, it is more difficult to connect with people, perhaps? ... 

Ada later reflected more about social presence in her assignment:
I believe that people in general have a strong desire to be valued. In one of my postings, I described the notion of social presence as vital necessity, a central part of human existence. That is, I compared it to food. For example, malnutrition results when food is lacking and, as a result, people struggle to function. Yet, in a nourishing environment where there is an abundance of food, people tend to prosper. Hence, for optimal learning to take place, students need to feel that they belong. As for myself, I felt that I was a part of our online community. In turn, I looked forward to reading the postings and also enjoyed composing them. In other words, a positive affect had been evoked. Furthermore, accessing and participating in the online community became an integral part of my day.

These perceptions suggest that the participants were inclined to view social presence as psychological connections and those connections are crucial to their perceptions of the community. These perceptions are closely aligned with Rourke et al.'s (2001) definition of social presence as the ability of learners to project themselves socially and emotionally in a community of inquiry. The role of the medium, on the other hand, does not seem to be the most important component of social presence; instead ones' psychological connectedness with the other members of the community and their emotional engagement with the community seem to be the major components of social presence.

4.3.3 Valuable Connecting

The interplay between data and literature (Strauss & Corbin, 1990) induced key words, emerging themes, patterns and categories; plus the constant comparison strategy with theoretical sensitivity enabled one of the core categories, Valuable Connecting, to evolve. From the definitions of social presence, the participants associated their percep-
tions of social presence with the concepts of the imagined community (Anderson, 1991) and the ideal community (Shumar & Renninger, 2002), and wanted to achieve the 'ideal social presence' that is conducive to learning. Every participant revealed that there was a sense of having a learning community developed throughout the course as Tim stated in the interview: "Everybody in this community was supportive, enthusiastic, and was participating in a way that could construct a meaningful and learning group in community". Moreover, like the members of other virtual communities, the participants seemed to keep an image of the loving and close community, building intimate personal relationships and bonds of caring. The finding showed that the participants understood that the language/culture/identity narrative interaction provoked positive and quality connectedness with peers, which fit with their image of the ideal community. Ultimately, they saw that connectedness as a 'vital necessity' for the construction of an effective learning community because people need to satisfy their fundamental social needs. The participant students were aware of the rich social presence, and felt they were valuable members of the learning community. The sense of valuable connectedness is recognized by the participants as the necessary social antecedent condition for sharing information and collaborating with other community members. Figure 4-2 shows the coding process as the Valuable Connecting category was constructed:
Units of Data | Open Coding | Axial Coding | Selective Coding
--- | --- | --- | ---
I fell I have a strong social presence. I felt I belong, very comfortable. | Comfortable Connectedness | | 
This class is little different, it's really 'seminar'. The learning community is holding the members more tightly. | Close Connectedness | Quality Connecting | Valuable Connecting
I felt that I developed more...It wasn't just student-student relationship, but much more...It was a genuine relationship definitely, especially the autobiography part. Depending on how much you want to reveal, you really got to know people. | | Genuine Connectedness | 
I do not think that the presence that I have put forward in-person is the same as my presence on-line. | Different Connectedness | | 
Everybody in this community was supportive, enthusiastic...was participating in a way that could construct a meaningful and learning group in community. | Community Connectedness | Necessary Connecting | 
In one of my postings, I described the notion of social presence as vital necessity, a central part of human existence. That is, I compared it to food. | Necessary Connectedness | | 

Figure 4-2 Coding Process of Valuable Connecting
The emergence of the core category *Valuable Connecting* corroborated with the finding from the QCA. The results of the quantitative and qualitative analyses could provide additional convergent support for the overall validity (Greene & McClintock, 1985; Miles & Huberman, 1994; Rossman & Wilson, 1984) and confidence (Patton, 1990) of the findings from multiple data sources. As shown above, the quantitative and qualitative results confirmed the finding that the participants gained a high level of or rich social presence and a sense of valuable connectedness through sharing the language/culture/identity development autobiography in CMC.

### 4.3.4 Patterns of Valuable Connecting

Patterns constitute a network of conceptual relationship and it gives the theory specificity (Strauss & Corbin, 1990). As indicated in Table 4-1, the pattern, ‘Increasingly active participation’, was identified when most of the participants first observed others’ discourse and communication style at the initial stage of the online BB discussion. The instructor Dr. Rogers first modeled the style of discourse with a few very motivated individuals such as Tim. Dr. Rogers first wrote his autobiography on the BB: “I remember that when I studied French Civilization in the 70’s…” Moreover, Dr. Rogers demonstrated positive teacher immediacy, the nonverbal behaviors that reduce physical and/or psychological distance between teachers and students (Anderson, 1979). Dr. Roger’s prompt responses, attentiveness, welcoming and encouraging behavior initiated student participation and active participation followed. As a result, most participants quickly increased their level of participation: moving from mainly reading others’ messages on the first two days of the course to gradually increased their number of posting day by day. Especially the NNS students including Tracy and I gradually changed from passive participants to active participants who initiated many new topics of discussion. In total,
ticipants to active participants who initiated many new topics of discussion. In total, 246 topics were discussed throughout the course. Among them, 23 threads were on participants' autobiographies which generated 221 messages in total, and the average number of response per thread was 9.61 messages, SD=4.78. A very high level of responses to each other's autobiography was shown.

In FtF discussions, NNS students most of the time seem to be passive participants due to the various challenges they face, such as negotiating discourses, identities and power relations (Morita, 2000). However, in this study, when the NNS participants could share their language/culture/identity development experience, they felt their language and cultural background were respected and their experiences were valued. The NNS participants such as Tracy and Jenny took on the identity as successful language learners thus gaining their agency through sharing their language learning experience. In the process of sharing, they shared their stories of struggles and internal conflicts about acculturating and adapting to the English-speaking society. For example, Jenny talked about her first encounter of being a 'foreigner' when she first arrived in Canada:

Message no. 5605Posted by Jenny on Monday, July 26, 2004 11:11pm

Subject: Autobiography by Jenny

After flying for 10 hours from the edge of the Pacific Rim, I at last arrived at Canada to pursue my dream. Scary. I felt I was entering the forest at its deepest, darkest point. I did not know what I would find in this strange, new city. It all seemed so remote and disinterested, and I was overwhelmed by the feeling of being a stranger. I wandered like a ghost in a physical space and experienced every possible emotion. I was a stranger in this alien world. It was so different from where I grew up and also from what I had expected. It felt like I was from other
planet. The burden of my responsibility to succeed in my new life in Canada weighed on me, and I felt at one moment as if I were in a dark tunnel, and the next as if I were in the middle of an endless ocean, trying to row my little boat towards my goal. Just as on that day over twenty years before, I was again labeled as “different”?

As a result, the NS student participants gained much understandings and showed tremendous respect and admiration toward the NNS participants for their courage, persistence and strength in succeeding in the new ‘world’.

Moreover, the community members got to know and understand each other’s past experiences in person. They all revealed that they had definitely formed distinct impressions of their peers and the instructor over the course as Eddie revealed in the interview: “Sure. How can I not (form distinct impressions of others)! Some people more, some people less... Ada challenged things, but not accepts things inconsistently, sometimes she’s there, and sometimes she held things in. Sometimes, she’s interesting in contributing, sometimes not, maybe she’s tired”. As shown, every participant was able to reveal his or her impression of each participant in terms of participation and personality, and distinct impressions were formed for some of the participants.

As a result, the participants were satisfied with the quality of participation and interaction with others as Mandy stated in the interview, “My other online definitely didn’t get as in-depth as this one. This is one of the best courses I took”. This in-depth getting-to-know process accelerated participants’ development of social presence indicating the process of ‘from feeling isolated to feeling connected’. Moreover, participants’ motivation went through a rapid change, they were basically instrumentally motivated on the first day of the class because most of the participants revealed that they needed ‘one more
course’ to graduate from their master’s program; however, later some participants revealed that they became addicted to the BB activity, indicating the shift ‘from instrumentally motivated to intrinsically motivated’. Ada revealed the online communication was addicting: “I was really pleased with it (the course), enjoyed it compared to the other ones. I look forward to going to class. I really enjoyed coming to class. The online was addicting…” Tim expressed his opinion in his assignment:

Through the on-line forum and the in-person classroom environment (and unplanned F2F discussions outside of class time,) a sense of community of shared purpose and adventure (for me learning is an adventure – the metaphor of travel) developed swiftly. The obligation of on-line contribution soon lost the feeling of duty and became addictive. Together, these forums enabled our learning community to develop the way it did. If either of these environments had been absent, it would have been less thrilling and fulfilling.

4.4 Research Question 3

How do the uses of the language/culture/identity narratives, CMC and collaborative learning promote the development of social presence among graduate students in education?

4.4.1 Constructed Connecting

Constructed Connecting as shown in Chapter Three was identified as the second core category that produced Cyber-Narrative Mediated Connecting. Constructed Connecting is a process by which the participants showed evidences of their developing social presence in the course. It was recognized by the participants as building a sense of
social presence individually and with others in a facilitative mixed-mode environment. The participants transformed from building self-connectedness to building connectedness with others. During axial coding, categories of the QCA were integrated in the major categories. The core category, Constructed Connecting was comprised of three major related themes, which described the development of students' social presence while sharing the language/culture/identity narratives: Familiarizing Connecting, Disclosing Connecting and Learning Connecting.

4.4.1.1 Familiarizing Connecting

Sharing the language/culture/identity development autobiographies enabled participants to become acquainted with each other in a very short period of time. Since the course was only three weeks, it was essential to develop a process for creating almost immediate social presence. Participant Margie commented during the interview: “It was a good tool to make people talk about themselves. I thought that was good”. Sharing the autobiographies promotes rapid establishment of social presence as participant Tim revealed in his assignment: “The discussions and autobiographies have been the impetus for enacting a social presence in this class”. Due to the rapid establishment of social presence, participants appreciated the online activity as revealed by participant Eddie in the interview:

The experience online is richer for sharing with these people because what they say or response. The autobiographies filled in all the blanks. Everybody needs to be comfortable and interceptive with speaking, or else they are just not going to do it.
Eddie explained that ‘blanks’ referred to participants’ background information including their language learning histories, ethnicities and past life experiences that were revealed in the autobiographies. As a result, the students came to immediately know each other on a valued personal level and this led to a high level of comfort and value in interaction and trusting both online and FtF. The finding supports Hillman’s (1999) claim that relevant personal vignettes, anecdotes, descriptions of personal experiences promotes trust among participants and with the instructor, reduce students’ anxiety, enhance motivation, creativity, brainstorming, and risk-taking. Moreover, the instructor came to rapidly know the students and understand students’ strengths and weaknesses, as the instructor of the course Dr. Rogers revealed in the interview: “Through autobiographies, I got to know the students and even their personality”. Thus sharing the language/culture/identity development autobiographies also enhanced teacher immediacy.

