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Increasing Student Voice and Empowerment Through Technology: The Perceptions of Communication Apprehensive Latter-day Saint (LDS) Seminary Students

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INCREASING STUDENT VOICE AND EMPOWERMENT THROUGH TECHNOLOGY:

THE PERCEPTIONS OF COMMUNICATION APPREHENSIVE

LATTER-DAY SAINT (LDS) SEMINARY STUDENTS

by

Doran H. Christensen

A dissertation submitted in partial fulfillment
of the requirements for the degree

of

DOCTOR OF EDUCATION

in

Education
(Curriculum and Instruction)

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UTAH STATE UNIVERSITY
Logan, Utah

2012

ABSTRACT

Increasing Student Voice and Empowerment Through Technology: The Perceptions of

Communication Apprehensive Latter-day Saint (LDS) Seminary Students

by

Doran H. Christensen, Doctor of Education

Utah State University, 2012

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Many students appear to be disinterested and unengaged in traditional classroom settings. Numerous educational theorists suggest that students need current technology and communication in order to get students more involved in classroom discussion. This study examined a group of Latter-day Saint (LDS) students who were not involved vocally in the classroom (communication apprehensive), yet were highly involved in peer-to-peer communication via technology outside of the classroom. Issues of power are critically examined utilizing LDS and Freirean lenses of student voice, democracy, and empowerment. These issues are consistent with the LDS Church Educational System's efforts to help students to explain, share, and testify of gospel truths. Student surveys concerning the use of technology and communication were instrumental in selecting a purposeful sample of five students for further study. These students, ranging from grades ninth to twelfth, were interviewed regarding their perceptions of the potential of

educational technology implementation in LDS seminary classrooms in an effort to engage the communication apprehensive students. The data derived from this multiple case study design were analyzed using constructed grounded theory. Several key findings emerged through the analysis. The participants felt that some form of communicative technology could be empowering and advantageous to apprehensive students. However, the technological tool selected should be innovative and independent of currently existent resources. The participants also noted that some degree of communication apprehension still exists when using communicative technology. Ultimately, it is people who empower and give voice to the apprehensive student, not technological mediums alone.

(151 pages)

PUBLIC ABSTRACT

Increasing Student Voice and Empowerment Through Technology: The Perceptions of

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Many students find themselves unwilling or unable to participate vocally in traditional classroom settings. This study examines a group of LDS (members of the Church of Jesus Christ of Latter-day Saints) seminary students who were hesitant to participate vocally in the classroom, but were highly involved in peer-to-peer communication through technology. The objective of this research was to determine the perceived value of technological implementations as it provides a potential forum for increased student participation.

As educators find and utilize teaching methods and resources that engage students more fully in the educational process, the students themselves become the primary beneficiaries. This research was intended to allow the student participants to determine what technological resources could empower and give voice to those who were apprehensive to traditional classroom participation.

Student surveys regarding communication apprehension and technology use were administered to five seminary classes. The results of these surveys were instrumental in selecting a purposeful sample of five students for further study. These students were interviewed on two different occasions regarding their perceptions of the potential of educational technological implementation in LDS seminary classrooms in an effort to engage apprehensive students. The findings from this research can assist administrators and educators as they seek to implement strategies to help marginalized students become more involved in the democratic classroom.

ACKNOWLEDGMENTS

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CHAPTER I

INTRODUCTION, CONTEXT, AND RESEARCH QUESTIONS

Introduction

Learning, which is the aim of our educational endeavors, requires that students are engaged in participatory and interactive ways. Han and Hill (2007) suggested that all learning is social in nature. Because we are social beings, meaning-making develops through the social process of language use over time. Pask (1976) agreed with the social tenents of learning when he introduced what is called *conversation theory*. This theory suggests that conversation is the fundamental process of learning. As students interact with each other and the teacher in meaningful ways, change begins to take place in terms of student growth and development. Learning then becomes a process of *coming to know* through mutual adjustment and negotiation.

Dewey (1981) added to this premise of learning by saying, "Not only is social life identical with communication, but all communication (and hence all genuine social life) is educative. To be a recipient of a communication is to have an enlarged and changed experience" (p. 7). Based on these observations, educators need to more aptly facilitate student conversation and discussion in an effort to bring about this changed experience.

In our modern world, human interaction and communication is made readily accessible through a variety of technological means. Because of the ubiquitous nature of social technology, students have the ability to interact with each other outside of the classroom in both social and educative ways. The potential for learning is increasingly

expanding further outside the walls of the traditional classroom.

This study examined the perspectives of LDS (members of the Church of Jesus Christ of Latter-day Saints) seminary students as they consider the role that technology could have in providing a social space for classroom learning. In this chapter, I will identify the ever-present challenge associated with social learning application in the classroom. I will then describe my own unique position and personal context within this study as lead-researcher. I conclude this chapter with a description of the theoretical lenses I implicitly and explicitly use throughout this research study.

Problem Statement

One of the great challenges that take place as educators seek to apply principles of social learning is the proclivity for a few students to dominate classroom discussions, thereby squelching the voices of others (Han & Hill, 2007). Additionally, many other students find it difficult to open up and share things with class members in a face-to-face forum, whether it is a small-group or a large class. This discouraging reality poses a large predicament in the way of social learning application in the classroom. Although learning may indeed stem from social interactions, many students may struggle to contribute to, and benefit from the social attempts administered by the teacher. These students may not feel comfortable raising their hands, participating in classroom discussions—or even opening up in small group activities. Regardless of the reason for this lack of participation, apprehensive students are not receiving the full benefit of participating in a democratic classroom.

Positionality and Personal Context

My research is inevitably intertwined with who I am, my social positioning in society, and my experiences in life. Scheurich (1994) remarked that one's historical position, one's class (which may or may not include changes over the course of a lifetime), one's race, one's gender, one's religion, and so on—all of these interact and influence, limit and constrain production of knowledge. Because of this, my choice of study—as well as my description of findings—will all stem from my own unique positionality and lived experiences.

I grew up in a large LDS family in rural Utah. My parents are both educated and well-respected by their peers. My father obtained a doctorate and taught at a local university throughout his professional career. Due to his position and long-term financial stability, we lived a comfortable middle-class lifestyle. My mother chose to spend her time as a homemaker with her 11 children.

Because of the groundwork laid by my parents, my siblings and I felt somewhat privileged in our community. We felt that our parents were highly capable when educational needs arose, while at the same time granting us access to books, computers, and other resources that were not as readily available to our peers. Even if not always warranted, the Christensen children were considered smart, capable, and headed towards a productive and successful future.

Now married, and with a family of my own, I have sought to maintain a similar lifestyle and expectation with my children. Both my wife and I have been educated, and live a comfortable middle-class lifestyle. We hope to provide our children with the best

resources available in order to help them be successful and happy in every way, both individually, and as members of society.

Additionally, my religious convictions have helped me to see outside of myself and seek the well-being of others. Because of the blessings and privileges that I have experienced throughout my life, I feel morally obligated to help others to have what I have—to reach their full potential. In essence, my goal is to help those who are positioned beneath their potential (which is all of us) to rise up and experience a better and more complete quality of life.

In light of this background and personal context, my concern for the quiet student stems primarily from my experience as one of them. Even with all my personal privileges, I frequently observed other students engaged in classroom discussions, asking questions, and appearing to be having a great educational experience. It was apparent to me that these more vocal students were taking greater advantage of their opportunities for learning and growth, while I was simply getting by. I often wished that my personal inhibitions would vanish, and that I could come to enjoy school and learning in the way that others were.

Strangely enough, one of the reasons I chose to become a teacher was to help those who struggle in the same ways that I did when I was their age. Simply put, I wanted to help others to be better than I was—and to learn more, and become more than I was in that stage of life.

In light of these desires, I chose to seek employment as a seminary teacher in the Church Educational System (CES) of the LDS Church. At the seminary, secondary

students are able to take scripture courses as an elective throughout their high school years. Seminary teachers are expected to utilize effective teaching methods and become proficient in every way as we seek to teach and exemplify principles of the gospel of Jesus Christ as defined by the LDS Church. As part of this professional development expectation, further education and training is implicit.

As a doctoral student, I began to study the potential of educational technologies that could be incorporated into the classroom in an effort to get students more involved and to assist the quiet students in having a voice. I began to get excited about the difference that this could make in the classroom experience. In LDS religious education—where I work— the door has just begun to open relative to technological implementation in the classroom. More research would be needed in order to ascertain the benefits of specific technological implementations.

In harmony with these interests, I received permission in the fall of 2008 to begin an informal research project with a seminary classroom blog. The intent of the blog was to further classroom discussion in a more comfortable and informal setting. As the teacher and administrator of the blog, I would post thoughts and questions for my students to consider, and they would then have the opportunity to respond to what I and others in the class were saying.

The immediate results of the blog were quite favorable. Many students were spending time online both reading and commenting on the discussion prompts. In fact, some of the first and most active participants on the blog were students who were traditionally quiet in the classroom. Unfortunately, as time went on, interest and

involvement in this exciting technology seemed to wane as well. The quiet students began to fade into the background, and only the most vocal remained.

This discouraging finding posed more questions in my mind relative to the educative value of certain technologies along with their potential to give voice to the apprehensive and quiet students. I decided that I needed to go more in depth in seeking to understand my students—seeking to discover what they really thought about technology incorporation in the classroom. I had learned from my first experiences with technology implementation that my thoughts may not be representative of the thoughts and desires of my students. For this reason, I have chosen to do a student-centered study, where students without a voice in the classroom can be empowered and be given an opportunity to express their ideas regarding technological implementation in the seminary classroom.

All educators find themselves in a position of power as they examine the role that they play in the lives of their students. My historical background, gender, race, religious beliefs, and social positioning all have a unique impact in defining who I am, and how I seek to use that power as I interact with the people around me. In the same sense, my own lived experiences—both past, present, and future—continue to shape my perspectives, motives, and desires. These variables are inextricably woven into all aspects of this study, as I seek to empower and elevate my students.

Research Questions

In conjunction with the educational problems and personal interests I have described, I explored the following research questions.

1. How do LDS seminary students with communication apprehension find voice and empowerment through technological means outside of the classroom?

2. How do these students conceive these technological mediums being implemented in a seminary classroom?

Theoretical Lenses

In addressing these research questions, a synthesis of three theoretical lenses served as tools for describing, analyzing, and interpreting student perspectives. Because this study involves LDS students in a seminary classroom, an LDS perspective will implicitly be used in the interpretation of the data. Additionally, conceptions of liberation, democracy, and student voice will be analyzed through the lens of Paulo Freire—a well-known educational theorist from Brazil. Finally, a technological lens will help to connect Freirean principles with actual teaching practices in an LDS seminary classroom. A brief description of each of these lenses is provided below.

LDS Lens

One of the primary purposes of religious education in the LDS church is the individual conversion of the student. Conversion in this sense refers to more than learning about or accepting something or someone. Rather, true conversion is a process by which an individual is made able to become something better than they are—obtaining a change of heart. The prophet Alma in the *Book of Mormon* described this mighty change in which our souls become "illuminated by the light of the everlasting word" (Alma 5:7). This conversion is made evident through the identification and acceptance of a better way

to live, and is accompanied with greater peace, contentment, and happiness in life. Conversion then, becomes associated with liberation—where individuals experience a feeling of freedom, power, and focus hitherto unknown.

Conversion also has multiple democratic principles that are inherently implied. Certainly, true conversion is not only about self. Jesus taught Peter, "When thou art converted, strengthen thy brethren" (Luke 22:32 King James Version). Using this admonition, the converted soul is not meant to remain silent and alone, but has a divinely-appointed obligation to help and assist others to receive what they have received. Then, the converted individual becomes a teacher.

While the teachings and doctrines of the LDS faith remain relatively constant, the understandings and applications of these same principles vary with each individual. For example, the simple notion that *prayer is important* is understood by all Latter-day Saints. However, understanding *why prayer is important* could invite a thoughtful and animated discussion. Additional topics could be: What makes a prayer effective? How does God answer prayer? What is your experience with prayer? When have you felt God was listening? And the list of meaningful questions goes on. Ultimately, the lived experiences and perspectives of all gospel learners have the potential to increase the understanding and application of all the participants in a gospel-related discussion. The principle of strengthening others, along with its real-life application, is at the heart of teaching and learning in LDS classrooms. Successful seminary experiences are made evident when students become wonderful parents, teachers, neighbors, friends, missionaries, and societal leaders. The classroom then becomes a training ground for

living a productive life in a democracy, and having a powerful impact for good in the world.