As such, sharing the language/culture/identity development autobiographies was the initiator of a learning community. Most participants were sensitive to the benefit of the activity that encouraged online discussion and initiated the building of a learning community. Participant Betty stated in the interview: “Sharing (the language/culture/identity development) autobiographies is a good way to start a learning community”. The sharing offered a chance of opening one’s personal life history to others, including peers and instructors, and participants showed strong interests in each other’s life experience, especially about other’s language and culture experiences. This effectively encouraged intercultural communication. Participant Belinda reflected in the interview: “People have rich life. So it is like going from one culture, develop a new cul-
ture, be aware of another culture, being bicultural”. Participant Mandy also stated in the interview:

Definitely there was (a learning community). There were so many varying backgrounds and perspectives people coming from that enable people see similarities and differences between each other, and between experiences that are as part as well.

4.4.1.2 Disclosing Connecting

Many participants first read others’ language/culture/identity development autobiographies and then decided which parts of their language learning and how much experience to reveal on the WebCT BB. After feeling the level of disclosure through peers’ autobiographies, some participants decided to disclose more about themselves as Eddie revealed in the interview:

When I see people were sharing to the depth online and class, then I say, why won’t I? They seem to be benefiting from it, and they seem to be getting everyone’s comments and questions, and subsequent discussion online and in class. I say, yeah, I want to be part of that. I am in this class I signed up for, why shouldn’t I benefit from it.

Eddie later revealed in the interview that the level of disclosure was ‘no boundary’, in-depth and even ‘not proper’ to his Chinese cultural belief:

I found I am very willing to disclose whatever I need to that's pertinent to the conversation. You… just no boundary, you just layout, "not proper" to Chinese. Autobiography helped me bring together some thoughts. On my computer personally, I typed down…but not to the length and breath, especially focused on the
issues of culture and language. It was really pleasant to have the formal opportunity to do it.

Near the end of the course, Tim even shared his poetry with the class, which he usually only shared with his family. Disclosure led to challenging discussions that reflected a co-constructive collaboration among the student participants. In addition to the mixed-mode communication, the autobiographies helped the participants get to know their audience in order to co-construct their online discussions. Participants were able to learn about each other’s beliefs and interests. For instance, when one participant revealed the rigorous religious aspect of his life, other participants showed respect and acceptance of his views. On the other hand, the participants did not feel inhibited from expressing their opinions and identity. To illustrate, Tim compared his experiences with other traditional FtF based courses and this mixed-mode course in his assignment, and found: “In other courses I was often holding back on my personal enthusiasm and contribution for fear of dominating the discussion. I did not feel inhibited in that way this time”.

A few participants revealed thoughts about their personal privacy and permanency of the online discussion. However, these did not stop them from disclosing their language/culture/identity development experiences. Actually, participants carefully chose what they wanted to reveal. Belinda said in the interview:

I was keenly aware of the autobiography that’s going to go online, so I tried to choose stories that’s comfortable with the larger world hearing. Obviously I didn’t tell everything about my life. Lots of things are too private, but I choose to make part of my life that’s going to make public.

On the other hand, most participants did not show much concern about the issue of privacy. Participants Mona and Eddie loved writing journals in a regular basis. They
appreciated the chance to reflect critically on their language/culture/identity development experiences which the instructor encouraged. The NNS student Tracy especially appreciated the opportunity of sharing her autobiography. Even more, she became better in portraying her identity and taking on agency, as she owned the authorship of being the 'sole author of her autobiography'. However, her additions to her autobiography were influenced by other's questions and autobiographies. Nonetheless, she had ample time to make the decisions about what and how to portray her self-identity through writing:

I think writing autobiography, a good opportunity to reflect on my previous experience, especially experiences of learning first and second languages...Not only memorized those events and details, but also I reflect on the meaning...the effect on the later experiences. ...Sharing...I wrote for this class, I chose what to write and what not to write, so sharing is okay.

A majority of the participants revealed that they formed distinct impressions of some students in the course. Mandy revealed in the interview:

Just by doing the autobiography I got to know someone better. Yes, you are presenting something about yourself, so yes, people are getting to know you, but also with the short interaction online, you could also get impressions about people that may not have been obvious in class.

Many participants even built surprisingly close social relationships with each other in the relatively short period of three weeks. Some chatted after the classes, contacted each other and even continued their online communications for a few weeks after the course ended. The high levels of disclosure brought about a rich sense of social presence. As participant Ada revealed in the interview:
I feel I am closer to other students than in other courses. I contacted Margie and Betty (after the course ended). I felt that I developed more...It wasn’t just student-student relationship, but much more... It was a genuine relationship definitely, especially the autobiography part. Depending on how much you want to reveal, you really got to know people.

Moreover, after the rich social presence had been developed in the learning community, participants showed efforts to maintain that level of social presence. Acceptance and respect of different opinions, understanding, support, humor, and sympathy that indicate strong group cohesion were found throughout the messages. Participant Mandy commented about the group cohesion in her assignment: “As this course has progressed, the sense of group cohesion has grown stronger, and I feel I truly know the members of this class and feel comfortable with them”. Participant Mona showed much understanding and support in responding to Jenny’s autobiography:

Message no. 5695[Branch from no. 5605] Posted by Mona on Wednesday, July 28, 2004 8:32pm Subject: Re: Autobiography by Jenny

Thanks for sharing so many of your thoughts. You express yourself very well. It takes a lot of courage to make such a significant move into a new country, culture and language. I imagine that this will be a very worthwhile and rich experience for you. So much risk-taking that I'm sure will lead to rewards! I like that you feel that "curiosity" is one of your best teachers. I believe that too. Good Luck! –Mona

Belinda who was in doubt about using technology at the beginning of the course showed a change of her attitude when she sensed humor from Margie’s posted messages. The following posted message showed that humor contributed to students’ social presence.
Message no. 6021 [Branch from no. 6001] Posted by Belinda on Wednesday, August 4, 2004 4:25pm Subject: Re: Dress code

Margie, you just made me giggle okay it was more of a chortle!! no catholic blood but years of latin and Bible lit. does that count? ... thanks for the giggle--perhaps i'll begin to enjoy this webct a little more now that i've had a giggle ;o) regards -b

Margie, Belinda and Ada were the frequent users of humor and that allowed a strong bond established among them. They talked to each other most of the time during class breaks and after the class. Margie revealed the reasons for using a lot of humor on the BB during the interview:

I was getting a little bit tired. This is my third course, and I found that being in class, the thinking is so intense, when I went online, I didn’t want the same intensity.

However, not everyone used humor in his or her postings. Some participants like Tim and Betty preferred academic formal style postings, instead preferred to use humor in FtF as Tim revealed in the interview:

I think my online presence was a bit more formal. I don’t think I have any humor in my postings cos I found it hard to write funny. FtF, the warmth and humor emotions will come through. In this class, I did not hold back.

Betty thought some messages were too social, and she only chose to respond to the messages that she felt they were related to the course. However, she insisted the online communication was rich and a learning community was established and developed. Humor is culturally and individually sensitive, for instance, the NNS students sometimes could not understand NS students’ jokes, but humor still worked as the affective glue that made the students feel relaxed and close to each other regardless of the differences in cultural back-
background. Eddie stated in the interview: “I found them (other community members) all to be sincere, kind, intelligent, experienced teachers and most of all, funny!”

4.4.1 Learning Connecting

The participants gained social presence rapidly through autobiography writing; they became intrinsically motivated about learning as Tim wrote in his assignment: “The obligation of on-line contribution soon lost the feeling of duty and became addictive”. Participating online became a pleasure, which showed that participants fully took on their student agency. When asked about how they felt about conceptualizing and writing their language/culture/identity development experiences, all participants stated that it was their first chance to do so, and it was a very meaningful experience. Reflection on one’s own and other’s language and culture experience led to awareness and reflection about their current learning and teaching. Ada revealed in the interview:

I guess I learned commonalities between me and my colleagues in terms of learning language. That’s the feedback I get mostly from them, “oh yeah, I experience this too, and how we should try to be as teachers”. So I think you can learn a lot just by reflecting on yourself, and what I’ve experienced…awareness I guess, level of awareness was raised.

In line with Ada, Tim also showed that reflection of past learning experience led to thinking of current teaching as he reflected in the interview:

I got much clearer idea about the way I should learn, and I think other people probably learn the way I do, but not everybody. I continue to make clear how I teach, and what I would value and prioritize in my teaching.
Margie on the other hand, reflected on her current experience in the course and related that to her teaching as she stated in the interview:

I think it gave us the opportunity to actually to think more in-depth what’s going on in class. I would love to do something like this in my class...

In terms of identity, the autobiography made participants think about their current identity critically. Belinda commented: “Writing autobiography made me aware of my culture and learning about my culture, how my culture formed, and experienced...Until we brought it up in class, I never thought about my identity without being told to”. Some participants think about issues relating to their current identity. The NNS participant Jenny stated in the interview: “I could develop myself, could think more about who I am now, currently”. Three participants expressed that they had come to learn about the fluid nature of one’s identity (Castells, 1997), for example, Margie stated in the interview:

It makes you reflect where you are going. I realized the identity is fluid. I always thought of it’s one thing. Because I was going through so many changes in life, maybe I was not thinking of it consciously, but...yeah, I am not who I was before.

The participants thought critically about their identities in online and FtF communications and most learned that the two communication modes complemented each other in an effective way. The findings showed that members of this online community continued to project their identities (Gunawardena, 1995) in parallel with the norms that emerged from interaction, and normative influence plays a significant role in members’ participation. The students reported that they benefited from the ‘extra time’ and ‘double opportunities to think clearly’ in order to participate and to construct their learner identity. Some participants who were originally in doubt about using technology for teaching and learning changed their attitudes. Participant Denny revealed in his assignment that he
felt apprehensive about the mixed-mode setting at the beginning of the course, but came "to understand is that there are positive and negative aspects to both types of learning (online and FtF). When used in combination, the greatest benefit to the learner is that there is a choice". Tim wrote in his assignment:

The combination of on-line and in-person modes for the construction of identity, however, permits and facilitates a rounder, more holistic hologram of the learner's constructed identity to shine through. The weaknesses of each on their own are nullified...In the end, I feel that this course was a transformative experience.

The mixed-mode experience in this course including the norms of interacting in dual modes and normative influences, made many participants change their perspectives about using technology. Furthermore, a majority of the participants revealed that they would use computers for their own teaching, and some even came up with detailed planning of curriculum such as sharing online journals and discussions of current events. Moreover, as shown in the examples on the table, other themes including Self-interest Connecting, Emotion/Feeling Connecting, Humor Connecting and Teacher Connecting are components of the core category Constructed Connecting. It is the blending of building self- and co- constructed connectedness. As shown, the participants were social actors (Shumar & Renninger, 2002) who were constantly constructing connectedness that contributed to the highly fluid and multifaceted nature of the community.

4.4.2 Experiential Connecting

Experiential Connecting was identified as the third core category that produced Cyber-Narrative Mediated Connecting. Experiential Connecting is a process by which the students gain social presence when they learn through their direct experience in acting
(interacting) and reflecting. Figure 4-3 illustrated the coding process of Experiential Connecting.

<table>
<thead>
<tr>
<th>Units of Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing autobiograph enables to increase my social presence in this class. It provides the space of sharing and learning each other's life.</td>
<td>Authentic Connecting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>When I could relate to other people's experiences... in some cases, I wasn't all that different from anybody else. I guess I learned commonalities between me and my colleagues in terms of learning language.</td>
<td>Commonality Connecting</td>
<td>Acting Connecting</td>
<td></td>
</tr>
<tr>
<td>So when I come in contact with people whose life paths and life experiences being very different from mine. It's an opportunity to learn and question what I think, believe, want, and understand.</td>
<td>Difference Connecting</td>
<td></td>
<td>Experiential Connecting</td>
</tr>
<tr>
<td>I haven't thought about them (language/culture/identity) before...something natural to me. Until I wrote the autobiography, they became concern to me.</td>
<td>Articulating Connecting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moreover, I can learn so much from people's experiences which make me think about many critical issues.</td>
<td>Thinking Connecting</td>
<td>Reflecting Connecting</td>
<td></td>
</tr>
<tr>
<td>My other online courses definitely didn't get as in-depth as this one.</td>
<td>In-depth Connecting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4-3 Coding Process of Experiential Connecting

4.4.2.1 Acting Connecting

During the interview process, I directed the participants to focus on their experiences sharing autobiography online. During axial coding, Experiential Connecting was
comprised of two major categories: *Acting Connecting* and *Reflecting Connecting*, which showed that the activity was knowledge-based (NCRTEC & Metiri Group, 2003), and the participants were learning throughout the activity. There were three elements that made the action of sharing the language/culture/identity development autobiography enhanced social presence. The action allows participants to explore the authenticity, commonality and differences in each other's experiences. The participants shared their autobiography via CMC, which allowed authenticity and authorship (Kramsch et al., 2000; Warschauer, 2000b) to emerge. Autobiography was personally relevant and meaningful to the students, and this authenticity increased students’ interests and reflections in their own and in each other's experiences. The levels of concern gradually arise and that made students felt they care about each other as fellow community members. For example, Ada revealed in the interview:

> When I could relate to other people's experiences, that is when I think I could respond the most and then I just learned that, in some cases, I wasn't all that different from anybody else. I guess I learned commonalities between me and my colleagues in terms of learning language. That's the feedback I get mostly from them, "oh yeah, I experience this too, and how we should try to be as teachers".

The students were also able to learn differences from sharing their autobiography as Tim stated in the interview:

> So when I come in contact with people whose life paths and life experiences being very different from mine, it's an opportunity to learn and question what I think, believe, want, understand.

Learning from the commonalities and differences in each other's experience increased the level of understanding and that enhanced the feeling of connectedness.
4.4.2.2 Reflecting Connecting

In Reflecting Connecting, students went through a process of articulating, thinking, discussing in-depth and contributing to each other’s learning experiences. This process engaged the community members “in a process of reflective restorying wherein their collective and individual knowledge of teaching is constructed and reconstructed” (Lyons & LaBoskey, 2002, p. 44). It was the first time that all the participants wrote their language/culture/identity development autobiography and the activity raised awareness and brought issues into focus. The texts that appeared on the BB brought experiences into view and raised consciousness: the essences in teaching and learning a language, and most of all, the participants’ own beliefs about language education. Jenny stated that the online discussion helped her conceptualize many ideas related to language teaching and learning. Tracy perceived that the online discussion helped her reflect on issues that she overlooked:

I haven't thought about them (how a language is learned and taught)
before...something natural to me. Until I wrote auto., they become concern to me.
For example, L1 acquisition...really natural to me, now I have clearer procedure,
steps and stages how I acquired the language. I concluded important factors and
events in my L2 learning that's what I usually overlooked.

The process of writing the autobiography became ‘an important reminder’ of her culture as Mandy revealed on the BB:

Message no. 5747[Branch from no. 5634] Posted by Mandy on Thursday, July 29, 2004 6:09pm Subject: Re: Mandy's autobiography

In fact, I was struck that I might know more about some of the people in our class
than I do about my best friend, who I thought I knew everything about. The class
is leaving me wanting to ask questions, of my friends, of my family, and of my-self. I am inspired to learn another language, to travel more, to spend more time talking with my dad about Croatia, and keeping in closer contact with his relatives. In our busy lives, it is easy to forget about such important aspects of our culture, but this class has served as an important reminder.

Tim described the articulation as an inner dialogue with oneself in the interview, "What I was learning is an inner dialogue with myself, and I am constantly talking to myself. I am articulating and formulating ideas etc". Moreover, Tim regarded this inner dialogue as a self-enquiry as he stated, "So when I come in contact with people whose life paths and life experiences being very different from mine, it's an opportunity to learn and question what I think, believe, want, understand". The self-enquiry was also a process of constructing self-identity as Blake, Blake and Tinsley (2001) suggested that narrative can be a useful tool for constructing identity. The participants went through a process of self-discovery, in which they rediscover their own selves, and in relations with many aspects of their selves. Mona revealed that she is a shy person during the interview and the online discussion helped her open up herself and thought about her identity as she stated:

It was my first time doing that. I think it confirmed things a little more about my identity and gave me the opportunity to share... It's interesting because it shows that I obviously...I am able to speak things freely that I might have not been comfortable about ten years ago...maybe I am still developing my identity.

Moreover, the participants thought the online the language/culture/identity narrative interaction helped to bring language learning and teaching into perspectives and continued make clear how they would learn or teach a language in the future. Tim found his per-
spectives about learning Japanese become more vivid to him due to the lan-
guage/culture/identity narrative experience online:

First, I certainly want to properly speak Japanese because I want to speak to my
daughter in Japanese. Second, I don’t think I’d made strong commitment and
effort to it as I would like to. I would like to do it formally, especially the reading
and writing parts, but that’s going to take some time. I will have to put myself into
the experiences whereby I have time to do that. I’ve got motivation and I’ve got
ideas about it...(refer to how Japanese is taught inappropriately). You need to do
it in a culturally appropriate way...

Even more, Tim continued reflecting about the ways language should be learned and
taught:

I got much clearer idea about the way I should learn, and I think other people
probably learn the way I do, but not everybody. I continue to make clear how I
teach, and what I would value and prioritize in my teaching. (Tim, interview)

The reflection of past experiences provoked much thinking and in-depth discussions. The
in-depth discussions lead to a high level of student satisfaction. I wrote on the BB: “I can
learn so much from people's experiences which make me think about many critical is-

sues”. Mandy revealed in the interview: “My other online definitely didn't get as in-depth
as this one. It's one of the best courses I took”. Denny showed how he appreciated the
opportunity to conceptualize ideas, initiate discussions, and re-think various issues as he
wrote in his assignment: “People learn best when they have an opportunity to think about
a concept or an issue, discuss, and re-think”. In summary, much acting and reflecting
were found while the participants shared the language/culture/identity development auto-
biography.

145
4.4.3 Medium Connecting

Medium Connecting was identified as a fourth core category that produced Cyber-Narrative Mediated Connecting. Medium connecting is a process by which the students characterized the benefits of the mixed-mode features while engaged with sharing the language/culture/identity development autobiography on the BB (see Figure 4-4). Medium connecting is recognized by the participants as having the ability to feel the benefits of both modes (FtF and online).

<table>
<thead>
<tr>
<th>Units of Data</th>
<th>Open Coding</th>
<th>Axial Coding</th>
<th>Selective Coding</th>
</tr>
</thead>
<tbody>
<tr>
<td>When both these modes of learning are combined, the impression I form and the</td>
<td>Combined Connecting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>connection I have with students becomes stronger.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think I had make connection with people online, and quite often those</td>
<td>Circular Connecting</td>
<td>Rich Connecting</td>
<td>Medium Connecting</td>
</tr>
<tr>
<td>people would come in class and made comments for something I had said in the</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>online forum, and that would start a conversation.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The face-to-face interaction gives us the opportunity to establish physical</td>
<td>Complementary</td>
<td>Freedom Connecting</td>
<td></td>
</tr>
<tr>
<td>presence and personalized connections with others that most learners need</td>
<td>Connecting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and crave for. The online interaction, on the other hand, provides us with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a chance to engage with knowledge.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Furthermore, not having to obey by any particular external rules, we could</td>
<td>Freedom Connecting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>establish and maintain our social presence on our own terms.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB is like an equalizer. ESL students make the course more interesting. They</td>
<td>Equal Connecting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>lived in so many places.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 4-4 Coding Process of Medium Connecting
4.4.3.1 Rich Connecting

During the data collecting process, I directed the participants to focus on the mixed-mode elements of the course. All the participants expressed that they enjoyed establishing social presence through the visual and audio channels that were available in FtF in-class meetings. The benefits of the FtF mode included receiving immediate responses and most of all, being able to see faces, have eye contact and non-verbal gestures. The participants emphasized that these advantages of online communication can never replace the benefits of FtF communication. The participants also insisted that without the FtF components, “we lose the important part of human communication, human contact” (Tracy, assignment). The participants revealed their preference for FtF interaction:

The FtF interaction gives us the opportunity to establish physical presence and personalized connections with others that most learners need and crave for. The online interaction, on the other hand, provides us with a chance to engage with knowledge on a deeper and more formal level. If difficulties of miscommunication arise online, they can easily be clarified in the classroom. (Margie, assignment)

All nuances of language, which cannot be replicated online, like gestures, sounds, body language, facial expressions, are saved to facilitate and help understanding and communication…It’s much easier to engage people when there are added sense of hearing and seeing which is available in FtF communication. Just because of this, I never think that the online mode can completely take the place of traditional FtF mode. (Tracy, assignment)
At the same time, the participants were well aware of the intensity in FtF in-class discussion which requires fast scaffolding. Especially to NNS students, the constant changing of various topics makes it difficult to keep up with the flow of the discussion. In-class discussion could be demanding cognitively as Jenny revealed in her assignment:

During discussion about one topic, I need time to think and make an order to put all my thoughts in a verbal form. But continuously the discussion is kept going with transferring to other themes. As a ‘slow thinker’, it is difficult to catch it actively.

On the BB, Tracy made an analogy about in-class discussion with ball passing:

Message no. 5963 Posted by Tracy on Tuesday, August 3, 2004 11:01pmSubject: Web-based VS FtF

In-class discussion might stimulate more thoughts, for responses are immediate. Interaction between students is quickly scaffolding the discourse of discussion. If we tape record the discussion, it would be interesting to investigate how the discussion is shifted from one topic to another. However, from ESL students' point of view, it might be a little bit overwhelming taking part in this kind of class discussion. It's just like playing a ball game. The ball is passed swiftly among the native speakers, jumping here and there quickly. ESL students are just like poor players who can hardly get the ball, and sometimes even can't see clearly where the ball goes. Their uneasiness might be compensated in web-based discussion, where they can take their time. There is no pressure of getting the ball. They can read all the postings at any time they want, and reply them after contemplation,
which would help them to nurture something more profound and more meaningful.