Recently, LDS seminary teachers were given instruction relative to teaching practices that would better help us to reach our ultimate goals of change and empowerment. One of the important items of emphasis was that teachers need to help students to be able to "explain, share, and testify of gospel doctrines and principles" (CES, 2009, p. 1). Using this direction, teachers should spend time in class helping the students to become leaders and teachers—being engaged in dialogical conversation throughout the class. Scott (2005) taught religious educators, "Never, and I mean never, give a lecture where there is no student participation. A "talking head" is the weakest form of class instruction" (p. 3). Later, he suggested that "creating an atmosphere of participation enhances the probability that the Spirit will teach more important lessons than you can communicate" (Scott, 2007, p. 3). Ultimately, a more productive and empowering environment is created when students are intricately involved in participatory ways in their own learning. Hales (2002) added, "Faith promoting incidents occur in teaching when students take a role in teaching and testifying to their peers" (p. 4). Learning then becomes associated with change, conversion, and the betterment of society as students are empowered with voice and opportunity in the classroom.

Freirean Lens

One of the most prominent advocates in the past century of student voice and empowerment is Paulo Freire. Freire (1970) rejected the commonplace practice of what he called the *banking* concept of education. This ubiquitous educational practice places

the teacher—as the sole possessor of knowledge and experience in the classroom—as the source of instruction, and the student as the stoic recipients of that knowledge. According to Freire, "education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiqués and makes deposits which the students patiently receive, memorize, and repeat" (p. 72). Ultimately then, students become victims of *oppressive* practices where the educational emphasis is on receiving, filing, and storing information that will be strategically recalled at the right time for testing purposes, and thereafter discarded as necessary. In this way, Freire noted that the banking system of education has little to do with learning and empowerment, and everything to do with oppression and dehumanization.

Instead of becoming complicit to student oppression by utilizing traditional-yet-misguided teaching practices, Freire suggested that teachers need to employ practical strategies that would elicit collective inquiry, creativity and a closer connection with reality in the classroom. Freire (1970) expressed that "knowledge emerges only through invention and re-invention, through the restless impatient, continuing, hopeful inquiry, human beings pursue in the world, with the world, and with each other" (p. 72). Freire further suggested that "authentic liberation—the process of humanization—is not another deposit to be made in men. Liberation is a praxis: the action and reflection of men and women upon their world in order to transform it" (p. 79). Under this notion, proper education becomes more about practical living and acting appropriately upon acquired knowledge (praxis). This real-life approach necessitates that more interaction takes place

in the classroom, rather than allowing a teacher to distribute information, while the student obediently takes notes.

Like others (i.e., Dewey, 1916; Vygotsky, 1978), Freire (1970) suggested that learning needs to be a dialogical process which engages students and empowers them in social ways. "Without dialogue there is no communication, and without communication there can be no true education" (p. 73). This educative framework shifts emphasis and power from the teacher to the students. With this shift, the teacher and students alike have voice and opportunity to learn, share, and teach each other in the classroom. As Freire explained, "Authentic education is not carried on by A for B or by A about B, but rather by A with B, mediated by the world—a world which impresses and challenges both parties, giving rise to views or opinions about it" (p. 93).

Freire strongly believed that by inviting and encouraging each individual student to participate and be involved in classroom discussions, a climate of learning could then be fostered. In explaining the role of educators in this process, Freire (2000) suggested that "the educator with a democratic vision or posture cannot avoid in his teaching praxis insisting on the critical capacity, curiosity, and autonomy of the learner" (p. 13). To truly liberate and empower the student, teachers will need to elicit the thoughts, opinions, and ideas of their students. "Through dialogue, the teacher-of-the-students and the students-of-the-teacher cease to exist and a new term emerges: teacher-student with students-teachers" (Freire, 1970, p. 80). In essence, a new and productive learning environment is created where teachers and students are both learners together. As a result, the traditional walls of oppression fall as the teacher joins with the student in inquiry and discussion.

Instead of being oppressed by teacher domination and a lifeless curriculum, students can be given a voice to participate in real and meaningful ways. The awakening of each individual voice in the classroom then leads to liberation, empowerment, and change.

Technological Lens

The perceived need to empower students has led many researchers (Ferdig & Trammell, 2004; Kajder & Bull, 2004; Kaplan, Rupley, Sparks, & Holcomb, 2007) to suggest that educators need to join the technology revolution as a way to enhance student participation and learning. According to Prensky (2001), our students are *digital natives* who have grown up with, and are accustomed to learning and living in a technological world. They are used to multi-tasking, Googling, and finding answers through digital means. For digital natives, today's classrooms may seem "old-school" and archaic, in terms of accessing information. As a result, the modern teacher may be labeled as *digital immigrant*. This title hints at the teacher's perceived inability or hesitancy to speak, teach, and learn, using technological tools. The result is a communication barrier that is ever-widening in the classroom. Because of this educational rift, the only productive and interactive communication that some students may experience will come only after school hours.

Prensky (2005) explained further, "Our students, who are empowered in so many ways outside their schools today, have no meaningful voice at all in their own education…. In the 21st century, this lack of any voice on the part of the customer will soon be unacceptable" (p. 13). To some extent, Prensky is suggesting that the reason that so many students fail to participate in schools is because of the non-participatory

structure of today's schools. If this is the case, a curriculum that is more current and relevant would be required in order to restore individual student voice into the classroom.

In viewing a classroom situation through this technological lens, there are resources available to help students be more engaged in classroom participation and dialogue. Given the existent challenges that face teachers and students in promoting a democratic classroom, it is feasible that conversational technologies will have the potential to empower students whose voices remain unheard. Additional focus and exploration regarding these technologies could have a considerable effect on the opportunities for students to speak, discuss, and learn.

Synthesis of Lenses

One of the perceived paradoxes in religious education is the notion that there is a rigid curriculum that does not allow for great amounts of alteration and change—or the use of multiple lenses. While this statement may be true for the curriculum standard itself (e.g. scriptures, prophetic counsel, absolute truths), it is not to say that our methods of teaching cannot be improved upon in order to more powerfully accomplish our objectives. This commitment to improvement matches both the Freirean and technology tenents, as educators seek to empower the learner with communicative tools.

In this way, social learning has more to do with the pedagogy of teaching and learning than it does with a curriculum standard. Even Paulo Freire, who served as the education minister of Brazil for a time, endorsed a prescribed curriculum. His focus, however, was on a teaching methodology that would help students to truly learn and evolve. This type of education invites liberation and empowerment as students listen to,

and work with one another in a democratic environment of learning and growth.

In addressing Freire's (2005) vision regarding technological implementation, he admitted that he was not as concerned as much about the machine, but in the humanization of man. Or, in other words, the quandary is not as much about the technology itself, but about what the technology can potentially do for the student.

The multiplicity of lenses used in this study is meant to be consistent and complimentary with each other in helping to identify teaching methodologies and principles that would benefit LDS seminary students. The expectation of this multiple-lens approach is that a clearer picture will be provided that will ultimately shed insight into the minds and hearts of the students themselves.

Conclusion

In this chapter, I have emphasized the social nature of learning, as well as the challenges educators face in creating a social climate for learning. My own personal positionality and lived experiences have also been described in an effort to establish a foundation for my interest in student voice and empowerment. Additionally, three complimentary theoretical lenses were also brought to light that have guided the description and interpretation presented in this study. These personal variables and assumptions, coupled with the review of literature that is presented in the next chapter, provide the framework for this research study.

CHAPTER II

REVIEW OF LITERATURE

Introduction

In an effort to clarify and refine the need for additional study, I conducted a

thorough literature review relating to my research questions. The main emphasis of my

search centered on literature relating to the social nature of learning, as well as the

potential of learning-enhancing technologies to increase classroom dialogue, discussion,

individual voice, and empowerment. I also gave specific emphasis to research that

harmonized with notions of student voice, democracy, and empowerment. Considerations

of counter-arguments were also part of my review.

The sequence in presenting this review is deliberate in an effort to create a

backdrop for my research study. One of the primary assumptions of this study is the

belief that learning is a social endeavor. Because of this, I begin my review with a

summary of literature supporting this assumption. However, as stated in Chapter I, there

are challenges that educators face in creating a social classroom climate for every student,

for a variety of reasons. To respond to this challenge, I then summarize literature that

describes the potential of learning enhancing technologies to fill this social-learning

dilemma. Finally, I then summarize literature that describes the increased dialogue,

individual voice, and empowerment that comes with the implementation of educational

technologies. These three sections of literature review are intended to establish a basis for

the belief that educational technologies can help to create a social environment for

learning where students can feel liberation and empowerment.

Also, due to the fact that the field of educational technology is relatively new and emergent, much of the literature cited is theoretical in nature. Because of this, I have also summarized literature that gives counter-views, in an effort to be as fair and objective as possible as I attempt to shed light on my research questions.

The Social Nature of Learning

One of the main tenants of social learning theory is a constructivist notion that the individual learner is an active constructor of knowledge (Dewey, 1916; Piaget, 1952; Prawat, 1996). Primary importance is assigned to the way that learners make sense of what is taking place around them in social contexts mediated with cognitive tools in an effort to enrich learning (Gallini & Barron, 2001; Vygotsky, 1978). As students bring their own unique perspectives and experiences into a community of learners, each individual is enriched as a multiplicity of ideas, opinions, and viewpoints are brought to light.

Vygotsky, often considered the father of social constructivism, provided a framework for this interactive component of learning and development as he illuminated the role of social interaction in educational processes. In his view, all human development and learning is bound up in purposeful action mediated by various tools, which he termed as "activity" (Vygotsky, 1978). These activities are brought to life through language, which serves as the most essential tool in engaging in a purposeful learning community.

Vygotsky (1962) stressed that collaborative learning, either among students and teacher, or students and students, was necessary in supporting students as they advanced through their zone of proximal development (ZPD). This ZPD represented the gap between what students could accomplish by themselves, and what they could accomplish with the social interaction and cooperation with others. Finding the proper zone for development denotes that students have been placed in an environment where individual and group efforts combine to foster growth and development.

Along these same lines of cooperative learning, Vygotsky (1962) also referred to a term called *scaffolding* in his theory. Scaffolding suggests that children learn more effectively when they have others to support them in their learning endeavors. Scaffolding is an assisted learning process that harmonizes with the ZPD, as students work with teachers, peers, and others to achieve the next level of understanding. In his view, this attainment would not happen without the help of others. According to Vygotsky, cooperative learning is an integral part of creating a deeper understanding, and internalizing knowledge.

Since Vygotsky's time, many other theorists have joined together in advocating a greater social role in learning. This shift away from the traditional view of learning as merely a cognitive act on the part of the student, gives emphasis to the need for educators to create mediated social contexts in which students can interact in meaningful ways (Brown, Collins, & Duguid, 1989; Lave & Wenger, 1991). To do this, teachers would need to move away from their traditional roles as "sages on the stage" and become "guides on the side," where they can serve as facilitators of discussion in a democratic

classroom environment. Ultimately, as this type of student discussion and interaction increases, knowledge construction automatically follows.

Brown and Campione (1994) theorized that students need to be more active participants in learning, rather than being subject to didactic principles of teachings and learning alone. In response to this, they developed a program entitled *Fostering a Community of Learners* (FCL) whereby students and educators work to create a learning environment of collaboration, discussion, and experiential learning. This project also included a component of reciprocal teaching, which allowed students the opportunity to study and share their experiences and expertise with classmates in an interactive forum. Over the course of several years, Brown and Campione administered a variety of curricula aimed at helping students be actively involved in their own education. A wide variety of research methodologies were used to determine the value of these curriculums. Pre and post tests were taken, interviews were conducted, and portfolios were organized, and students were repeatedly observed. As a result of these efforts, Brown noted that students were being immersed in conversation and activity that led towards higher levels of thinking, learning, and citizenship. This outcome was made possible by engaging in group processes of negotiation, argumentation, and case building in an effort to resolve differences and increase understanding (Brown et al., 1993).

Pask (1976) narrowed the basic unit of social learning in the classroom to the common term of "conversation." The fundamental idea of this theory of learning suggests that learning occurs through conversations about a subject matter which serves to make knowledge explicit. Through recursive interactions called *conversation*, the differences

that arise through human-to-human interaction may be reduced until an agreement over an understanding may be reached. Ultimately, this construction and consensus can only take place through interactive means.

Pask (1976) further explained that the critical method of learning according to Conversation Theory is *teachback* in which one person teaches another what they have learned. Essentially, the whole learning process involves an ongoing dialogue with others, which culminates with each student being empowered to actually teach others.

As a result of these interactive and collaborative efforts, students are able to experience deeper level learning, critical thinking, shared understanding, and long term retention of the learned material (Kreijns, Kirschner, & Jochems, 2003) These results correspond well with the tenants of democratic education, where students, through education, become capable of participating in a productive way in society (Dewey, 1916).

For over two decades, brothers David and Roger Johnson have been conducting research regarding cooperative learning. In addition to initiating over 80 studies of their own, they also performed a series of extensive reviews of existing research on cooperation and learning. The findings were consistent across the board, as studies showed students' positive efforts to achieve when working together in groups. They work harder, achievement levels go up, material is remembered longer, higher-level reasoning is used more, and it provides not just external motivation but also intrinsic motivation. Social learning also provides opportunities for students to develop social and communication skills, develop positive attitudes towards peers, and build social relationships and group cohesion (Johnson & Johnson, 1999).