Jenny and Tracy’s revelations showed support to Morita’s (2000) claim that L2 students encountered difficulties in their FtF participation perhaps due to their lack of tacit knowledge and subtle skills of classroom interaction, the lack of training in critical thinking, and the lack of confidence about their non-native status. Like any other NNS students, the NNS students in this study showed lack of classroom interaction skills, and the use of the words “slow thinker” indicated their lack of confidence due to their non-native status. Among all, what worries NNS students the most is the swift change of various topic discussions. Time is the key factor contributing to their participation as Jenny revealed on the BB:

Message no. 5967[Branch from no. 5963] Posted by Jenny on Tuesday, August 3, 2004 11:54pm Subject: Re: Web-based VS FtF

I need more time to think, to investigate the flow of discussion. Sometimes I overwhelmed by those pressures, but in Web-based communication, I can use my time as much as I want...

The in-class discussion usually goes in a linear fashion. Tracy showed her preference to having the access to multi-directional discussion topics simultaneously:

Online, participants can work on multiple topics at the same time, while in class, we usually work on a single topic at a time, and progress to the next according to the agenda. We can respond to postings concerning with different topics at same time, and even go back and forth, but in class, it usually would be digressive if we introduce new topics in the process of discussing the current one, or go back to the previous topics covered. (Tracy, assignment)
Moreover, sufficient time generated rich and in-depth discussion, and in turn, online communication nurtured students’ imagination. Jenny revealed that online communication provided ample time for L2 students’ imagination to soar while gaining their senses of authorship and agency (Kramsch et al., 2000; Warschauer, 2000a).

On-line communication provides me with the space of enjoying own imagination and interpretation. While I read each posting, I could be a writer and also be an interpreter to construct meaning from my point of view and from writer’s point of view. My positioning could be changed. (Jenny, assignment)

All the participants felt that their mixed-mode experiences were richer due to the combination of communication modes. As mentioned earlier, in terms of participation, some participants such as Belinda, Betty, Denny and Tim revealed their preference to FtF communication, nonetheless came to learn that the combination of FtF and online could be the most effective mode for education. All the participants, including those who showed resistance to using technology in instruction such as Belinda and Denny came to the conclusion that both modes have their strengths and weaknesses and students could benefit most from the combination of both modes as Ada wrote in her assignment:

What I have come to understand is that there are positive and negative aspects to both types of learning. When used in combination, the greatest benefit to the learner is that there is choice.

Ada used the word ‘choice’ which implied students’ need for choice or freedom in establishing social presence through different communication channels; they could either build their connectedness (Smith & Mackie, 2000) through the non-verbal cues in FtF situa-
tions or through texts on the BB. Some participants such as Margie appreciated the chance to get to know her peers online:

The construction of such impressions (impression of peers) was perhaps helped by the fact that many of us took risks and liberties to share various intimate and personal details of our lives, something we most likely would not have had the opportunity to do in an open forum, in a face-to-face learning situation. (Margie’s assignment)

The participants showed an appreciation for having the opportunities to learn about each other’s learning experiences and styles and to form a distinct impression, which were made possible by combining the two communication modes and sharing autobiography. Denny and Tracy revealed in the interview:

In both cases (FtF or online), I have not formed an accurate impression of that learner. When both of these modes of learning are combined, the impression I form and the connection I have with students becomes stronger. (Denny, interview)

Yeah, I think so (formed distinct impression of peers), especially combine three factors: the autobio and their performance in class and online. (Tracy, interview)

The participants looked forward to personalized learning that could be facilitated by mixed-mode communication. Personalized learning depends upon “intimacy”. Even the NS participants Ada and Eddie stated that FtF in-class learning could be ‘less personalized’ due to the lack of intimacy among community members:
In my opinion, there is something rather intimidating about speaking in front of large groups of people. Why? Probably because of the lack of intimacy. The more the students, the more difficult it is to get to know them (e.g., learn names). In turn, learning seems less personalized; you are just another student "plowing" through the course. (Ada, assignment)

In class, the constant pressure to complete this entire string of thought process was overwhelming, at best. Too often, I was reduced to sporadic comments on those topics for which I was able to make quick links between prior knowledge and new information. I greatly appreciated and the nature of on-line discussions. (Eddie, assignment)

The online communication did not only provide another chance to participant outside of the classroom, but also facilitated more in-depth discussion FtF. The participants found the social presence generated online often encouraged more interaction in FtF situations. The rich social presence that was developed online transferred to FtF discussions. Participant Mona revealed that the ideas and discussions often began online and continued in FtF discussions. The participants reflected about the connections due to the use of the communication modes:

Sometimes topics brought out in class were what we discussed online, definitely a connection (between FtF and online). (Mona, interview)

When we missed chance to participate, online communication encourage to develop more deeper discussion into face-to-face discussion, the ideas are in our head. (Jenny, interview)
In my field notes, I noted in class, Tracy often talked about her autobiography or began her in-class discussion by referring to an online dialogue: “Like Kristy said (on the BB)…” Moreover, a lot of before and after class conversations began and were continuations of the dialogues online. For instance, Ada and Belinda initiated their FtF conversations by referring to their online dialogues and that led to their friendship. Ada reflected how that happened in the interview:

I think I had make connection with people online, and quite often those people would come in class and made comments for something I had said in the online forum, and that would start a conversation. (Ada, interview)

I also noted, on the third day of the class, Tim came to me before the class began and said, “I found what you said online was interesting. We are going to get you to talk more (in class)”. Moreover, Tim intentionally asked Tracy more questions about China during class after he learned about Tracy’s Chinese background online. Tim revealed that the online dialogues provoked his interests in different people’ perspectives, especially NNS students, and he wanted to probe deeper into some issues in FtF discussions. Tim thought that both online or FtF contacts were needed because “we never see the other people around (outside of class)”.  

As stated, the participants learned to appreciate how the two communication modes of learning complemented each other in a unique way as shown in Tracy and Ada’s online dialogue:

Message no. 6087[Branch from no. 5980] Posted by Tracy on Thursday, August 5, 2004 2:27am Subject: Hi Ada

Hi Ada,
I agree that's one of the limits of online communication. We cannot elaborate, explain or adjust the meanings we wish to convey. The delay might result in misunderstanding and is communication. But we can make it up during FtF communication, can't we? We are not talking about applying one mode of communication and discarding the other. Our purpose is to apply both effectively to serve our learning, isn't it?

cheers

Tracy

Message no. 6109[Branch from no. 6087] Posted by Ada on Thursday, August 5, 2004 1:24pm

Subject: Re: Hi Ada

Hi Tracy,

I agree that mixed-mode is the way to go. That way, they can complement each other.

Definitely.

Ada

For one of the assignments as mentioned earlier, the participants actively reflected on the strengths and weaknesses of online and FtF communication mode for learning, and came to a conclusion that both modes can complement each other in tailoring students' learning. The goal is to provide more choices and opportunities for students to participate, to express themselves effectively, and to develop their social presence in the way they prefer. When one mode does not encourage effective participation, the other mode provides
another chance to ‘make it up’, and to allow the participants elaborate or express themselves better. I reflected my thoughts on the BB:

Message no. 6079 Posted by Kristy on Thursday, August 5, 2004 12:00am

Subject: quality online discussion

I like both online and face-to-face communication because they work for different people and for various purposes, and in some cases complement each other. I appreciate the opportunity to see the faces of my peers because I like to feel connected with people ‘visually’. Also, I enjoy hearing the digression and laughter so I feel ‘human’. Online communication gives me more time to think and respond. I enjoy learning by reading texts. Texts can be profound and filled with emotions. They are more thought-provoking and go deep into my mind sometimes...

Ada elaborated more about the complementary aspect of mixed-mode for building a learning community in the interview:

I can’t say which is more (learning community)...but I would say the two complemented each other. Personally I like being knowing people, having a relationship with people...I am that kind of people so I make that effort...So I strategize, used both FtF and online to achieve that. (Ada, interview).

The students were able to exploit the advantages of both modes of communication for getting to know their peers and enhancing their social presence. Some participants revealed that their sense of community emerged from both modes of learning, each complemented the other as Margie stated in the interview:
I think the sense of community emerged from both FtF and online. Meeting every­
day in class reinforce the friendship perhaps, but online extended our presence.
Both are important I think.
Tim came to learn the combined and complementary modes of learning allowed ‘a more
holistic hologram of the learners’ constructed identity’ to emerge which could not
achieved through single mode of learning:
If the focus of the participation of the course is only through one of either in-
person or on- line environments, then it now seems to me to be incomplete or
fragmentary. The combination of on-line and in-person modes for the
construction of identity, however, permits and facilitates a rounder, more holistic
hologram of the learner’s constructed identity to shine through. The weaknesses
of each on their own are nullified. (Tim, assignment)
The participants like Mandy, Ada, Belinda and Eddie showed that they embraced the
mixed-mode learning due to its complementary natures, and some even thought it is the
ideal mode of learning:
I feel that a course that offers learners the opportunity to talk FtF and be
participants in an online learning community is ideal. In essence, these two modes
of learning complement each other. (Mandy, assignment)
In my opinion, a mixed-mode course such as this course seems the most ideal
given that both in class and online learning complement each other. (Ada,
assignment)
This online assignment is an excellent example of how online and FtF
components of a course complement each other. (Belinda, assignment)
The two forums complemented each other tremendously and provided me with the latitude to make my thoughts heard and understood. (Eddie, assignment)

At the end of the course, most participants did not feel wanting to choose neither online nor FtF mode learning; instead, they preferred mixed-mode as Tracy revealed:

In discussing the advantages and disadvantages of online and FtF learning, I'm not taking sides on either one, for I think the two modes are mutual-supplementary and mutual-supporting. (Tracy, assignment)

As the course progressed, the participants developed their learning habits based on mixed-mode communications. The participants showed that they strategize their learning in accordance with the mixed-mode communications for various purposes:

Sometimes in class, depending on what was discussed I think that developed a stronger sense of community; and then other times, maybe I would take the opportunity to try to develop that online because it was a more sensitive topic, or perhaps I didn't sit next to that person in class so I didn't feel that I should try that FtF, so I would exploit that more online. (Mona, interview)

As a result, many in-depth discussions emerged, and that encouraged the building of understanding and trust among the students. The finding showed that the high level of social presence facilitated the building of trust (Aragon, 2003; Rourke, 2000; Wegerif, 1998). Belinda wrote about the importance of trust in her assignment:

First, learning is a social activity, and a good learning community, whether online or face-to-face, needs to be highly social. For a learning environment to be effective, it needs to be personal and supportive, a place where trust is valued and where honesty is promoted and encouraged.
Since the course, a strong sense of trust was established and developed as Tim wrote in his assignment:

This duality (FtF and online) has brought us closer together. The trust, engagement and collaborative construction of our learner and peer identities have crossed cultures, environments and individual differences to produce a community that is truly special.

Moreover, some participants found the mixed-mode communication contributed to building the trust among them. Below are the excerpts illustrating the point of Tracy and Jenny made about building trust:

Message no. 6394 Posted by Tracy on Monday, August 9, 2004 9:47pm Subject: On-line discussion SOLELY

It reminds me of another concern I always have: the quality and effectiveness of distance education. I don't know whether it's because I'm too conservative, I can hardly build trust in it.

Message no. 6479[Branch from no. 6394] Posted by Jenny on Tuesday, August 10, 2004 5:00pm

Subject: Re: On-line discussion SOLELY

Hi. Tracy

Personally, I like this course combining on-line discussion and FtF discussion. As a human being, we need visible interaction. On-line discussion solely without any physical contact must be very boring.

Jenny
4.4.3.2 Reciprocal connecting

The participants perceived the openness of the BB forum as two sides of a coin: it could be freedom or constraint due to its reciprocal nature of human-to-human online exchange. To some participants, online communication gave them the feeling of freedom to express ideas and opinions. For example, Betty and Margie enjoyed the openness of the online forum as there were no strict rules imposed on participation, and that facilitated more discussions:

Writing on a BB gives those students the freedom to express themselves. (Betty, assignment)

Ultimately, our interaction turned out to be largely unregulated, without any particular rituals or protocols. We could, perhaps, argue that such freedom generated a more open and spontaneous discussion, because there were hardly any constraints or limitations put on the participants. (Margie, assignment)

Ada perceived the online component as having ‘no boundary’:

I think it was more a place (online) where people could perhaps... there was no boundary, at least, it was uncertain as what the boundaries were. Maybe people don’t feel as constricted, they could explore different topics, or even just how they would respond...like people sometimes wouldn’t even say “dear,” they would just right away getting into the talk...like Belinda and I, just used B and A (to address to each other). Where in class, you won’t ...you know what the rules of the classroom like, what the rules of interaction are. We all have experienced that, where as online that still, at least in my case, it’s my first online course. We were exploring the whole process. As time passes, you kind of learned, what’s acceptable,
what's not, that's all relevant to anybody else, and to the context or to the particular online course. (Ada, interview)

As Ada stated, the sense of 'no boundary' and without constriction was gained through interaction, and was facilitated by the increasing connectedness among community members. Margie’s frequent uses of ‘Dear’ to address to peers pulled all the community members including Ada into personal conversation. Margie revealed that she used ‘Dear’ to get connected to other community members as she revealed in the interview, “… I just…to make a connection... For example, I read something that I liked, I thought I should tell the person who is writing it that I liked it...” Moreover, the uses of abbreviations to address to each other were evident of close relationship and a high level of social presence. As shown, the participants used various strategies to develop connectedness with other community members, especially the participants who were more sociable and preferred a high level connectedness. This supports the view that social presence is one of the important antecedent conditions for constructive learning.

On the other hand, some participants were confused by the flexibility. The participants such as Ada and Belinda expressed their worries when they did not receive responses from peers, as they expressed:

at times I felt apprehensive if I didn't get responses, "did I do something wrong?"

(Ada, interview)

Online discussions are appealing because the reader can take their time to think and respond; the speaker cannot be interrupted; no one has to listen or talk if they don’t want to; and all students are able to screen out what they don't want take part in. The flip side of this is that listening and constructive dialogue can suffer.
When any reader is free to silence who and what they want, probably the thornier questions are the ones that are going to get skipped. (Belinda, assignment)

As mentioned earlier, the participants came to realize that social presence is a product of the reciprocal process thus the so-called freedom could also bring about senses of uncertainty and insecurity. To Belinda, her thornier questions covering the topics of feminism and queer identity did not receive a lot of responses and that led to her feeling of decrease in social presence.

However, more than half of the participants like Tim, Ada and I commented positively on Belinda's thought-provoking topics on the BB during the interview. The seeming lack of responses on those topics was due to the fact that more time was needed to digest Belinda’s critical statements. The 'silence' did not mean no one was listening. In addition, I felt that I was exposed to a novel way of thinking due to Belinda’s messages. Most of the participants felt the audience did exist, as Mona wrote in her assignment:

Regardless of the stronger and weaker connections that were made, the number of members online was large enough and so most ideas that were posted lead to some sort of interaction that let the writer/contributor to believe that an audience did exist for them within the community.

However, Margie emphasized that online communication does not guarantee the availability of audience all the time. It all depends on the responses from peers due the reciprocal nature of the online exchange:

Moreover, unlike in FtF interactions when all students are likely to listen to the one speaker having the floor, in online communications any participant may choose who he/she wants to listen to. Consequently, some voices may end up being heard more than others. (Margie, assignment).
From this perspective, the BB allows participants to choose whom to ‘listen’ and respond to. To some participants, this ‘freedom’ could make them feel a ‘lack of audience’ sometimes. However, this kind of misunderstanding could be solved by FtF interaction. Belinda was able to discuss those issues with other community members during the FtF in-class discussions as Tracy stated on the BB:

Message no. 6087[Branch from no. 5980] Posted by Tracy on Thursday, August 5, 2004 2:27am Subject: Hi Ada

Hi Ada,

I agree that's one of the limits of online communication. We can not elaborate, explain or adjust the meanings we wish to convey. The delay might result in misunderstanding and mis-communication. But we can make it up during FtF communication, can't we? We are not talking about applying one mode of communication and discarding the other. Our purpose is to apply both effectively to serve our learning, isn't it?

cheers

Tracy

To all the NNS students in this study, the online communication gave them the voice to speak freely, and allowed their peers to connect with their background and experiences. All the NNS students in this study did not feel inhibited online due to their non-native language background. Tracy and I showed appreciation of the online communication for learning:

Message no. 5774 Posted by Tracy on Friday, July 30, 2004 12:06am Subject: I like the way it works!

Hi everyone,
I found it really fantastic to communicate in this way. I enjoy reading your autobiographies (although I haven't finished everybody's, I definitely will), and responding to the parts I am interested in. I have been in other online forums in Chinese, and I like the way people reading each other's words online and responding interactively. But I've never thought it would work so excellently in learning (cuz most of the forums I was in were just for fun topics). I enjoy it so much. I think it serves a perfect auxiliary way to the FtF instructions and communication. Keep going!

cheers
Tracy

Message no. 6079 Posted by Kristy on Thursday, August 5, 2004 12:00am

Subject: quality online discussion

Dear peers,

I like both online and FtF communication because they work for different people and for various purposes, and in some cases complement each other. I appreciate the opportunity to see the faces of my peers because I like to feel connected with people 'visually'. Also, I enjoy hearing the digression and laughter so I feel 'human'. Online communication gives me more time to think and respond. I enjoy learning by reading texts. Texts can be profound and filled with emotions. They are more thought-provoking and go deep into my mind sometimes... good night

Kristy

Besides the NNS students, the NS students such as Eddie saw the BB as an equalizer for the NNS students, supporting the previous research finding (Carey, 1999b; Kamhi-Stein,
2000; Warschauer, 1996b) that BB could equalize participation between NS and NNS students:

The BB is like an equalizer (of participation). ESL students make the course more interesting. They lived in so many places... (Eddie, interview)

Moreover, most NS students showed concern about facilitating equal participation in the course. Tim revealed that he was interested in hearing from the NNS students' perspectives and that meant equal participation to him:

I want to hear what other people say when they don't feel comfortable (in class). Some people before/after class one-to-one... not the matter of speaking...but it's the question of how many people talk. Jenny, if just two of us, she talked more. I am interested in hearing from everybody not just from people who just jump in without feeling any pressure. (Tim, interview)

The NNS students were often received encouraging messages from other community members who showed much interest in their language learning experience:

Message no. 5656[Branch from no. 5651] Posted by Denny on Wednesday, July 28, 2004 6:44am Subject: Re: Kristy's Autobiography

Kristy - I find your stories of your struggles with English fascinating. I teach many students in grade 7 and 8 who are your position when you were in grade 7 in Australia and I too share their frustrations as a second language learner. I am interested to hear details about some of the strategies you employed to help you understand and learn English better - maybe through you, I can gain a deeper, more meaningful insight into many of the second language learners I teach.

Tracy received many compliments on her excellent use of analogy about FtF discussion that resembles passing the ball as Eddie wrote on the BB, “...thanks for the analogy. It
helped me to understand the discussion from a new perspective”. Likewise, Jenny re-
ceived a lot of encouraging messages from other community members, and that had con-
tributed to her social presence:

Message no. 6026[Branch from no. 5967] Posted by Tim on Wednesday, August
4, 2004 5:05pm Subject: Re: Web-based VS FtF

I really like your contributions, Jenny. I welcome more of them. Your perspective
and ideas are stimulating and help the discussion and community. Tim

The online interaction had a positive impact on Jenny:

Reading and responding to the postings make me feel that I am in the same group
with other people. That is, I am belonging in this community and related with
other people. (Jenny, assignment)

The participants were collaborating and contributing to each other’s learning as Tim
revealed in the interview:

The exchange and feedbacks from classmates concerning a topic usually give
another perspective to look at issue. I am sure about my own view, when I get
feedback, it made my perspective wider. My personal view is limited. After a few
exchange, the issues become clearer and clearer. We might negotiate point of
view, might argue with each other...

With a strong sense of social presence, more collaboration arose among the stu-
dents in class. The NS students showed enthusiasms in facilitating NNS students’
participation. The NS Tim intentionally mixed seating so that the NS students could hear
more from the NNS students. Moreover, the NS students helped the NNS students voice
their opinions during FtF discussions. As recorded in the field notes, sometimes when the
instructor did not hear the NNS students’ comments during class, the NS students helped
to call for the instructor’s attention; answered NNS students’ questions when the
call for the instructor’s attention; answered NNS students’ questions when the instructor could not get to the questions immediately due to the constraints of the classroom setting. As I recorded on my field notes, when Dr. Rogers did not hear my comments during class, Belinda called out loud, “Kristy got something to say…” At the end of the course, the NNS students and NS students collaborated actively in the group projects. In addition, several NS students became very interested in talking to the NNS students individually after class. The NS Tim revealed that the NNS students’ rich language/culture/identity development experiences were very valuable, and he wanted to learn more from the NNS students.

4.4.4 Patterns of Constructed, Experiential and Medium Connecting

During the coding process, a number of patterns emerged inferring the three major cores: Constructed Connecting, Experiential Connecting and Medium Connecting. Synthesized from the themes emerged and discussed above, Constructed Connecting was conceptualized as a continuum and labeled as from ‘from self constructor of connectedness to co-constructors of connectedness’. Experiential Connecting was conceptualized as a set of continua: ‘from experiencing imagined community to achieving the ideal community’ and ‘from articulating to reflecting and commenting on authentic experiences’. Medium Connecting was conceptualized as a continuum: ‘from rich social presence online to high social presence in FtF meetings’. The participants changed ‘from feeling constrained (by time, the structure of FtF in-class setting or personal learning styles) to feeling free to express’, from knowing others ‘on the surface’ to knowing others ‘in person’ and ultimately ‘from resisting the use of technology to wanting to use technology for instruction’. To NNS students, they were empowered by gaining their voice through
the language/culture/identity narratives and CMC. Thus they changed 'from feeling voiceless as L2 students with disadvantages to feeling empowered as bilingual speakers with rich language and culture experiences', and that could be a transforming experience (Solis, 2004). The online dialogues encouraged L2 students to use various discourse strategies to construct the language/culture/identity narratives that validated their identity as successful and experienced language learners. By that, they gained self-confidence in the process of learning to speak as members with experiences and with expertise in language and culture learning.