In addition to the democratic benefits that come to society through a cooperative and interactive education, Hiltz (1994) underlined the importance of social interaction stating that "the social process of developing shared understanding through interaction is the "natural" way for people to learn" (p. 22). In order to apply this principle in the modern world, Hiltz and others at the New Jersey Institute of Technology developed what is called the *Virtual Classroom*. This innovative program was designed to bring the university into the homes and workplaces of the students through the use of computers. Students could view lectures, participate in discussions with professors and classmates, and work on collaborative projects in an online setting. This computer-mediated environment became a tool in supporting collaborative learning processes that extend beyond the walls of the traditional classroom.

This notion of education outside of the classroom runs parallel to Dewey's (1981) suggestion that all social life and communication is educative in nature. As students learn to interact and associate with others in collaborative ways, they are learning skills that relate to productivity and democracy. In its truest sense then, education is not simply the curricula found in books, but involves the productive interactions that we have with each other in real-life settings. Ultimately, the classroom experience is meant to imitate and prepare students for life outside of the classroom. Being prepared for this life matches the aims of a proper public education.

Unfortunately, realities exist in the classroom that present challenges for social learning application. In spite of educators' best efforts to facilitate student participation and interaction, there is a natural proclivity for a few students to dominate classroom

discussions.

Reda (2010) interviewed five self-identified *quiet students* throughout the course of a school year to learn about their perceptions of classroom participation. She found an overwhelming feeling from her interviews that speaking up in class was a high-stakes situation where students are expected to give a correct answer. In addition to this pressure, the interview participants also were acutely aware that their classmates' opinions of them would be affected, or formed, by the comments they offer in class. The opportunity to create an unwanted image of oneself was a determining factor in choosing to remain quiet throughout the class period.

In a similar study, Townsend (1998) interviewed four secondary students to learn about their feelings during classroom discussions. She found a variety of reasons that students may not be participating vocally in class. The findings of the study indicated that students did not feel comfortable commenting in class when they were feeling shy, confused, disinterested, irritated, or frustrated with their peers. However, like the Reda (2010) study, Townsend found that students were always contemplating how their commenting would affect their classmates' perceptions of them. They did not want to appear dumb, or create conflict, or be labeled in some way that was not favorable. Hence, silence was the preferable option in most cases.

Phelan, Davidson, and Cao (1992) followed 54 secondary students over a 2-year period to see how they perceived their involvement in the school community. Interviews with these students highlighted several findings relating to vocal participation in class. They found that students feel more comfortable being involved in class when they know

the teacher and their classmates well. Students feel less threatened when they are surrounded by their friends, and are much more willing to take risks like commenting vocally in class. Additionally, they found that a feeling of emotional safety can be created by teachers who truly care about their students. When an emotionally-safe environment was established, students reported a greater willingness to participate and become involved in classroom discussions.

Regardless of the variables surrounding why some students participate vocally in class and others do not, unintentional status rankings naturally occur as a result. Cohen and Lotan (1995) noted that status grouping automatically occurs in social settings (such as small groups or classrooms), as those with higher status tend to interact and participate more than those with lesser status. This designation of status occurs as students make self-assessments regarding their intellect, attractiveness, popularity, social class, race, gender, and ethnicity (Cohen, 1998). Based on their assessments coupled with the perceived assessments of their peers, student will choose to participate, lead, and be involved in group discussions, or choose to hold back and take a more passive role. Ultimately, the individual differences in classroom participation and interaction between high-status and lower-status students leads to a disparity in learning outcomes. Simply put, those who talk more learn more; while those students who talk less, learn less.

The result of this reality indicates that only a small portion of students are highly engaged and learning in social settings, while the rest remain without a voice and a sense of empowerment. Based on the tenants of social learning theory, this lack of individual voice corresponds with a lack of learning, growth, and knowledge construction.

Little resistance accompanies the suggestion that students need to have a social and interactive experience as they learn. However, actually creating a social and interactive experience for every student is a much more difficult and daunting task. With the wide variety of social variables present in each individual and classroom, there is a definite need to research, study, and experiment upon principles and methodologies that will empower and give voice to every student.

Potential of Learning-Enhancing Technologies

With this growing awareness of the need for social interaction in education, coupled with the reality that not all students are participating vocally in traditional classroom settings, more and more educators are looking at *untraditional* methods for creating a social climate for learning. Likewise, with the recent emphasis on communication, rather than simple individual knowledge acquisition as a means to improve the quality of students' educational experiences, educators are considering current classroom resources in order to meet this objective (Thomas, 2002). In order for student voice and interaction to become paramount in the classroom, different educational tools may be required in order to facilitate this growing need.

Traditional curriculums and instructional methodologies of past decades argue against this more progressive and communicative approach to learning and instruction. Ferrero (2005) summarized the dichotomous relationship between traditionalist and progressive paradigms in this way:

> In fact, education's fiercest and most intractable conflicts have stemmed from differences in philosophy. Take the 100 Years' War between "progressives" and

"traditionalists." To oversimplify an already oversimplified dichotomy, progressives incline toward pedagogical approaches that start with student interest and emphasize hands-on engagement with the physical and social environments, whereas traditionalists tend to start with pre-existing canons of inquiry and knowledge and emphasize ideas and concepts mediated through words and symbols. (p. 10)

Religious education may seem to overwhelmingly side with the traditionalist use of preexisting canons of inquiry and knowledge. However, while the curriculum standard (scriptures, prophetic counsel, absolute truths) may carry a traditionalist stance, it is not to say that religious educators cannot and should not be *progressive* when addressing the methods used to teach the curriculum (e.g. discussion, analysis, application). In this way, the emphasis for reform may rest more squarely upon *how* things are taught, rather than *what* is being taught.

More than ever, progressive educators are crying out for a technology reformation in regards to methods that are used to educate today's students. Prensky (2005), a vocal proponent for technology in education, argues that "the curriculums of the past—the 'legacy' part of our kids' learning—are interfering with and cutting into the 'future' curriculum—the skills and knowledge that students need for the 21st century. We need to consolidate and concentrate important legacy knowledge and make room in school for 21st century learning" (p. 13). This current learning shift includes the opportunity for students to think, speak, create, and interact in productive ways.

Skiba and Barton (2006) agreed with Prensky (2005) in suggesting that educators need to rise to the challenge to adapt teaching styles and curriculum to accommodate a new generation of learners. Today's learners, known as the *net generation* or *millennials* have learning expectations, styles, and needs that are different from past students. These

students have preferences for digital literacy, experiential learning, interactivity, and immediacy. They want to speak and be heard, rather than only passively participate.

Owston (1997) suggested that one of the primary advantages to the worldwide web is that it is very compatible with the way students now prefer to learn in the modern world. Because of familiarity and exposure, students are naturally inclined to use technology in much of their daily activity. Papert (1993) even went so far as to refer to the computer as the *children's machine*, because virtually all of today's students do not know a world without this technology. Likewise, these same students relate to the computer in ways that baffle adults as they seek entertainment, communication, and learning—all with the same tool. Papert also noted that current students are more visual learners than previous generations due to the increasing availability of visual stimuli. With this understanding, it is fitting that educators design learning materials and opportunities that will capitalize on what we know about our students' preference for learning and interaction. It seems apparent that the computer will be at the heart of many of these initiatives.

In an attempt to understand the relationship between technology and the needs of modern students, Tapscott (1998) surveyed over eleven thousand young people. His study revealed that the net generation displays interesting and revolutionary new ways of thinking, interacting, working, and socializing. Instead of seeing them as lazy and unmotivated, Tapscott described modern students with attributes of independence, emotional and intellectual openness, inclusion, free expression and strong views, innovation, inclination for investigation, and immediacy. In essence, because modern

students are digital natives, rather than digital immigrants (Prensky, 2001), they need to be instructed in ways that represent who they are and what they will need to be, rather than what their instructors are and were. Similarly, students will need to be educated to prepare them for the future, rather than preparing them for the past. With this view, technology has the potential to stretch students, using resources that students are already prepared to use.

Kellner (2003), a prominent critical theorist, saw the need in modern society to focus his efforts towards critical media literacy that would empower those who are marginalized by factors such as gender, race, sexual orientation, ethnicity, social status, and others. In response to this need, he suggests the development of a critical theory of education for the new millennium. This would include developing new literacies that respond to new technologies in an effort to meet the challenges of globalization, multiculturalism, and democracy. This *millennial education* would then better prepare the students of today for the world of tomorrow that is infused with innovative technologies and new methods and modes of communication.

This contributes to the argument that a technology-driven curriculum builds on the premise that education is social in nature. Because much of the technological world involves various forms of social-networking, educators can tap into these resources as a way for marginalized students to become more involved in classroom discussion and dialogue. For the digital native, this type of interaction may be a natural fit as educators rise to meet the needs of a new generation of learners.

One of the great benefits of technology is the allowance for individuals to connect

with others through text in an informal, public, and reflective way. Moon (1998)

expressed the value of writing as she explains the process of refection. According to her,

reflection surrounds the notion of learning and thinking. In essence, we reflect in order to

learn something, which implies that we learn when we properly reflect. Moon theorized

that reflective writing does several positive things for the student: It deepens the quality

of learning as students learn critical thinking skills; it enables learners to understand their

own thinking processes; it increases active involvement and ownership in learning; it

enhances the personal valuing of self towards self-empowerment; it enhances creativity

by enabling intuitive understanding; it provides an alternative voice for those who are not

good at expressing themselves; and it fosters reflective and creative interaction within a

group.

Topper (2005) conducted a study utilizing students from four graduate level

online courses to explore the potential of technology in supporting and maintaining class

discussion and interaction. The researcher sought to maximize student participation and

facilitate learning through rich, thoughtful discussion in an online discussion forum.

Discursive moves were utilized in threaded discussions to help students stay involved,

and to deepen and improve the overall quality of participation. Topper employed

discourse analysis methods to help understand and analyze students' online participation

patterns. The results of his findings show promise in regard to the potential of web-based

tools for creating and maintaining thoughtful and productive interactions. A major

assumption of this study incorporates the belief that increased participation leads to

increased learning.

As technology serves as a tool with great potential in the educational arena, many have questioned its value relative to actual student achievement. In 1999, Schacter produced a report for the Milken Exchange that focused on the research that expounded on the relationship between use of technology and achievement. The findings of this meta-analysis seemed to suggest optimism for a positive relationship—and gave impetus for further study.

In 1994, Kulik used an experimental design method to discern that students across all levels (K-12 through higher education) learned more and showed significant percentile increases in their achievement test scores when instruction was computer based. Likewise, in a similar study performed by Sivin-Kachala and Bialo (1998), the researchers found that students who were engaged in learning in technology rich environments also showed an increase in achievement across all age levels.

In a study of fourth-grade math students, Valdez and colleagues (2000) found that students who used computers primarily for math and learning games scored higher on achievement tests than those that did not. In another study, researchers from the Center for Applied Special Technology (Follansbee et al., 1996) examined student performance of 66 fourth- and sixth-grade classes in seven urban school districts. A group of 28 students were given access to online enhancements to a civil rights curriculum, while the remaining control group was not. According to the findings, students who had access to the online supplements produced better projects in multiple categories of evaluation. The researchers attributed this success to the availability and usage of online resources.

It is readily apparent that there is a growing body of literature that is advocating

for technological implementation in educational settings. Many theorists cry for educational reform due to outdated curriculums and methodologies. Others describe a new kind of student that is naturally inclined to technological modes of communication and learning. In addition, more and more researchers are reporting positive learning outcomes that are being attributed to technological implementation in the classroom. Regardless the motive, there is a mounting organization of evidence that suggests the need to consider the potential of learning enhancing technologies in the classroom.

Increased Dialogue, Individual Voice, and Empowerment
Through Technology

In addition to the educative benefits of a new technology-infused curriculum, Kellner (2000) also noted that these new types of literacies have the potential to empower and give voice to groups and individuals who have been traditionally excluded and marginalized in some form or another. In his view, modern technology offers a multiplicity of resources that could give a voice to each individual student in liberating ways. As Jun (2007) suggested:

> Both researchers and practitioners need to embrace the possibility that online learning contexts might fundamentally alter power dynamics of discussions by eliminating the impact of physical appearance, size, body language, and tone of voice. The two-dimensional, linear, asynchronous nature of online discussion offers a very real contrast to the three-dimensional, sometimes chaotic world of face-to-face discussion. (p. 383)

Specifically, studies that have been conducted relating to the social dynamics of computer mediated communication tend to show a greater feeling of equity in regards to marginalized students. For example, Sproull and Kiesler (1991) examined several

published studies, and fount that electronic discussion groups of people of different status showed approximately twice as much equality as did the face-to-face discussion groups. This equality was measured by a balanced quantity of participation, as more participants in online settings were actively engaged in discussion than were face-to-face participants. This interesting increase of communication was afforded as technology opened the door to apprehensive students who were willing to use their voice in that setting. In this sense, empowerment seems to be made available through online mediums.

In a similar study regarding equitable participation, McGuire, Kiesler, and Siegel (1987) noted that in face-to-face discussions, males make the first proposal five times more often than their female counterparts. However, in discussions that were held electronically, females made the first proposals as often as males. In this sense, technology seemed to offer females the opportunity to voice their thoughts and opinions in a greater degree than appeared to be available in traditional classroom settings.

In a more general sense, Warschauer (1996) conducted an experimental study comparing small group discussion in both online and face-to-face settings. The findings of this comparison showed that online group discussions were twice as balanced in terms of participation. In face-to-face settings there remained an unequal proportion of participation in small group discussions. This increase of communication in the online groups is attributed to the more silent students becoming more involved in group processes through computer text. King (2001) also noted in his early work with online discussion boards, that students who were marginalized or shy were able to participate more in the classroom, while creating powerful public content through technological

means. King also suggested that Web 2.0 (web applications that facilitate participatory information sharing) "is a vibrant opportunity to change classroom spectators to vibrant participants, content creators, and empowered adults" (p. 55).

The empowering nature of technological communication is most commonly made available through online text. As students are given time to read, reflect, and write in synchronous or asynchronous settings, they have an ever-present invitation to write and be heard. The discussion does not start and end with a classroom bell, nor is it limited to those who are brave enough to raise their hands and be heard publicly.

In looking at reflective writing in an online setting, Read (2006) conducted a study that delved into the motivations and practices of six high-school-aged bloggers. For several weeks, Read viewed and commented on the students' blogs, while asking them questions about their practices. Her conclusion suggested that because online writing entails a sharing of ideas with real people online, it becomes a natural setting with real-life implications. In other words, instead of having students write a few words on a blank sheet of paper, which will possibly be read by a teacher with little-or-no time, students are actually sharing ideas with their most critical audience—their peers. Because of this awareness, students are more likely to think deeply and share something of worth, rather than simply going through the motions. Wright (2002) concurred with this sentiment by proposing that for writing to be meaningful, it needs to be read and evaluated by others.

Tippetts (2005) further contributed to the argument that collaborative writing is helpful in stimulating thought and conversation in the classroom setting. As a result of his teaching experiences, he observed that when students write, they are able to sort out their

fears, concerns, and questions—ultimately arriving at new levels of learning. Tippetts recommended that these types of experiences seem to come much more naturally when there is an ongoing dialogue of opinions, rebuttals, and questions. In today's world, this forum may be most easily and preferably accessible through technological mediums.

Due to the public-yet-private nature of technological communication, many students are able to find a voice and sense of empowerment that they were not previously able to express in the classroom (Han & Hill, 2007). Meyer (2006) observed the conversations of 10 graduate students as they were asked to discuss controversial subjects in both face-to-face and online forums. His findings indicated that some students actually found comfort in the sense of immunity that comes from online discussion forums. Meyer noted that when communicating online, there are no observable facial reactions or intimidating and potentially embarrassing elements of feedback. Because of this, some of the student-participants in this study felt that they were able to find a voice through technology in the classroom while discussing difficult issues. However, the results were varied, and not all of the students preferred technological modes of communication in every case.

Anderson and Haddad (2005) conducted a study of 109 online students at a Midwestern regional university. These students were surveyed and asked to compare expression of voice, control over learning, and perceived deep learning outcomes in face-to-face versus online course environments. They found that students felt greater control over their learning in online, rather than face-to-face courses, and were thus able to contribute a greater voice. Interestingly, they found also that females experienced greater

perceived deep learning in online, rather than face-to-face courses than did their male counterparts.

Ahern, Peck, and Laycock (1992) investigated the style of discourse that instructors used when interacting with students in online courses. They found this variable to be the most important factor in determining the amount of participation and the overall quality of the commenting. The researchers determined that the informal, conversational style of discourse that takes place with online communication produced higher levels of student participation, coupled with more complex interaction and a higher frequency of learner-learner interaction. The more traditional and sophisticated responses produced less interaction and learner-learner interaction.

In his case study regarding online discussions, Topper (2005) sought to maximize student participation and facilitate learning through rich, thoughtful discussion with his graduate student participants. Discursive methods were employed by Topper to keep the students involved and interested in continued discussions with each other. Topper recorded this interesting comment from one of the online discussion board participants:

> The degree of interaction with, and awareness of, the thoughts of other students is unlike any other course I've encountered. Although the lack of physical presence was initially disconcerting, I realized that I was getting way more information about way more people than in a regular class. In all my previous classes, I generally only interacted with 1 or 2 other students, and only heard the spoken thought of a few, rather than all of them. In the online class, I had to read through the written thoughts of many more fellow students on assigned readings, every week, all semester long, and try to find someone's thoughts to connect to. The delay in response gave everyone time to think about what they wanted to say, rather than the old style of the most confident students "hogging the floor," and the less assertive ones being left with "I was going to say that." While quite laborious, it was the first time I'd ever had such ongoing interaction, and seems to come closer to the old ideal of what a college education was meant to be—an intense ongoing discussion of ideas. (p. 65)

As the discussion board participant reported, technology has provided currentstudents with a host of resources in order to communicate, discuss, and receive feedback from teachers and peers alike. What was not always feasible in traditional classroom settings of the past is now easily accessible in the modern world. The quiet or shy students, who are unwilling to participate in a public and formal setting, may feel empowered as they are able to participate at their own pace, within a secure and informal space of their own choosing. The literature supports the promising potential of educational and social technologies that can empower and give voice to marginalized students.

Counter Views

With all the rhetoric surrounding the potential of technology to foster increased student participation, voice, and learning, the U.S. Department of Education (2009) sponsored a meta-analysis of studies that represented *evidence-based* practices in online learning. The most unexpected finding was that an extensive initial search of the published literature from 1996 through 2006 found no experimental or controlled quasi-experimental studies that both compared the learning effectiveness of online versus face-to-face instruction for K-12 students and provided sufficient data for inclusion in the meta-analysis. A subsequent search extended the time frame for studies through July 2008, and additional searches eventually yielded 51 studies for evaluation.

The main findings of the literature review revealed that few rigorous research studies of the effectiveness of online learning for K-12 students have been published (of

the 51 studies included in the meta-analysis, 44 of them were drawn from research with older learners). However, the studies that have been published overwhelmingly show that students who take all or part of their class online performed better, on average, than those taking the same course through traditional face-to-face instruction. Additionally, students fared better in courses that mixed face-to-face instruction with online implements, rather than isolating either of them by themselves.

However, an interesting finding reported by the U.S Department of Education (2009) also showed that students enrolled in online courses actually spent more time in their studies. Thus, time spent may correlate more strongly with learning outcomes than instructional methods (i.e., online resources). Ultimately, the studies in this meta-analysis do not demonstrate that online learning is superior as a medium for instruction.

This apparent insufficiency of substantive research has led some to question the panicked effort to implement technological elements into educational settings (Bennett, Maton, & Kervin, 2008; Kennedy et al., 2007; Kreijns et al., 2003; Thomas, 2002; VanSlyke, 2003). According to Bennett and colleagues, the claim that our digital native students (Prensky, 2001) are receiving an outdated, incompatible education is unfounded. These authors suggest that a "moral panic" button has been pushed that is largely based on anecdotal evidence and appeals to common-sense beliefs, rather than on empirical evidence. Furthermore, these authors suggest that the literature that has been cited supporting a dramatic need for technological reform in education has been done so in an irresponsible and uncritical way.

For example, as researchers cite the vast increase in student participation made

possible through technology, there is little reference to the quality of participation and how it equates to higher-level learning. As Thomas (2002) investigated this phenomenon more closely as it relates to online discussion forums, he likewise found an increase in participation and student voice. However, the findings of the study demonstrated that while online discussion forums promoted high levels of cognitive engagement and critical thinking, the virtual learning space of an online forum did not promote the kind of coherent and interactive dialogue that is necessary for truly conversational modes of learning. Or, in other words, the conversations were taking place, but they were hollow, forced, and impersonal. As a result, students were not fully engaged in methods that promote actual learning and growth.

In another study, Kennedy and colleagues (2007) sought to determine how technologically linked students really are. The researchers surveyed 2,588 first year university students to identify technologies and practices that were actual components of the students' daily lives. While these researchers found that students did frequently use the internet for schooling, social networking, and other uses, it could hardly be universally concluded that digital resources were a way of life for them individually. The study indicated that many web publishing resources (e.g., Web 2.0) were somewhat foreign to a large proportion of the students. According to the data, more than half of the students surveyed had never even read a blog online, let alone published or participated in its creation. Other students asked researchers to explain to them what a blog, wiki, or podcast were.

Such findings, and others, lead many to question the speed and panic with which

many are demanding change. VanSlyke (2003) suggested, "I don't think students learn from computers or teachers—which has been a traditional assumption of most schooling. Rather, students learn from thinking in meaningful ways. Thinking is engaged by activities, which can be fostered by computers or teachers" (p. 4).

These counter views of technological implementation may appear to be just as convincing as the proponents of technological reform. In fairness however, most of the counter view literature cited in this section is critiquing the validity of the evidence presented, rather than refuting it. To date, much of push for technological implementation in classrooms stems from theoretical or anecdotal sources. Simply put, there is much research that still needs to be done.

One of the concluding remarks in the report of the U.S. Department of Education's (2009) meta-analysis of evidence-based practices in online learning states, "Educators making decisions about online learning need rigorous research examining the effectiveness of online learning for different types of students and subject matter as well as studies of the relative effectiveness of different online learning practices" (p. 54). This statement alone validates the call for more research studies in this field.

Conclusion

In this chapter I have reviewed some of the literature that relates to my research questions and study. The main emphasis of my search centered on literature relating to the social nature of learning, as well as the potential of learning-enhancing technologies to increase classroom dialogue, discussion, individual voice, and empowerment. I also

gave specific emphasis to research that harmonized with notions of student voice, democracy, and empowerment. Considerations of counter-arguments were also part of this review.

It is evident that there is much work to do in terms of research in the field of technology and education. Currently, the debate continues with proponents on each side clinging to the traditional or countering with demands for reform. This debate is fueled by a lack of concrete and reliable information that would give clear focus as to the direction educators need to go in order to meet the needs of their students. Truly, important educational questions remain unanswered. Can nonparticipating (communication apprehensive) students be benefited by the incorporation of conversational technologies in an effort to give them voice and power in the classroom?

CHAPTER III

METHODOLOGY

Introduction

Because this study centers on a complex group of students (those who are apprehensive to in-class participation and communication), a deliberate depth in the research methodology was felt to be necessary. According to Glesne (2006), qualitative researchers seek to deeply understand and interpret how participants in a social setting construct the world around them. Utilizing this lens, I have made efforts throughout this study to come to an understanding through extended personal interaction with participants in a real-life setting. This kind of research could be described as *exploratory*, as I have attempted to be open to the variety of perspectives that have arisen as the research process evolved. Truly, I have taken the direction that the data has led me.

In this chapter, I present a systematic outline of my research methodology. I begin by introducing the critical theory epistemology used in order to select a multiple case study design. Following the overview of the study design, I will describe the participants, the survey instruments, and the strategies used to select the 5 student interview participants. After a brief introduction to the interviewees, I will describe the processes used to collect and analyze the data used in this study. The chapter concludes with the consideration of trustworthiness and personal context issues.

Epistemology

Guba and Lincoln (2005) referred to the multiple ontological, epistemological, and methodological assumptions for various qualitative research paradigms. In addressing these assumptions, and then choosing the most appropriate research design, I have felt that it was essential to match epistemology to methodology (Koro-Ljungberg, Yendol-Hoppey, Smith, & Hayes, 2009).

As explained in Chapter I, my own position in society as an LDS White middle-class male, coupled with my lived experiences, has led me to seek the liberation of marginalized members of society. As a privileged member of society, I often find myself identifying problems, coming up with prospective solutions, and then using my privilege to create change.

In this study, as I looked at the issue of unheard voices in the classroom, the tenants of critical theory seem to align themselves most closely with the problems I was addressing. For reasons not yet fully understood, such as social, political, cultural, economic, ethnic, and gender issues, student apprehension still exists in the classroom. The epistemological foundation of critical theory suggest that the researcher themselves are non-neutral participants (Creswell, 2005). Therefore, when dealing with a marginalized group (communication apprehensive students), the researcher assumes a role of advocacy. This value-laden role of the researcher inherently embraces personal bias and an individual intent for social change. Like Guba and Lincoln (2005) suggested, "We are persuaded that objectivity is a chimera: a mythological creature that never existed, save in the imaginations of those who believe that knowing can be separated

from the knower" (p. 208). The goal of critical theory is to come to a trustworthy

understanding of a phenomenon that would result in some type of liberation for the

individuals being addressed in the study.