4.4.5 Self-Reflection of Social Presence Development

4.4.5.1 My Participation Experience

My experience as a participant researcher was very meaningful. I learned insights about my own development of social presence besides observing other students' participation in mixed-mode courses. As a NNS for 15 years, I think providing my own reflection about this course could add another dimension of insight to findings. On the BB, I learned much about L2 students' social presence in oral discussions, which requires their awareness of the classroom situations and their perspectives on participatory performance. As one of the study participants Tracy pointed out on the online BB, she realized that in-class discussions were often rendered in swift change of different topics, and that required students' fast scaffolding of the discourses to come up with immediate verbal responses. Tracy used an excellent analogy of passing the ball among players: "The ball is passed swiftly among the native speakers, jumping here and there quickly.... ESL students are just like poor players who can hardly get the ball, and sometimes even can't see clearly where the ball goes". The speed and intensity are often overwhelming for L2 stu-
dents who have not used to this style of participation, which is typical in most traditional classes in North America.

After reading Tracy’s posting, I empathetically revealed that I could fully understand how she feels because I am also a NNS. I talked about my own experience with academic oral participation. Even after many years of academic studies in North America, I still find attending to the oral discussion in traditional classes challenging. The reasons are I was a quiet child and I did not get much opportunity to speak in class due to the over populated conditions in the school and university I attended. Moreover, my Chinese cultural background, which comprises a lot of Confucius’s views, encourages listening instead of speaking. The essence of thinking hard and carefully before opening one’s mouth was ingrained in me since I was little. The goal is to try to appear humble, avoid humiliation and losing ‘face’ in public. Thus, I find myself often quite anxious about responding orally in class discussions though I know oral participation is very important for the evaluation of my overall performance in the course. Tracy showed agreement with my revelations about the effects of Chinese students’ cultural background on their in-class oral participation. Also, other students and the instructor showed a deep level of understanding and empathy. At the same time, I felt a large increase in social presence due to the acceptance and understanding shown by peers and the instructor.

Through the use of online BB, I was able to reveal the insights about my participation and show support to other L2 students in the classroom. I raised their awareness of the reasons for the seemingly passive attitudes in FtF oral participation. Moreover, writing and sharing my thoughts about oral in-class participation on the BB made me think about my identity in public presentations. I was able to step back and think about my self in past situations of public speaking. I realized that I am still working on developing a
more confident identity in public speaking and I have been looking for approval of my performance. I spent a lot of time preparing for my chapter presentation because I know I have been fortunate to work with a very positive and supportive group. I spent days preparing my PowerPoint slides and practiced hard for my presentation before the class. When I did my presentation, I was still nervous at the beginning, but learned to relax and concentrate on my speaking. I was relaxed when my peers showed strong interest in my discussion questions. My social presence increased because I was again touched by the warm acceptance of my peers. On the BB, I talked about the concerns of my performance in the presentation. Immediately, I received a large number of responses showing understandings, supports and offers of various strategies for making a good presentation. I was very impressed by such high level of immediacy and intimacy shown by my peers in this course.

4.4.5.2 My Perceptions of Social Presence

The immediacy and intimacy led to a high degree of disclosure. The permanency of texts usually makes me think twice before I pressed the post button to send out my response. At the beginning of the course, I checked my spelling and grammar carefully before I posted my messages. Also, I tried to write in a formal academic style. As the course progressed, my writing on the BB has become less formal. It seems that the rhetoric we used had fallen between formal writing and colloquial English. Sometimes some peers and I used emoticons to express emotions. Moreover, as the course progressed, I disclosed more and more personal perspectives and feelings when I reflect on other’s autobiography and initiated topics. For example, when we talked about naming children, I talked about my own Chinese name and why I feel embarrassed about it, which I don’t usually talk about in other Internet public forums. Further, when a few
peers asked about what my nickname was, despite the permanency of the texts, I revealed what it was. I found my degree of disclosure to my peers is amazingly high over the three-week period.

By taking this mixed-mode course, I learned some ideas about the ingredients for building a good learning community in online and FtF courses. The essence is that one’s ability to construct meaning is driven by social presence. It is important to encourage social presence through out the course via goal directed activities. Writing and sharing autobiography is an excellent activity, which not only broke the ice but also allowed students getting to know each other surpassing the surface level and be able to communicate well for discussion. In the mixed-mode course, I was able to transfer the social presence I felt online to my FtF communications. As I sensed fast progressive group cohesion as the course progressed, so as my social presence and in turn, better learning and performance.

Over the course, I have felt very good about being at ease interacting with the students in this course, and I have been able to form distinct individual impressions of almost every student in this course. Particularly, Belinda’s postings were filled with sophisticated ideas and opinions that kept me pondering for a long time, and I was hardly able to show any disagreement at the end. Also, Belinda’s level of critical thinking was impressive in class discussions. Eddie’s autobiography was the most interesting one to me. I learned a lot about Chinese Canadian’s struggles for maintenance of heritage language and culture, and how his mother looked at photo albums and had recovered from her eight-year depression. Moreover, Eddie’s reflections on his long-term writing of journals and how he used journal writing in his classes were very meaningful experiences that he shared with the class. Also, Eddie’s life experiences highlighted the power of the
language/culture/identity narratives. Overall, I found Eddie is a very sincere person who is not only sharing his life experiences but also passionately constructing knowledge with everyone in the course. The participants like Margie, Belinda, Ada and the instructor showed strong sense of humor both in class and online which enhanced group cohesion and increased social presence. Many jokes were told online and F2F. Sometimes I understood the jokes, sometimes I could not due to cultural differences, but that did not bother me much. When I hear or read the jokes, I become quite relaxed and enjoyed seeing the happy faces and hearing the laughter. The laughter implied that my peers are understanding and considerate human beings, and could be communicated with ease. Thus I think humor increases social presence.

4.4.5.3 My Perceptions of other Community Members
Among my peers in this course, I think Margie is the most self-motivated student I have even known. She is also a very nice person; she used “Dear...” to address to everyone in the course that showed a lot warmth and closeness. Everyday, Margie posted many creative and thoughtful postings. Her postings were very creative, direct and inspirational. Margie and I discussed the issues of non-native teachers in North America. Though we sometimes held different point of views, I got to learn a lot about Margie. I got to understand her social positioning and the attitudes toward her non-native identity. We exchanged ideas relating to non-native teachers’ identity development. I feel that the ideas and opinions she provided were constructive to my development of identity as a non-native teacher. I learned much from her long-term experiences of being a non-native teacher. Most of all, I admire her confidence in her ability to learn and her never-ending endeavor in learning the language.
Tim was the most studious person I have known. Tim was very knowledgeable and experienced in teaching. I find his postings were the most impressive ones that I will keep record of. They were always filled with interesting points and critical thoughts. Tom was also the most supportive member in this community. He always showed strong support and encouragement for peers, both online and FtF, and tried to form a good learning community. In the FtF classroom, Tim tried to mix seating in the class so that he could stimulate discussions from different classmates during in-class discussions. Online, Tim always paid close attention to each posting and reflected whole-heartedly. Indeed, I was very impressed by how vehemently he tried to build the learning community in this course. I had a few chats with Tim after the class, and the chats were mostly topics related to what we discussed in this course. We were both intrinsically interested in the issues of language teaching, culture and identity, and I learned a lot from our chats. Most of all, I think Tim was an excellent student and a good facilitator in this course.

From my experience in this course, I feel very satisfied that the online BB that allowed me to express myself more precisely and generate a higher level of social presence. As a NNS, it is sometimes more difficult to find the correct vocabulary to express myself during FtF discussions. The use of text allows more time to think and change my choice of words easily. Activities like writing and sharing autobiography enhanced my social presence and become emotionally connected with my peers in the community. As a result, I interact with my peers at ease, and I was able to forget about ‘losing face’ and feel free to express my ideas and feelings online. Furthermore, I formed distinct impressions of some students over the three-week course because of the good learning community that we formed. Despite our busy daily schedule, some of us were addicted to the online BB because the postings were so interesting and thought provoking. I was not
concerned about grading while I interacted with my peers online. The postings all made us think about perspectives on critical issues, attitudes toward life and multiple identities. The responses we receive can help to develop our identities. I feel this course has made me learn totally for my own good instead of credits.

4.4.5.4 My Perceptions of using Technology

I think in the future, I would definitely use online BB in my ESL/EFL class and turn my class into a mix-mode course. It is a great way of provoking interaction between teacher and students, and among students. It would make students feel that they are connected to teacher and their peers, a sense of belonging to a community. Also students would feel free to ask any questions that they didn’t get a chance to ask during class periods. The teacher can have a better chance to understand the needs of his or her fellow students. Without much notice, students would be using more and more English because they don’t have the worries of being graded and they are using English for real life communication. Moreover, I would use the online BB to create forums for topic discussion. The topics would both be related to the class materials and be of students’ interest. For college students, I would post issues of concern and of relevance, such as this social issue: “Have we reached gender quality in the U.S. yet?” For adult ESL students, I would post topics related to daily life. The idea is to make students actively expressing their ideas and opinions in English. Of course, I would post appropriate topics according to students’ level of language proficiency. Also students would provide emotional support to each other, especially for students who are more introverted and do not feel comfortable speaking a lot in the classroom. They would express themselves in writing. Definitely, I would use online BB in my future classroom because of its effectiveness for communication and language learning. Students would be intrinsically learning and using
English outside the classroom. Finally, I see much potential in the use of online BB as a complement to traditional FtF classes. For students who are self-motivated in learning, the use of technology can certainly provide more opportunities for meaningful communications and interactions.

4.5 Summary

As indicated, the findings presented here are derived from online WebCT BB transcripts, interview transcripts, participants’ assignments, field notes and my reflection on my own development of social presence as a participant researcher. My interpretations of the research findings are also influenced by my experiences and my extensive reading of literature. The results present answers to the research questions posed in this study. The principal method of analysis, grounded theory was used to discover the underlying social factors that shaped the social presence phenomenon. Connecting emerged as a commonality among themes during the open coding and the constant comparison processes and interpretations. Research literature was used to enhance theoretical sensitivity and validate the emerged themes and patterns.

A subsequent analysis of data identified four distinguishing manifestation of connecting: Valuable Connecting, Experiential Connecting, Medium Connecting and Constructed Connecting. Patterns that emerged from the supporting themes formed my theoretical model of social presence, Cyber-Narrative Mediated Connecting. To illustrate, the twelve descriptors or patterns that emerged from these analyses are shown in Table 4-1:

1) A high level of social presence;
2) A change in instrumental motivation to intrinsic motivation;
3) Increasingly active participation;
4) Increased feelings of being connected to the community;
5) Increased connectedness of online and FtF components;
6) Achieving a more ideal community;
7) A transference of the rich social presence online to a rich social presence in FtF meetings;
8) Increased feelings of freedom of expression;
9) Increased articulation, reflection and commenting on authentic experiences;
10) Increased knowing others 'in person';
11) Increased desire to use technology for instruction;
12) Increased feelings of empowerment as bilingual speakers with rich language and culture experiences.