Due to the in-depth and exploratory nature of this qualitative paradigm, the

methodology of critical research stems primarily from interactive dialogue between

researcher and the researched. In the case of this study, understanding originated by

necessity from the thoughts and observations of the students themselves. The importance

of this dialogue is described properly by Mischler (1986):

> The effort to empower respondents and the study of their responses as narratives
> are closely linked. They are connected through the assumption…that one of the
> significant ways through which individuals make sense of and give meaning to
> their experiences is to organize them in a narrative form. As we shall see, various
> attempts to restructure the interviewee-interviewer relationship so as to empower
> respondents are designed to encourage them to find and speak in their own
> "voices." (p. 118)

As Mischler (1986) noted, while studying students who are without voice in the

classroom, I was able through the interview process to give these marginalized students a

voice that had previously been unheard. By doing so, the process of advocacy is already

inadvertently taking place.

Anderson (1989) stated that the overriding goal of critical research is to "free

individuals from sources of domination and repression" (p. 249). Although this language

may appear somewhat strong relative to the classroom study I have described, it mirrors

what is taking place in every classroom. Often, only a portion of students in a given class

are willing to participate verbally by commenting and discussing class-content with their

peers. Their vocal domination can have a suppressive effect on their less-confident

classmates. As a result, the communication apprehensive students may find themselves powerless—and without a voice. With this classroom reality in mind, the basic components of critical theory appear to align themselves closely with my research intentions.

At the forefront of this study are issues of power, empowerment, inequality, and dominance. Where there is inequality and dominance in the classroom, efforts need to be directed towards empowerment and equality. These issues and objectives fit nicely with the proponents of critical theory who desire to generate insights, explain events, and seek understanding relative to these social issues.

This research study is also intended to discover knowledge that could lead to the liberation of those who have been marginalized and oppressed (presumably through the implementation of participatory technologies). Utilizing Friere's (1970) notions of empowerment and emancipation, I sought to understand and offer insight to students who feel that they do not have a voice in the classroom. Like other critical researchers, I will attempt to do more than simply describe what I have seen and heard. My role will be to serve as an advocate and activist in the cause of change and progress for communication apprehensive students in this study and beyond. This desire to give voice to those without a voice in the traditional classroom is at the heart of my research interest.

Study Design

Overview

My research interests and epistemological focus on critical theory research

support the priority of working personally with a marginalized group in a real-life setting, while working towards empowerment and social change. Because of these priorities, I have chosen to employ a multiple case study design (Yin, 2003) in an effort to respond to my research questions. This multiple case study design was implemented as five students were selected for interview based on their responses to two separate surveys. The results of the first survey were used to identify which students had significant levels of communication apprehension. The second survey was helpful in identifying students who were well connected socially through the use of technology. In addition to helping in sample selection, data derived from these surveys provided insightful descriptive statistics.

The primary source of data derived from this multiple case study design originated from the transcripts of the interviews that I held with the five students who were selected for further study. By spending this time in an interactive interview setting, I could focus my efforts on understanding the challenges at hand, while at the same time seeking solutions to the inequalities present in the classroom.

Participants

In qualitative research, the findings of a study are not intended to be generalized to an entire population, but to develop a rich, in-depth exploration of a central phenomenon (Creswell, 2005). Therefore, to best understand the phenomenon at hand, I chose to employ purposeful sampling efforts to select site and participants that address my research questions. Purposeful sampling is the practice of intentionally selecting research sites and individuals that are "informational rich" (Patton, 1990, p. 169).

In this case, convenience and logistics suggested that the seminary where I currently work is adequately rich with students whose voices are yet largely unheard. Because I work at a relatively small seminary with three teachers and approximately 350 students, I chose to focus my efforts towards students that I was not currently teaching at that time. I felt that students might be more comfortable discussing their individual participation patterns and apprehensions with someone who was not currently directly involved with them in a classroom setting. Using other students could also potentially lessen the risk to the students relative to perceptions of judgment, heightened expectations, and critical assessments regarding their participation following the interview process.

Because of these concerns and objectives, I collaborated with one of the teachers in the building that agreed to assist me in my research. For the purposes of this study, I'll identify this teacher as Mr. Allen. After obtaining all the necessary permissions from the administrators over the seminary program in the CES, I debriefed Mr. Allen's students (approximately 115 in number) regarding the study, along with is potential benefits and risks (see parental permission/IRB form in Appendix D). This debriefing took place in the last 10 minutes of the students' class. The students were told that if they were willing to participate, they would need to complete and return a parental consent form, with the accompanying signatures within the next two weeks. Because the end of the school year was quickly approaching, circumstances dictated that a strict timeline would be necessary for participation. At the end of the 2-week period, approximately 55 students had returned their signed consent forms, thereby showing a willingness to participate. These

students were invited into an empty classroom for the first 15 minutes of their respective

classes, and participated in taking the communication apprehension survey, along with

Kennedy's survey regarding student use of technological communication.

Instruments

In order to operationalize the label *non-participator*, a survey developed by

McCroskey (1982) was administered to the 55 LDS seminary students in order to

determine self-perceptions of communication apprehension (see Appendix B). The aim of

this survey was to identify the level of comfort that students have participating vocally in

groups, classrooms, and other public settings. This instrument has been extensively tested

for reliability and validity, and proved to be extremely helpful in selecting a

homogeneous group of students who meet a set criterion established to identify degrees

of communication apprehension.

The second survey instrument developed by Kennedy and colleagues (2007) was

also administered at the same time (see Appendix C). This survey addressed questions

regarding which technological resources students use outside of the classroom, along

with their frequency. Data derived from this survey was helpful in identifying students

who are participating in communicative behavior in an online setting, along with their

frequencies and specific modes of technological use. Data derived from this survey

coupled with the communication apprehension survey was instrumental as purposeful

sampling methods were employed to identify students for further study and interviews.

Interview-Participant Selection

Students who met the qualification set by Kennedy and colleagues (2007) for communication apprehension were identified as potential candidates for further study (see Appendix A for selection process). Thirteen students of those who took the surveys were recognized through this means. Then, I analyzed these student's second survey results to identify how active these students were in their utilization of social technologies. Based on this analysis, only three students were eliminated as possibilities based on their lack of experience and minimal participation with these technologies. Essentially, the ten students left in the selection pool had reported that they were extremely apprehensive to in-class participation and interaction, but were likewise extensively involved and comfortable with social communication in technological environments.

The third tier of my selection strategy was to consult with these students' teacher. Mr. Allen was able to help identify students whom he felt would be more forthright and willing to share honest thoughts, opinions, and insights during a personal interview process. Students who were thought to be too uncomfortable or unwilling to talk openly in a one-on-one setting were eliminated from the list of potential interviewees. Also, students who seemed neutral or unwilling to express opinions were also eliminated from the list.

As Mr. Allen and I collaborated together, we ultimately identified five students whom we felt confident were most likely *information rich*, and would be helpful and willing to shed light on my research questions (see Figure 1). These students were then

55	• Total students surveyed
13	• Students identified as Communication Apprehensive
10	• Students identified as Communication Apprehensive and technologically connected
5	• Students selected for further study through interview
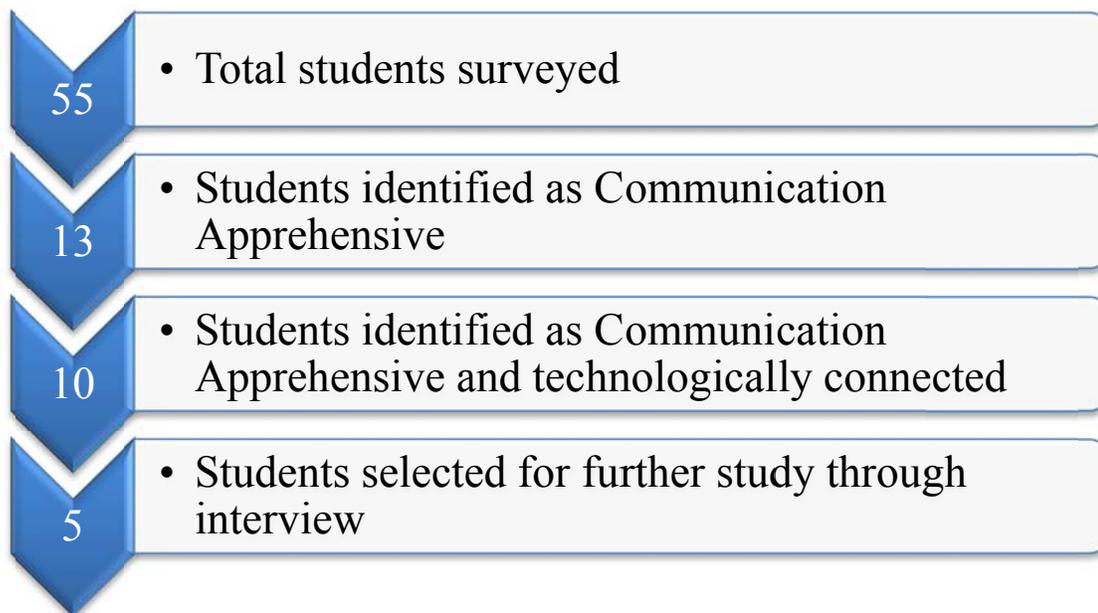
Figure 1. Process of selecting participants to interview.

contacted individually and asked if they would be willing to participate in further study through interview. They were informed that their survey results had indicated that they possessed characteristics that I was interested in learning more about through study and research. Each of the five students readily accepted, and interview dates were set.

The Five Interview-Participants

Each of the participants selected for interview in this study were LDS seminary students during the 2009-2010 school year. Two of the interview-participants were male, and three were female. Each of them is White, and ranged in age from 15-18 at the time of their interviews. A brief description of each of them is provided below.

Shauna. Shauna (all informant names have been changed to pseudonyms in order to protect confidentiality) was a senior in high school at the time of our interviews. Her

survey results indicating moderate levels of communication apprehension were a little bit surprising to both her teacher and me because of her apparent confidence and willingness to participate in the classroom. Interestingly, Shauna's classroom participation involved more work and desire, rather than a natural comfort. She expressed the importance of being involved in the classroom, which might explain a portion of her willingness to be involved. Shauna freely expressed her excitement about the future and seemed comfortable answering questions and expressing opinions.

Brandon. Also a senior in high school, Brandon proved to be insightful in our interviews. On several occasions, he admitted that he did not always feel that his participation was as meaningful as his peers, and he felt uncomfortable putting himself out there when they had so much more to offer.

Brandon was not entirely convinced that every student needed to be involved vocally in the classroom, although he expressed an aspiration to be more comfortable in this way. He was always respectful and helpful in our interviews, but did not appear to be as interested in the subject as some of the others.

Sara. I had learned a little bit about Sara prior to her completing my surveys and being chosen to be interviewed for this study. In fact, some of her behaviors in previous years had ultimately inspired my research questions. As one of my students the previous year, she had been invited to participate in our seminary blog. In class she appeared to be shy, reserved, and largely nonvocal. However, after the seminary classroom blog was introduced, Sara became one of the most active and involved participators online.

This interesting shift from quiet in-class, to vocal in an online setting got me

really interested in the potential of technology. I was pleased that Sara was part of the selection pool for interviews, and was not surprised by her survey results indicating high levels of in-class apprehension. Because of my previous awareness of her circumstances, I was excited to interview and learn from Sara.

Tim. Like Sara, Tim also had some prior experience with the seminary blog the year before, while he was a student in my class. He was one of the first students to log on and make a comment However, after other students started logging on to the blog and began to participate, Tim never made another comment. I was discouraged and disappointed that technology was not empowering and involving him as I thought it might. I wanted to understand why his initial enthusiasm had apparently faded, and was happy to see him fall within the parameters that were determined in order to be considered for interviewing.

Throughout our interviews, Tim seemed hesitant and unsure of his own feelings. It was clear that he was not very comfortable with me in a one-on-one setting, and was anxious for the interviews to conclude. Although helpful, I was not confident that I had been able to retrieve everything that he truly had to offer in our conversations. At the time of his interviews, Tim was a junior in high school.

Mandy. Mandy, as a freshman, was the youngest student chosen for interview. She expressed several times throughout our discussion her worry about being judged by others. More than the others, she voiced the concern of being considered inexperienced, insignificant, and dumb. One of her admitted reasons for communication apprehension was the concern of what others would think of her if she were to speak her mind in class.

Although she seemed somewhat anxious in our interviews, her comments were both helpful and insightful in addressing my research questions.

Data Collection

Before the commencement of my research with seminary students in a seminary building, permissions were requested and arranged at every level. Permission for this study of LDS seminary students had already been granted by administrators of the CES. Additionally, IRB approval from the university was sought and obtained prior to any work with the student participants. Although the ages of high school students vary, the majority of students that attend seminary classes are minors. The safeguarding of these students, along with their personal information, has been a top priority in this study.