When the non-verbal social cues are lacking online, it is important that students' social presence is facilitated. The blending of the three elements is one of the strategies in promoting social presence. The manifestation of various ways of Connecting was made possible by the blending of the task orientation, the medium and collaboration among the students. As shown in the data, both feeling connected with other community members and having a strong sense of social presence contributed to students' overall satisfaction learning. Through the nature and power of the language/culture/identity narratives, CMC and collaboration, the students were able to develop high levels of social presence. CMC allows collaborative learning to take place without the constraints of time and places, and the language/culture/identity narrative sharing enabled the students to get connected with each other by learning from each other's experiences and perspectives. The combination of CMC and the language/culture/identity narratives contributed significantly to the level
of social presence. This implied that CSCL could also be facilitated with experiential activities that encourages articulating and reflecting on personal experiences.
Chapter Five: Conclusion

5.1 Introduction

In this study, the online dialogues involving the use of the language/culture/identity narratives by native and non-native English-speaking students in a mixed-mode graduate seminar have been explored from a social constructivist perspective. It intended to seek understandings of the students’ development of social presence. Collecting both quantitative and qualitative data and using mainly a grounded theory method, the study aimed to answer the following research questions:

1. Does writing and sharing language/culture/identity development autobiography online contribute to students’ social presence?
2. How do the students describe their understanding of social presence from this activity?
3. How do the uses of the language/culture/identity narratives, CMC and collaborative learning promote the development of social presence among graduate students in education?

This chapter first provides a brief summary of the results of the study responding to the three research questions, followed by a discussion of theoretical and practical implications of the study. Finally, the chapter ends with the implications for future research.

5.2 Summary of Research Findings

By drawing on multiple data resources, the three research questions were explored in depth and a theoretical model of social presence has emerged. First, I was able to combine QCA with the qualitative methodologies to confirm the high level of social
presence of this mixed-mode course. Data from each of the methods were triangulated and both findings showed that the participants perceived a high level of social presence due to writing and sharing language/culture/identity development autobiography online. From the examinations of the indicators of social presence on the BB, the interview transcripts, students' assignments and other data sources, overall validity (Greene & McClintock, 1985; Miles & Huberman, 1994; Rossman & Wilson, 1984) and confidence (Patton, 1990) of the findings were obtained. Moreover, the indicators and categories of social presence helped to gain theoretical sensitivity during the grounded theory coding process. The convergence of the major themes, patterns and categories from multiple data sources lent strong credibility to the findings (Maykut & Morehouse, 1994).

By employing grounded theory, Connecting appears as a prevalent pattern that bonds the emerged themes and was identified as the core category of the preliminary theoretical model. Cyber-Narrative Mediated Connecting emerged as a preliminary theoretical model of a way of connecting, which involved a process that consciously shapes connectedness. It evolved when individuals immersed in a cyberspace, interacted with others about the language/culture/identity narratives and perceived a true sense of social presence. The theoretical model comprised four major core categories: Valuable Connecting, Constructed Connecting, Experiential Connecting and Medium Connecting. This theoretical model Cyber-Narrative Mediated Connecting involved the use of mixed-mode and the language/culture/identity narratives adds to the current social presence theory. The students' self-definition of social presence and Cyber-Narrative Mediated Connecting implied that the combination of mixed-mode communication and the language/culture/identity narratives produces novel ways of connectivity. Students could establish and develop their social presence through experiential learning and share mean-
ing construction among members of the community. Besides the use of medium, students' connectedness could be enhanced by effective collaborative tasks such as writing and sharing the language/culture/identity development autobiography. Ultimately, valuable and meaningful connectivity could be constructed in facilitating students' social presence and achieving the ideal community.

5.3 Conclusion and Implications

The study showed that an online learning environment that incorporates writing and sharing language/culture/identity development autobiographies can provide a remarkable space for researchers to look into both native and non-native English-speaking students' interactions and identity constructions in socially and culturally situated processes. This research also showed that social presence is substantial in facilitating the creation of an online learning community. The students' senses of knowing each other, forming personal impressions and building social relationships were important social dynamics of the learning community. Students need to feel being connected with the instructor and their peers through tasks that facilitated their social presence. Together, they hoped to establish and build their imagined community “in a utopian version” (Shumar & Renninger, 2002, p. 5) that is loving and close with intimate personal relationship and bonds of caring. Ultimately, the students worked toward achieving the ideal community (Shumar & Renninger, 2002) that promotes their incentives for investments, social imaginations and social interactions. The emerged patterns and the core category Valuable Connecting confirmed the development of rich social presence and the manifestation of achieving the ideal community.
Next, high levels of social presence reduced students’ inhibition, especially for L2 students. When students felt uninhibited, more in-person and in-depth discussions took place. This helped L2 students gain self-confidence and trust in their peers and that further encouraged their participation. This finding supported Rubin’s (1975) concept of the Good Language Learner. The level of social presence is important to create the sound social space (Kreijns et al., 2004) that reduces language learners’ inhibition and facilitates their willingness to take risks to communicate. Without a high level of social presence, L2 students would be expected to shy away from taking risks to communicate for participation. Although this study did not measure L2 students’ improvement in academic English proficiency over the three-week seminar, the L2 participants posted thoughtful messages with critical ideas and thoughts. The participants showed active participations and satisfactions with learning. Thus it could be stated that high levels of social presence facilitated L2 students’ active learning.

More importantly, a high level of social presence is necessary for promoting the development of the imagined and ideal community. The self-definitions of social presence suggest that the participants viewed social presence as the vital psychological connections and those connections are crucial to their perceptions of the community. Thus social presence becomes the antecedent social condition of L2 students’ making investments (Norton, 2001; Norton Pierce, 1995) and socialization into the social practices, target language community and culture (Duff, 2002; Reeder et al., 2004) in a sound social space (Kreijns et al., 2004).

The findings of the study suggest that writing and sharing the language/culture/identity narratives in an online learning environment can bring about differences in social presence and intrinsic motivation. The combined use of the lan-
guage/culture/identity narratives and CMC in education revealed a ‘clearer picture’ or understandings of the effects of social presence in mixed-mode courses. The study showed that using the language/culture/identity narratives online could reaffirm the potential of CMC for language and cultural learning (Kern, 1996; Tudini, 2003). Online communication (Meyer, 2003; Warschauer, 1997) increased the level of participation by allowing students’ identity and agency to emerge through promoting students’ social presence in a learning community. Experiential activities like writing and sharing language/culture/identity development autobiographies could boost students’ social presence and community-building in a very short period of time. Mantovani (1996a) stated: “The need for belonging, which animates most CMC environments, is given a peculiar response by the fact that computers are ‘linking’ machines, capable of overcoming physical barriers but less able to build shared meanings” (p. 126). Students need to be connected by their shared meanings and cultures embedded in their language/culture/identity development experiences in order to feel socially present.

A high level of social presence is needed to facilitate more profound learning of course content. Activities of sharing meanings and cultures such as writing and sharing the language/culture/identity narratives could promote learning at the personal level and in turn, students can become intrinsically motivated in participating. The reflections on past language learning experiences could make students think about and critique SLA conventional theory and practice, and what really helps in learning a language. This self-inquiry could lead to critical reflections on one’s current teaching indicating how he or she is working toward becoming a better teacher. This study hopes to draw implications for educators that facilitation of social presence is crucial for the development of learning communities in both online and FtF communication modes. A successful learning envi-

181
ronment does not evolve by itself; instead, both the teacher and students need to be committed with time, effort and determination in promoting each other’s social presence. Writing language/culture/identity development autobiographies can facilitate this process by expediting social presence. Thus the blending of CMC, the language/culture/identity narratives and collaborative learning provided implication for CALL pedagogical strategies.

Even more, this study provided implications for CSCL research. The findings of this study also showed that social presence is the antecedent social condition of successful CSCL. In order for effective collaboration to take place, students need to gain a high level of social presence. They need to feel comfortable about communicating and sharing information with other members of the community. This study suggests that a strong social presence is conducive for CSCL. This study hopes to draw implications for educators that facilitation of social presence is crucial for the development of learning communities and facilitation of successful CSCL. However, the true sense of belonging to a community does not evolve by itself, instead both the teacher and students need to strategize their teaching and learning in order to facilitate social presence. Moreover, the indicators of social presence could be perceived as indicators of the sociability of CSCL because they inform about the social conditions for group and individual learning. The goal is to build a valuable connectedness that is necessary for CSCL.

5.4 Limitations

Given the small number and the homogeneity of study participants, specific local context, and time in which the data were collected, this study yielded limited results. This study is not intended to generalize the findings to other sample groups, settings and con-
text. However, the exploration of the development of social presence may be useful for drawing pedagogical principles and implications. In addition, the mixed methods have offered rich insights and varied perspectives. While, due to the lack of research up-to-date to take the researcher through the process, the research design may have resulted in unequal evidence in interpreting the final results (Creswell et al., 2003). Awareness of the disadvantage of the mixed methods was raised early during the research process, and a reasonable and balanced weighing of evidences was strived for.

5.5 Recommendations for Future Research

It would be useful to know the effects of various levels of social presence on promoting students’ participation and learning. Comparative studies of various levels of social presence would illuminate more details on what facilitates social presence and how a collaborative learning community could be built. Moreover, these studies would add more to the existing social presence theory.

With reference to the sample size and time frame, it would be useful to examine the effects of language/culture/identity narratives and mixed-mode with a larger pool of graduate Education students. Participants in this study were graduate students majoring in Education, so efforts could be made to study similar cohorts of graduate students in other Education programs. Also, studies could be conducted to investigate students of other disciplinary areas and their social presence development in mixed-mode settings. In addition, longitudinal studies are needed for future social presence research. It would be valuable to examine the effects of various collaborative learning strategies on social presence, and how that would further contribute to CSCL.
The findings show that combining QCA and grounded theory approach yields more insights of students' social presence development. These methods supplemented each other (Holsti, 1969). The study suggests that grounded theory helps to look into learner subjectivities such as their social presence and provides detailed insights that other quantitative methods might overlook. However, when the grounded theory method is combined with a quantitative approach, they provide complementary insights into social presence. For the future research, longitudinal studies that investigate the long-term influences of language/culture/identity narratives in mixed-mode courses using mixed methods would be beneficial to educators and researchers of education.
References


Egbert, J., Chao, C., & Hanson-Smith, E. (1999). Computer-enhanced language learning environments: An overview. In E. Egbert & E. Hanson-Smith (Eds.), *CALL envi-
environments: research, practice, and critical issues (pp. 1-13). Alexandria, VA: Teachers of English to speakers of Other Languages.


The study of Asia-Pacific intercultural narratives and their role in the pedagogy of culture, ethnicity and identity as they pertain to language and literacy education.