Besides the surveys, the primary source of data in this study has stemmed from the student interviews that were conducted. Each of these interviews were digitally recorded and then transcribed for qualitative analysis. This data has been kept in a locked office and will be promptly destroyed following the completion of the study.

Interview Procedures

The interviews took place in my office in the seminary building during the students' scheduled seminary class time. This setting was chosen due to the public-yet-private benefits of this location. Because there are always a large number of students in the building during regular school hours, a closed office door with a transparent window was felt to be the safest, and least likely to be disturbed location in the building.

Prior to the commencement of the interview, the interviewees were given an

additional opportunity to review IRB permission and consent forms, and come to fully understand their rights and responsibilities regarding their participation in the study.

Each student interview was structured utilizing Mischler's (1986) understanding of the joint nature of meaning. He suggests that a question may be thought of as "part of a circular process through which its meaning and that of its answer are created in the discourse between interviewer and respondent as they try to make continuing sense of what they are saying to each other" (pp. 53-54). Because meaning is jointly constructed, Mischler rejected the application of traditional interview methods where questions are predetermined and then asked verbatim in a strict and formal way. Rather, he suggests that meaning is meant to be shared, with interactions going back and forth until understanding is achieved.

It is through this framework of interactive dialogue that the student interviews were organized and conducted. I attempted to make each interview feel informal and very conversational in tone. Although pre-determined questions were created for the purpose of direction and guidance during each interview (see Appendix E), additional clarification and understanding was sought throughout the interview as necessary. Additional questions and reflective feedback were all part of the process. A few days prior to their first interview, the students being interviewed were given a list of these questions for their consideration in preparation for our appointment. In this way, students were aware of what to expect, and how to be helpful. The initial interview lasted approximately 45 minutes, and a follow-up interview was scheduled to clarify and refocus and important issues uncovered during the first interview. The follow-up interviews lasted

approximately 25 minutes. This interview time allotment was deemed appropriate for data saturation purposes. By the end of the second interview, no further questioning seemed necessary in order to meet the purposes and parameters of this study. Each interview was recorded so that a transcription could be made for qualitative data analysis.

Data Analysis

The data in this study has been deliberately viewed through a synthesis of LDS, Freirean, and technological lenses. Both data collection and analysis have been purposely focused on issues of oppression, voice, empowerment, and liberation. This attention to specific lenses and principles has helped to focus and refine the analysis in an effort to best address the research questions of this study.

In order to organize and analyze the data in an efficient way, I have chosen to attach myself to the principles of grounded theory. According to Charmaz (2006), grounded theory is meant to "demonstrate relations between conceptual categories and to specify the conditions under which theoretical relationships emerge, change, or are maintained" (p. 675).

Following the transcription of the interviews, the data were uploaded into a qualitative analysis program named ATLAS.ti in order to organize, analyze, and interpret the data. Then, grounded theory methodologies were employed in an effort to analyze and make sense of the data. As part of this process, the data was studied in detail, looking for patterns and nuances. Throughout this process, multiple memos and annotations were written in a study-journal. These writings described any preliminary thoughts and findings I was seeing, and helped narrow the focus and properly define what was actually

present in the data, along with shedding light for additional questions or clarification that

could be sought in follow-up interviews with the research participants.

Continuing this process, I delved into the actual process of coding chunks of data

the interview transcripts. Charmaz (2006) suggested that "coding is the pivotal link

between collecting data and developing an emergent theory to explain these data.

Through coding, you define what is happening in the data and begin to grapple with what

it means" (p. 46). Ultimately then, coding becomes the process of organizing and labeling

what is seen in the data. A screenshot of the coding process is seen in Figure 2.

Throughout the transcription process, I wrote multiple memos describing my

initial thoughts and insights regarding what I was reviewing. The extended time required

to transcribe proved helpful in providing time to think and explore these new ideas. These

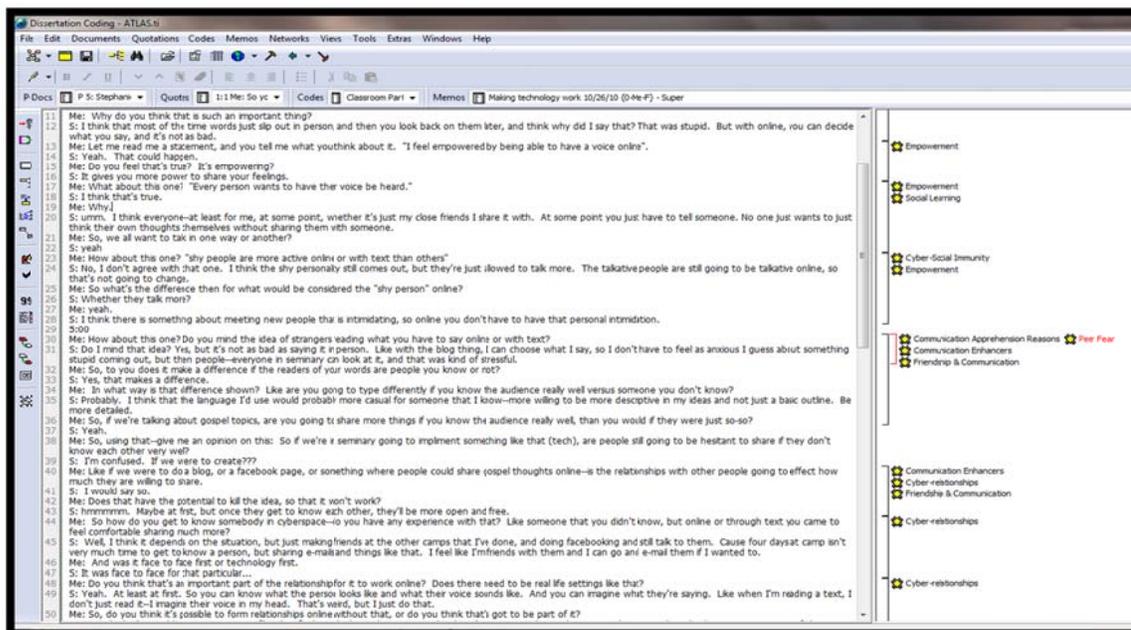memos were then instrumental in creating initial codes that could be used as I began to

Figure 2. Screenshot of coding process.

pick apart the transcripts. Following my first endeavor with coding Mandy's transcript, several new codes emerged. This process continued as I began to analyze the other transcripts. After this initial phase of coding, I eventually settled on 16 different codes that seemed to find themselves within each of the interview transcripts. A list of these codes, with a brief explanation is found in Table 1.

Table 1

Codes for Qualitative Analysis

Code	Description
Social learning	Students experiences with learning in social environments, along with their beliefs relative to its importance.
Face-to-face inhibitions	An expression of circumstances that contribute to a feeling of inhibition when interacting in real face-to-face settings.
Classroom participation	Expressions about current classroom participation, coupled with desires for the future.
Communication apprehension	Referring to specific reasons or perceptions of why a student is apprehensive to communication in the classroom.
Peer fear	Specific reference to peers, as the reason for communication apprehension.
Communication enhancers	Student indicators of variables that ease apprehension, and contribute to empowerment and student voice.
Friendship and communication	Specific reference to peer comfort level as a factor in increasing student voice and participation.
Pros of technological communication	Perceptions of the advantages of technological implementation in the classroom.
Cyber-social immunity	When students have less fear in cyber-settings than they would in face-to-face settings
Cyber-relationships	Perceived relationships with individuals that are independent of real-life settings
Facebook	Reference to any Facebook behavior, both positive and negative in nature
Texting	Reasons, advantages, and disadvantages of text communication between individuals
Email, blog, or other	Any reference to other technologies that are employed by those who are interviewed
Cons of technological communication	Perceptions of the disadvantages or concerns with technological communication
Empowerment	Behaviors or tools that lead to student voice, participation, and empowerment
Perceptions of the future	Student thoughts regarding the future of seminary relative to technological implementation

As can be seen, some of the codes may overlap with each other, yet have subtle differences in their definition. For example, peer fear is associated with reasons for communication apprehension. However, there are more reasons than peer fear alone for this apprehension. Therefore, because of the frequency of certain ideas in the data, a special code was assigned for this category. As a result, many lines of text were given multiple codes to ensure that important ideas were not neglected or ignored. In addition, a trusted colleague reviewed the transcripts, along with their accompanying codes. Using his consultation, segments of text were more narrowly analyzed and adjusted with matching codes assigned.

Throughout the coding process, I wrote additional memos that contained emerging thoughts and theories regarding what I was seeing in the data. I combined these thoughts with the prevalence of codes to identify important themes that stemmed from the informant interviews. I then chose those themes to report in this study that most closely related to my research questions as viewed through my theoretical lenses.

The emergent themes derived from the interview portions of the study will be presented primarily in a narrative form in Chapter IV, as I describe the feelings, impressions, and real-life experiences of the select group of interviewees. Again, the purpose of this effort has been to come to understand the phenomena at hand--but more accurately to resolve, and to liberate the marginalized student. The reader is expected to get a sense of personality and authenticity as they come to understand the hearts and minds of those being studied.

Trustworthiness

When addressing issues of validity and reliability, Weiss (1998) asserted that validity refers to the approximation of the conclusion of the study to the actual truth, while reliability refers to the stability of a measurement to produce the same results with repeated use. Guba and Lincoln (2005) referred to these issues as *trustworthiness*. Because of the qualitative and interpretive nature of this study, coupled with a case-study design, these standards of trustworthiness seem to be the most appropriate match for this study.

In an effort to ensure these standards, well-grounded qualitative analysis procedures have been utilized to organize, analyze and summarize the data. Also, member checking and collegial peer-review efforts have been employed throughout the study to ensure that codes, analysis, and conclusions conform to the highest standards of qualitative research.

In addressing trustworthiness, however, it is important to understand that the results of this study are not intended to be generalized. In this way, the universal *truth* about technology and student voice was not being sought—but rather to be explained and understood relative to the particular group of students being studied. However, Guba (1981) explained that "these facts do not obviate the possibility that some transferability between two contexts may occur because of certain essential similarities between them" (p. 81). Ultimately, qualitative researchers do not attempt to make generalizations that fit every people and circumstance, but rather seek to form working hypothesizes that could be *transferred* from one setting to another depending on the level of similarities between

the settings. Based on this criteria, the findings of this study may be considered as transferable.

Assumptions

The first major assumption of this study asserts that student participation is tied to student learning. In essence, all students need be involved in educational settings in voicing opinions, discussing ideas with peers, and participating in a democratic way.

The second major assumption of this study suggests that student participation is essential in creating and maintaining a productive democracy. Particularly in religious settings, helping students to participate appropriately now will help them to be the successful and necessary leaders of tomorrow. In this way, students who are trained in democratic ideals will become impactful parents, teachers, missionaries, and leaders for the next generation.

Personal Context

Undoubtedly, my background and personal and professional interests will be interwoven throughout this research. I am a White middle-class religious educator and have been teaching LDS seminary adjacent to a rural high school for the past 13 years. In evaluating my own educational experiences, I might consider myself akin to the student who is inclined to be somewhat apprehensive in engaging in public classroom participation. I have often seen many of my classmates and peers having what I consider to be a better educational experience because of their involvement and participation in the

classroom. In hindsight, I feel a degree of regret that I have not been more willing to stretch beyond some of my personal inhibitions in traditional classroom settings. For these reasons and others, I am interested in finding alternative methods that may prove helpful for students like me.

Conclusion

In this chapter, I presented a systematic outline of my research methodology. I began by introducing the critical theory epistemology that was used to select a multiple case study design. Following the overview of the study design, I described the participants, the survey instruments, and the strategies used to select the five student interview participants. After a brief introduction to the interviewees, I then described the processes used to collect and analyze the data used in this study. I concluded the chapter with considering issues of trustworthiness and personal context.

The methodology outlined in this study is aimed to allow marginalized students to have a say in identifying resources that will help students who struggle to find and exercise a voice in traditional classroom settings. Issues of liberation and empowerment are at the heart of this effort. With the vast amounts of technological and online resources available for students, there may be options that are accessible to classroom teachers in an effort to engage and involve students who are not currently prepared to participate and strengthen society in democratic ways. Making a difference today in this regard ultimately has the potential to shape the future.

CHAPTER IV

FINDINGS

Introduction

This chapter will primarily discuss the findings derived from both of the student

surveys, along with a thorough analysis of themes identified through informant

interviews. Although the surveys were administered primarily for selection purposes, the

data that were obtained may be helpful in providing a cultural context for this study. The

most prominent part of this chapter will deal with the individual thoughts and perceptions

of the students who were interviewed. These student perspectives will be categorized into

themes and headings that were identified through an emergent qualitative coding process.

The themes will be presented through the theoretical lenses that are implicit in this study.

Descriptive Statistics

Communication Apprehension

In order to operationalize the label non-*participator*, a survey developed by

McCroskey (1982) was administered to 55 LDS seminary students in order to determine

self-perceptions of communication apprehension (see Appendix B). The aim of this

survey was to identify the level of comfort that students felt as they participated vocally

in groups, classrooms, and other public settings.

Each survey participant responded to 24 questions regarding their individual

apprehension level as they consider verbal participation if four different social settings.

McCroskey (1982) provided a rubric by which to score and evaluate each survey response. Additionally, students whose responses scored above a predetermined criterion were considered to have high levels of communication apprehension. My findings from those surveyed are shown in Table 2.

As the table indicates, the majority of students indicated high levels of apprehension when considering the opportunity of public speaking. The lowest levels of communication apprehension that were reported had an association with the classroom setting. Based on the survey responses, it would appear that the more isolated the participant is in his or her participation, the more apprehension that is associated with that action. On the other hand, a greater group dynamic feel seems to be associated with lower communication apprehension levels.

As previously mentioned, McCroskey (1982) also created a combined evaluation rubric to identify an overall significant criterion for communication apprehension. Ten students met this criterion as individual scores were combined. Three of the five participants chosen for further interview indicated high levels of communication apprehension in all four areas.

Table 2

Communication Apprehension Survey Results

Survey item	# of students
Communication apprehension in interpersonal conversations	12
Communication apprehension in group discussions	7
Communication apprehension in classroom discussions	6
Communication apprehension with public speaking	30
Total students surveyed	55

Student Use of Technology

The second survey instrument (see Appendix C) developed by Kennedy and others (2007) was also given to participants at the same time. This survey addressed questions regarding which technological resources students use outside of the classroom, along with their relative frequency. This was helpful in addressing my first research question regarding the ways students are using technology outside of the classroom to find voice and empowerment. These data were also useful in identifying students who were participating in communicative behavior in online settings, along with their frequencies and specific modes of technological use. Data derived from this survey coupled with the communication apprehension survey were instrumental as purposeful sampling methods were employed to identify students for further study and interviews.

The first portion of the survey addressed issues of technological access. Table 3 shows student responses to questions regarding some of these issues. As is indicated, all 55 students who were surveyed reported easy access to a desktop computer. Likewise, the majority of students indicated that they were the sole operators

Table 3

Student Access to Technology

Technological resource	Student exclusive access (*n*)	Student shared, but unlimited access (*n*)
Desktop computer	15	40
Cell phone	38	4
High speed internet	17	31
Dial-up internet	2	6

Note. Total number of students reporting = 55.

of their cell phones. Although not indicated on the table, six of the students surveyed

indicated that they had no access whatsoever to a cell phone.

Also, based on the students responses, 48 of the 55 reported that they have

unlimited or exclusive access to high speed internet. The remaining few students all

indicated some level of access through dial-up or other means. Interestingly, some

inconsistencies in reporting hinted that some of the students may not be familiar with the

differences or definitions relating to internet speed and access.

The final portion of this survey addressed the frequency of technological use

among the students. Selected modes of technology, along with student responses are

shown in Table 4.

As is shown in the table, students are more frequently involved with cell phone

usage than the other technologies listed. Following the use of cell phones in frequency is

Table 4

Frequency of Technological Use Among Students

Mode of technology	Daily student use	Weekly student use	Monthly student use	No student use
E-mail	28	23	3	1
Instant messaging/ chat	14	18	10	7
Social networking (i.e., Facebook, MySpace, etc.)	29	13	2	11
Web-calls	2	2	4	40
Operate personal blog	0	2	1	52
Read blogs	4	7	7	26
Comment on blogs	4	5	3	33
Call on cell phone	38	9	4	4
Text on cell	37	4	4	10
Send/receive email on cell phone	7	3	5	40

the use of social networking sites. More than half the students surveyed are accessing these types of sites on a daily basis. Additionally, 51 of the 54 students surveyed are frequent users of email technology. Approximately half of those same students are using the internet for instant messaging or chatting purposes. With the remaining technologies listed, many fewer students are involved in their use.

One of the interesting findings of this survey indicates an agreement with Kennedy and others (2007), who suggested that students may not be as absolutely immersed in every technology available to them as Prensky (2001, 2005) has frequently suggested. It does appear that many of those surveyed use technology frequently in their daily lives, but in this sample of participants, the types of technologies incorporated seem to be limited to few common media.

<div align="center">**Analysis of Interview Data**</div>

Prior to my analysis of the interview data, it may be helpful to review the three theoretical lenses that are implicit within this analysis. These lenses provide the framework by which my thought processes and organization are structured.

LDS Lens

My membership in the LDS Church, coupled with my associated beliefs in the doctrines and principles of my faith have led to my current employment in CES. The beliefs that I hold closely and share with my students on a daily basis provide a foundation by which I make sense of the world around me. Because of this, the LDS lens is implicit in all that I do and say—and is fundamental to this research.

In regards to this study, issues of empowerment and individual potential are discussed. The doctrines of the LDS faith promote the belief that each student has individual worth and potential as a son or daughter of a divine being. As such, we have the capability and capacity for great growth and meaningful participation in the world around us. Likewise, as each student finds strength and empowerment through the atonement of Jesus Christ, they have the opportunity to help others to achieve that same result. In LDS scripture, we receive the admonition that each individual in a gospel setting be given the chance to speak, that "all may be edified of all" (Doctrine and Covenants 88:122). Ultimately, in a classroom setting, the goal is that each participant finds conversion and strength through meaningful participation. This aspiration is at the heart of this study.

Freirean Lens

The Freirean lens used in this study is closely linked to religious tenets as well. Friere (1970) strongly believed in the liberation of all people. Instead of treating students as mere receptacles of teacher knowledge, each participant in the classroom is to become an active agent in thinking, expressing, and creating a beneficial educational experience. Friere likewise maintained that teachers need to employ practical strategies that would elicit student inquiry and creativity.

In order to create a proper democratic milieu, Friere (1970) insisted that dialogue be part of education. As students are given the opportunity to speak, they are also given the opportunity to learn. As a result, students become empowered with a voice and can thereby avoid the oppressive practices utilized so often in education. Again, liberation

and empowerment fit nicely with the intended outcomes of this study.

Technological Lens

Like the other lenses, the technological lens rests on some core assumptions relative to student growth and learning. In modern society, there is an increasing assertion that the world in which we are living is changing at a rapid pace due to technological development and advancement. Because of this development, we must update the way that we have viewed things in the past. This shift of thinking may also be necessary when addressing issues of teaching and learning in the classroom.

The technological lens acknowledges that students are connected to technology in ways that their parents were not. Consequently, the ways that modern students interact, communicate, and recreate are vastly different than modes used in past generations. Educators need to acknowledge this shift in the rising generation and react with new curriculums and technologies that both appeal to, and respond to current educational needs. Because of students' familiarity with these technologies, the use of these media forms may prove to be a very effective tool in allowing each individual student to have a voice, and to participate in democratic ways with his or her peers.

A Synthesis of Lenses

Each of these lenses focus on the creation of an environment where students can feel comfortable being an active participant in their education. An underlying assumption of all three is the belief that communication is an essential component of learning and education. Each of these lenses pursues that intended goal—that teachers are creatively

discovering ways to put the students at the forefront of the educational experience. The anticipated result is that the students will find individual voice and empowerment, and will thereby be a more productive and influential participant in the world in which we live.

Themes Relating to the Technological Lens

Much of the literature cited previously suggests that modern students are inextricably connected to the world of technology. However, the literature does not specifically respond to the relationship between students who are apprehensive to communication and their use of socially-mediated technology in real life settings. As I interviewed my five participants, I was interested to know how they felt about using technology to communicate with their peers, as well as their perceptions of future technological use in the seminary classroom. Their thoughts and opinions have been organized into themes that relate to this technological lens.

Texting Preferred and Primary Mode of Technological Communication

Even with the ubiquitous familiarity with social networking among my participants, texting with cell phones was admittedly the most utilized form of technological communication. In every case, students were asked which form of technology they used most to communicate with others. Each of them quickly responded that it was their cell phones that they used to text people throughout the day.

Interestingly, there was not necessarily a common variable brought to light in

every case as I inquired about the reasons for communicating with this technology. For example, only Shauna and Sara mentioned the awkwardness of communicating in face-to-face settings or by phone. Shauna explained, "I'm still more of a texter than I am with talking. It's kind of awkward to talk on the phone now. There's these awkward little pauses. Yeah, that's awkward, and I don't like it." Sara added, "I think it is easier to speak your mind over text for some people. And in person it gets a little more awkward. You have facial expressions, and body language, and it means something different than text."

Both participants agreed that there were some challenges associated with personal communication in real-time settings. Interestingly, Shauna went so far as to confess that she had been introduced to a guy through texting with whom she communicatedoften using that technology. "We've never talked face to face, and never actually met," she said. I asked if she thought it would be kind of strange to actually talk to him. She responded:

> I know I'm different when texting. I'm not afraid to say things that I would be afraid to say to their face. I'm more likely to say things that I wouldn't face-to-face. So, I guess there's not as much pressure with what you have to say face-to-face getting mad at you or whatever. It can just happen over text and you just don't get it face-to-face, I guess.

Shauna later mentioned that on one occasion, a friend sneakily got this boy on the phone and handed the phone to her. She said hi quickly, and then told him that she would text him, then quickly got off the phone again. In this case, it was obvious that texting was a much preferred mode of communication for Shauna in socially vulnerable situations.

Tim offered another interesting advantage of text communication. Tim repeatedly

mentioned that he is uncomfortable with the idea of others gaining access to information

that is personal to him. He wants private conversations to remain private. When asked if

he would rather call a friend, or text them, he immediately indicated that he would prefer

to text. When asked why, he said, "Some people can hear what you say, and texting is

silent." In this way, communicating with text provides a security blanket that allows only

the sender and the receiver to intercept the conversations.

Likewise, when I asked Tim about relationships that centered around texting, he

informed me that he too had a neighbor with whom he communicated only by text. She

did not come to school, and he texted her on a regular basis. Although he was a neighbor

to her, their only communication and interaction took place through this technology.

Mandy enjoyed texting for some slightly different reasons. She referred to the

immunity of peer judgment that comes when avoiding face-to-face interactions with

others. When asked to explain why she felt it was so much easier to communicate with

others using text, she said:

> I don't really know actually because maybe it's cause we can't see them, I think.
> Their facial expressions, so we're not so afraid that they will, like, think we're
> weird, I guess…. I think it also helps because we're not worrying about our
> appearance too. And like, 'cause sometimes you're just so worried about, like,
> how like how you look and you don't have to worry about that.

Although Mandy's feelings may not be representative of all my participants, they

are definitely insightful and thought provoking. Many inhibitions that exist in real-life

settings by those with communication apprehension may be lessened with the use of

technological communication.

In addition to the apprehension-alleviating qualities of texting, Sara and Brandon

offered some conventional advantages as well. When addressing the quandary to call or

text an individual, Sara explained, "You don't always get them if you call them. They

don't always answer, and if they get their text, they can read it then or read it later. It's

more convenient." Later, when asked if she felt more confidence communicating with

text, she responded:

> I think that most of the time words just slip out in person, and then you look back on them later, and think: why did I say that? That was stupid. But with [text], you can decide what you say, and it's not as bad.… I think I'm more able to speak my mind. I feel more comfortable with it, but sometimes I struggle with finding the right words.… I don't have to worry about sitting here and thinking about what I'm trying to say. I can just sit there with my phone and think about what I'm trying to say. Instead of the person—I don't know—it's just kind of weird to try and do it in person for me.

For Sara, it just seemed easier for her to pick and choose her words and control

the timing of her communications. In a similar vein, I asked Brandon what he liked best

about communicating with text. He told me that he thought it was much easier to

communicate that way with others. When pressed, he said, "If you call, you know—two

minutes—and then you're done. And texting takes two minutes just to send a text. You

know, I think it helps conversations last longer, so it's funner to talk to people. That's just

what I think."

Although the reasons for the texting preferences vary among the participants, each

of them found definite advantages in choosing to communicate in this way, rather than in

a face-to-face setting or by phone call. Peer fear, word choice, social immunity, fun and

convenience, all played a role in creating a technological environment that was conducive

to communication.

**Facebooking Does Not Equate to
Social Interaction**

Prensky (2001, 2005) adamantly referred to how connected modern students are to the world of technology. Likewise, many refer to the massive numbers of individuals who are connected to each other via social networking sites. However, one of the most interesting insights that I stumbled across in this study relates to social networking practices on Facebook. According to their website, Facebook currently has over 500 million active users worldwide (www.facebook.com/press/info.php?statistics). Fifty percent of these users are accessing the site every day.

Interestingly, similar percentages were reported in the technological use survey that I administered as well. Over half the students who took the survey indicated that they were accessing a social networking site on a daily basis. An additional 13 students reported that they were logging onto one of these sites at least once a week. Naturally, I was interested in the patterns exhibited by those who had also been identified as communication apprehensive. As I reviewed the survey results of my informants, each of them reported that they were active participants in social networking sites like Facebook. Four of the five indicated that they were accessing the site daily, and the remaining informant reported that she was logging on several times a week. In my interviews, however, I was surprised to learn what it really meant for these students to be actively involved in Facebooking.