This course examines the emergence of narrative story construction as an increasingly influential and integrating paradigm in language education. Participants will get hands-on experience with narrative methodologies by writing autobiographies, by analyzing them, and by participating in online discussions with partners. The field of narrative as inquiry has developed rapidly in the last decade and now subsumes a multitude of orientations. In this course we will delimit this field to a consideration of narratives which may include interview material, ethnographies, autobiographies, and literary works such as novels, poetry, plays, film and other media including multi-media. Particular attention will be paid to autobiographical memory, self-narrative and identity development and construction as well as the “Narrative Turn” and interpretations of language learning and teaching experience. Recent advances in narrative research methodologies will be examined, particularly those qualitative approach which focus upon inter-views and other autobiographical sources of data. Each student will be expected to:

- 20% Write an autobiography and post it on the bulletin board as soon as possible.
- 20% Summarize and critique an assigned chapter and post this summary on the bulletin board along with 3 questions to stimulate discussion of the article with other students. All students are encouraged to participate in the discussion of each assigned chapter summary.
- 20% Discuss the constructivist approach to language/culture/content learning and develop a personal theory of SLA based on your autobiography, prior and present readings and experience.
• 20% Evaluate the effectiveness of online discussions and learning as compared with conventional face-to-face seminars for language/content teaching.

• 20% General quality and quantity of your online participation in discussions throughout the course.

Course Objectives:

This graduate seminar will encourage you to:

• Develop an appreciation and understanding of diverse methodologies for conducting narrative inquiry.

• Consider intercultural narratives as effective resources for teaching courses in language education.

• Become familiar with qualitative methods of data analysis associated with language education.

• Develop a critical understanding of the concepts of interculturalism and multiculturalism.

• Develop your appreciation of narratives and their role in expressing language and cultural identities.

• Learn how narratives on online interaction can be used as pedagogical tools to promote intercultural appreciation.

• Familiarize students with the theories and methods used in studying computer-mediated communication (CMC).

• Develop a personal theory of how languages/cultures are acquired.

This course requires minimal computer literacy. The computer support for this course is through an electronic bulletin board incorporated into WebCT’s courseware.
Many of the readings are deposited or linked to this site http://www.ecourses.ubc.ca. A more detailed explanation of how to access and post messages will be provided online.

**Course Approach:**

This course begins with your writing an autobiography with a major emphasis on your language education. Your autobiography should start with your first memories of language(s) spoken by your parents and other relatives in your home and neighborhood and with family friends and relatives. These earliest memories may also include language delivered by technologies such as radio, TV, or including musical recordings and church services and choirs. Although initial memories about these early childhood and preschool language experiences may be sparse, as you begin to write about your kindergarten and primary grades other preschool language memories may come to mind. As you proceed to write about your language education during elementary and secondary schooling you should try to remember and evaluate first or other language experiences that were most salient and led to your development and appreciation of languages and cultures. As your autobiography proceeds through school years, re-late and evaluate experiences from school, home, play, vacations, family travels and any other exposures you had to languages and cultures. In particular, try to remember which courses in first or other languages at school were productive in your learning and appreciating languages. You should describe which language experiences throughout your education (whether formal courses or other opportunities) were the most productive in your acquiring your first or other language. As you proceed with this autobiography of your languages experiences you should also develop an interpretation of which experiences were productive for your language learning and which language approaches in your opinion have been the most productive in terms of teaching languages. From this you should develop your personal
philosophy of how languages should be learned and taught in the most productive way. This personal theory of how languages can be taught/acquired should take into account which courses or language exposure were most unproductive and which approaches were productive whether or not they were within schooling or outside of schooling.

This course, which is a three-week summer program, is very intensive in the readings and the interactive discussions on-line. Students must do the required readings for each day and are expected to actively participate in discussing, critiquing and reflecting on each reading on that day. Each student will be assigned a chapter to summarize and critique and to post this summary/critique on the BB on the scheduled day. Your chapter summary/critique posting will count for 20% of your course grade.

Students will be required to develop their personal theory of the optimal situation for language learning based on their reflections on their autobiography, reflections on the assigned chapters and related reflections on the BB. The posting of this personal theory will be worth 20%.

In the first part (the initial week of the course), we will seek to understand the theoretical foundations of research methods used in narrative approaches to language education. We will approach this understanding through an intensive reading of Riesman's text on narrative methodologies. During the first days of the course, students will be required to post their autobiography regarding language learning and teaching on the Bulletin Board forum (written). The online discussion will comprise a major part of the course participation for evaluation. After the first week, we will then proceed with the assigned chapters from Daiute, Colette & Lightfoot Cynthia (2004) following the schedule below.
Online Chapter Presentation:

After the third class, each student will make an individual online presentation, which will lead to further discussion online. Each student will be expected to:

- Summarize an assigned chapter and prepare a presentation of this assigned chapter and post this on the bulletin board.
- Post three questions to initiate discussion of the chapter and be ready to lead a discussion and to answer questions by the members of the class or the instructor.

Course Activities and Grading

Grades in this course will be determined as a weighted average calculated from the performance on the following criteria:

- Posted autobiography: 20%
- Posted chapter summary: 20%
- Posted reflection on personal theory of learning: 20%
- Evaluation of online learning compared to face-to-face learning: 20%
- General quality and quantity of your online participation: 20%

In this online seminar, it is of overriding importance to encourage participation, interaction, cooperative learning and above all to encourage dialogue which is interesting to each participant. Consequently such a philosophy requires that participants receive credit for their participation. Unlike conventional seminars, there is a record of the participation of each student. It is possible to defensibly grade this on-line narrative. This participation will be analyzed both quantitatively by such measures as the number of participations, the diversity of topics and qualitatively in terms of creativity, depth of knowl-
edge, insights and further dialogue stimulated by the intervention. This will account for 20% of your final mark.

**Schedule of Classes and Assignments**

- Students will be expected to read the assigned readings, generate questions, and be prepared to discuss each session in detail in online seminars.

- Students will be required to post a minimum of 2 thoughtful messages on the Bulletin Board forum each day and a maximum number of postings for any student each day shouldn’t be over 5 messages for a balanced and well-formed discussion.

<table>
<thead>
<tr>
<th>#</th>
<th>Date</th>
<th>Classes</th>
<th>Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>July 26</td>
<td>Introduction</td>
<td>Posting autobiography as soon as possible and on-line discussion of Riessman's introduction &amp; chapter 1</td>
</tr>
<tr>
<td>2</td>
<td>July 27</td>
<td>Riessman, introduction &amp; chapter 1</td>
<td>On-line discussion of posted autobiography and Riessman, chapter 3</td>
</tr>
<tr>
<td>3</td>
<td>July 28</td>
<td>Riessman, chapter 3</td>
<td>On-line discussion on autobiography and the chapter</td>
</tr>
<tr>
<td>4</td>
<td>July 29</td>
<td>Daiute, Colette &amp; Lightfoot Cynthia (2004) Editor’s introduction (p. vii – xviii) 1.1. The role of imagination in narrative construction</td>
<td>On-line discussion on autobiography and the chapter</td>
</tr>
<tr>
<td>6</td>
<td>August 2</td>
<td>BC Day University closed</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>7</td>
<td>August 3</td>
<td>Daiute, Colette &amp; Lightfoot Cynthia (2004) 1.3. Cultural modeling as a frame for narrative analysis</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>8</td>
<td>August 4</td>
<td>1.4. Data for everywhere</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>9</td>
<td>August 5</td>
<td>2.1. Construction of the cultural self in early narratives</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>10</td>
<td>August 6</td>
<td>2.2. Creative uses of cultural</td>
<td>On-line discussion</td>
</tr>
<tr>
<td></td>
<td>August 9</td>
<td>2.3. Positioning with Davie Hogan: stories, tellings, and identities</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>----</td>
<td>------------</td>
<td>---------------------------------------------------------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>12</td>
<td>August 10</td>
<td>2.4. Dilemmas of storytelling and identity</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>13</td>
<td>August 11</td>
<td>3.1. Narrating and counternarrating illegality as an identity</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>14</td>
<td>August 12</td>
<td>3.4. Culture, continuity, and the limits of narrativity</td>
<td>On-line discussion</td>
</tr>
<tr>
<td>15</td>
<td>August 13</td>
<td>Wrap-up and evaluation</td>
<td></td>
</tr>
</tbody>
</table>
If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 604.822.8598. Your participation is very much appreciated.

Consent
I agree to be interviewed, and to have the interview tape-recorded. My assignments and activities in this course will be looked at. I understand that I can refuse to answer any questions during the interview. I understand that my identity will be protected by the used of pseudonym, and my name will not be appeared in any published or unpublished materials in the future. I can terminate my participation at any time without causing any negative impacts on my grades or academic progress. All documents will be kept in a secured filing cabinet according to the university’s policy. Upon the completion of the research study, all documents, including tapes will continue to be stored in the filing cabinet for 5 years.

My signature below indicates that I am willing to participate in the research project as it is outlined above, and that I have received a copy of the letter of information and the consent form.

Signature of Participant  Signature of Co-Investigator

Date  Date
Appendix C Sample of Reply Card

Reply Card

My name is ________________

I agree to participate in your research study about narrative interactions in network-based learning environment.

You may call me at _________________. The best time to phone is ____________.

You may email me at _________________.

I do not agree to participate in your research study about narrative interactions in network-based learning environment.
Appendix D Interview Questions with the Students

1. Please tell me about your language learning experience... (years living overseas, years learning a L2, level of proficiency)

2. Why did you enroll in this course?

3. What do you think about the quality of interactions with other students and the instructor?

4. How do you feel about the community in the course? Do you think there is a learning community developed?

5. What is your personal definition of social presence? How do you feel about your social presence?

6. How do you feel about the instructor’s presence/role in this course, online and face-to-face? Would you do anything different from what the instructor had done in this course?

7. Did you form distinct impressions of some students or the instructor over the course?

8. What do you think about the role that the online bulletin board has played in the course? Would you use it for your own teaching?

9. How do you feel about writing and sharing autobiography online? Why?

10. Did the discussion on BB help you write your 3 assignments?

11. How do you feel about conceptualizing and writing about your language and cultural experience and your identity online? What did you learn from it?

12. How do you feel about your participations online and FtF? How did they influence each other?

13. If you learn a L2 again, how will you learn it?

14. Please tell me what you have learned relevant out of this course.

15. What does this learning experience mean to you as a language teacher/learner?

16. Is there anything else you would like to tell me about your experience in this seminar?
Appendix E Interview Questions with the Instructor

1. Please tell me about your experiences of using the online bulletin board (BB) for instructional purposes.

2. Have you reached your instructional objectives in this graduate seminar (summer, 2004) mixed-mode course?

3. What do you think about the role that the online BB has played in the course?

4. What were the purposes of writing and sharing autobiography using the online BB?

5. What have the students learned from writing and sharing autobiography using the online BB?

6. Do you think that the students’ online participations influenced their face-to-face in-class oral participations or vice versa?

7. What do you think about the quality of interactions between you and the students, and among the students themselves?

8. How did you promote the sense of community in the online and face-to-face in-class situations?

9. What do you think about your social presence and the social presence of the students in this course?

10. Did you form distinct impressions of some students over the course?

11. What do you think the students have learned out of this course?

12. What does this experience mean to you as a language teacher/educator?

13. What possible factors might have influenced your responses in this interview?

14. Is there anything else you would like to tell me about your experience in teaching this course?

Note: The instructor was treated as other student participants, and his responses to the above questions were integrated into the results and discussion section of this thesis. In addition, specific comments on the professor’s responses to the questionnaire are made explicit throughout the thesis.