I had assumed that students who were accessing social networking sites every day were actually networking socially in that environment. Interestingly, this did not appear to be the case with my informants. I asked Shauna what she did on Facebook every day.

She responded, "Usually when I'm bored, and get on there and play Bejeweled. Just games. And then I look at other people's pictures to see what they're up to. I look at their status to see if there is anything new I guess in their world." Likewise, I asked Brandon the same question. He said:

> I don't get on Facebook to talk to people. I have a Facebook account. I play "Video Blitz" on it. That's about it. Games. That's what I do on Facebook.… I just like to look at people's status and see how people's lives are doing.… I don't really talk to people.

When I asked Tim the same question, he gave an identical response as well. Mostly, he reported that he played games and then viewed what others were doing, but no social networking was going on. When asked if he ever updated his page, he responded that it was not very often. Mostly he was just a bystander in an otherwise active online community.

Sara was slightly more active than the others in networking ways. However, she also admitted that she preferred to simply look at what was going on in the lives of others. Mostly, any communication that she did was to write on her sister's wall (post comments on her sister's Facebook page). Otherwise, she admitted that she mostly served as a silent participant with the other participants.

I had previously assumed that Facebook was synonymous with communication and individual voice. However, based on the responses from these participants, that does not appear to be the case at all. Facebook may be more synonymous with games, or information gathering—at least for the communication apprehensive. More than active social participants, they were internet voyeurs—still in the background, and still largely without a voice—even with technology.

Those, like Prensky (2001, 2005) who suggest that the statistics teach us how connected students are to each other through technology may not be aware that *connected* may not equate to communication. Students may indeed be part of an online community of peers on a daily basis. Sadly though, there is still a large division between those who are speaking and those who are not. While the statistics regarding the use of social technology may not lie, they may also paint a picture that is unintentionally deceiving and inaccurate.

Students Have Little Experience with
Social Technology Implementation
in Education

The technological lens utilized in this study presupposes that modern students are digital natives. I am confident that computers, electronics, and gadgets are an intuitive and integral part of their lives. Likewise, I feel confident that students have easy access to educational benefits through the use of these technologies. When looking at the educational landscape, it does not seem difficult to foresee that technology implementation and education will be joined inextricably together at some point. Because of the heightening awareness and interest, I had assumed that this shift towards technology in education was already taking place. As a result, I asked each of my participants about their use of technology—specifically social technology, in their educational experiences. Interestingly, only one of my participants had ever had an experience with social technology incorporation in any of her other classes. Sara was the only one—and her sole experience was with a discussion board in a college class that she was taking.

Although students had little, if anything, to say relative to their experiences outside of seminary with technology in education, I felt this was an important theme for analysis. Even with all the proponents for social technology in the classroom, these participants were not able to express an opinion either way due to inexperience and lack of context. Because of this, they likewise struggled to give helpful suggestions for further use.

As I asked Sara about her experiences with social technology in education, she explained that her college English class had a chat room where students could either talk to each other or visit another chat room and discuss things with the instructor. I asked her what her experiences were in these chat rooms. Interestingly, she responded, "I usually go in the student one 'cause they talk about random things that I'm interested in. I just don't like his [the instructor's chat room] as much."

Apparently, the students in Sara's classroom chat room were using their chat opportunity to talk about interesting *random* things that may not have had anything to do with the course at hand. Rather, their chatting had more social than educational value in this instance. Even with Sara's opportunities for social technology incorporation in education, she could not offer experiences where specific technology incorporation was directly related to productive educational experiences.

Technological Communication Media Are
Tied Closely to Family and Friends

During my interviews—while addressing issues of technology—I automatically considered how, or if, these principles could be applied in larger classroom settings. I

began to ask my participants about their patterns of communication. Who were they

communicating with? Why them? Would they feel comfortable communicating with

others as well? Throughout this process a theme developed may seem somewhat

intuitive. However, it is a theme that should not be ignored. In almost every case, the

individuals with whom these students are communicating via technology are trusted

friends and family.

In my interviews, I asked the participants who they were most comfortable talking

to, both inside and outside of class. Also, I asked the participants about how they felt

when teachers invited them to discuss classroom questions with a partner sitting next to

them in class. Although the responses varied slightly, there was an overall consensus that

this process was made much easier when people previously knew each other. Sara spoke

of an experience that she had visiting different seminary classes when she had free time.

> Just from going from class to class, I've noticed when I change where I sit,
> different people are more willing to talk to someone that they have been talking to
> all semester, if that makes sense? So probably other people are like me, that
> they're comfortable talking with this person, and suddenly they are not there
> anymore, and you have a stranger. So they don't want to share as much.

I then asked her if she would be willing to share more things with her neighbor if she

knew them well. She quickly replied that she would. As I asked for an example, Sara

recollected an experience that she had in seminary a few years previously.

> It seems like my freshman year we did these little 5 minutes of finding common
> things, or maybe I did it in my other classes--I just remember my freshman year
> 'cause it was my first time in seminary. It just sticks out to me. And what you
> found out what you have in common, then you can go off of that, if that makes
> sense.… I just remember our A4 class was awesome 'cause we all met each other
> in class, and in the hallways you just say "hi," and it just seemed like we were
> outside of class just a group of friends. I'm not really sure how we achieved that,
> it was just a good class.

Brandon also remembered a time when communication seemed to flow more comfortably and openly in class. Likewise, he attributed this openness to a feeling of friendship and trust among his classmates.

> Like last year—my junior year—I had Brother Allen. It was my A2 class, I think. Everyone in there--I think we had 2 sophomores. I don't think that there was more than 1 or 2 freshman. And it was all juniors and seniors. And we pretty much all knew each other. Everyone either knew each other or were friends, and it was fantastic, because everyone talked, and no one was afraid to say anything. You could express yourself openly, and people understood you 'cause they're your friends. I don't know, it was just really easy, and then I've had already a couple classes this year where you have a group of friends, and you don't have any idea who they were, they knew and accepted each other, but it still had a little bit of awkwardness in there. You don't really know them. I think some people have a hard time just opening up a little more. It's not that the spirit of the class wasn't there, 'cause it was. It was still a good time in seminary. You still enjoyed it, and felt the spirit. It just wasn't the same. The people you don't know. I just think it always makes it a little awkward.

Just like Sara, Brandon also felt comfortable and enjoyed feeling the freedom to communicate openly and honestly in class. However, his experience limited those fantastic classroom discussions to times when he was surrounded by those who were considered good friends.

During my interviews, I tried to draw parallels to the technological world of communication as well. Did this classroom phenomenon transfer over into the technological world? Will this family and friends theme apply in their technological communications as well?

I asked Shauna if it mattered to her if those with whom she was communicating via technology were friends or not, she said:

> I think I'd be more comfortable with a friend, 'cause I knew who they were, and I just know them. A stranger, where I don't know them, I think I'd be more hesitant to talk to them, just 'cause I don't know who they are. And I don't know their

state of mind. … I mean, I go on Outlook and see who is online, and I don't know anybody, and I don't think we talk to each other. Yeah, I don't chat with them.

Brandon shared some similar sentiments as well. When I asked him if he would share more meaningful things with people online, depending on if they were family or friends, he said:

> Yeah, I think it would be a little more personal just because it's in the family situation. They might understand more. They are not going to think of you different maybe, and you figure you can talk to them and be really open because it's family. You really know each other. But maybe, if it was a stranger or somebody, it would be a little different, just kind of, "well yeah," and you know if they did ask you well, you know "this is how I feel." I don't think it would be too bad, but I think I would share a little bit more with family.

Only one of the participants could cite an experience where a friendship had been developed with someone purely through technology. Interestingly, this relationship was one where a young man was introduced to Shauna through texting. On one occasion she was given the opportunity to speak to the young man on the phone. She recalled that she was really nervous about it and got off the phone quickly. In this case, they felt much discomfort communicating in any other way besides text. In every other case, informants expressed that they were solely using technology to communicate with those whom they previously established a relationship.

**Relationships of Trust Unlock the Doors
of Technological Communication**

Closely tied to the previous theme is the underlying reason that friends and family were the primary recipients of communication through technological means. Communication apprehensive students are reserved, guarded, and hesitant to place themselves in social situations with potential risk. Because of this apprehension, they

seem willing to communicate only with those whom they already trust. Shauna shared

how trust can be built over time in a face-to-face setting with those who were not family

or noted friends:

> I think this class this year at the first of the semester, we were quiet to share [ie. reluctant to speak out in class], I think, then it got better. I felt like I couldn't even share [comments] in class at the first of the semester, 'cause I didn't know them, but now that I've got to know them more and spent more of the semester with them, I can talk more. And that's how I think our class has gone.

Shauna seems to suggest that trust can be gained over time, as relationships develop. But

until these relationships of trust are formed, she—and students like her—will be reserved

in their willingness to comment and participate vocally in class.

When asking Brandon and Tim how they felt about the practice of answering

classroom questions to a partner in the class, both of them appeared hesitant to respond.

Brandon seemed to be most willing to explain why.

> Personally, I never liked the neighbor thing. I still don't. I don't think there is anything wrong with it. I just don't like it as much, because I like listening. I'm just one of the type that likes listening to other people.… I think the neighbor thing is always awkward. Unless it is your family or your best friend, you honestly don't know them, and you're trying to express yourself. You might get to know them a little better, but I still think it's still extremely awkward and always will be because you have no idea who they are most of the time, you just know that they are in your class or in your church, and they read the same thing that you did, and they might have inspiration just the same as you, or better or worse. You never know. So it's one of those things where you talk for about 3 seconds each, get done--that's what I got. Then they say, that's what I got. You turn, and you're done, while other people who are friends sit there and converse back and forth, and you're like, yep. And you just listen to the group in front of you because you and your partner have nothing to say any more.

Brandon's candid response is insightful in many ways. He mentions that his

conversations with his partner in class can be somewhat short, impersonal, and awkward.

He cites the reason as a lack of relationship. However, he does mention that he sees other

partnerships in class having lengthy discussions because they are "friends." Ultimately,

this relationship of trust is opening the doors to communication.

Tim agrees that speaking to a partner when asked by a teacher to discuss

something can be a miserable experience. He explains, "Like if you know your neighbor

real well, or it's your friend or something, then it's okay. But after you do the new seating

chart or whatever, it's like—okay, you don't really know them, I guess."

I asked Mandy if relationships were still a big factor when looking at her

willingness to participate, if it were an online setting. Trust was still a concern for her.

She responded:

> I don't know. 'Cause, like, even when you're writing something on Facebook on
> your status, even though you're putting it online, I would still even feel worried
> about being judged for what I was saying, so I don't know if it would be
> completely eliminated [fear of being judged], but it would probably help a little
> bit…For me, I think I mean to be—to be somewhat comfortable, I like to know
> them, and know that they won't be maybe offended by something I'm saying or if
> it would be okay to share that with them.

This sentiment offered by Mandy had been expressed by her repeatedly in our

interviews—the fear of being judged by others. By her statements, however, establishing

relationships of trust could diminish that fear in some degree. Without that trust, Mandy's

fear of judgment would lead her to withhold her communication, either in real-world or

technological settings.

Brandon shared a similar fear when communicating with people whom he does

not know really well. I asked if it made a difference to him if he knows the person well

that he is speaking to:

> I think it is always different. Simply because you know them, or if it is your
> friend, you are not afraid to say something stupid. If you say it and it was kind of

stupid, they are not going to think you're stupid. They know you, and you can revise it. And they are like, "I know exactly what you're saying," but if you don't know them, you say something stupid, and you're like, "ah, crap!" and then you kind of are back to that awkward situation again. So if you know them, it's just easier. Some people don't have any problem walking up to strangers, and some people do.

The judgment that Brandon feared was that he could be considered *stupid* because of something that he said. However, he also indicated that this fear is alleviated when communicating with someone that you trust. The potentially harmful judgment is not so quick to arrive, and you are given time to redeem yourself by those that you trust. Additionally, Brandon seemed to feel that a friend with whom you have established trust is less inclined to hold you accountable for your imperfections and faults in social settings.

Finally, each of the participants expressed a belief that individuals could build relationships to the point where the doors to communication could be opened, and individual voice and empowerment could be increased. However, this result would require time, trust, and relationships—in addition to the technological tools.

**Technological Implementation in a
Seminary Setting Should Be Unique
from Existent Resources**

If my participants were interested in incorporating communicative technologies into their classroom experience, I was eager to learn what specific technologies they would prefer. My interviews centered mostly on the informants' prior experience with technology. For the most part, each of them was highly familiar with cell phones, texting, e-mailing, and Facebook when considering social technologies. This was consistent with

Kennedy's (2007) findings that the "net generation" have little experience with Web 2.0 technologies. Only two of my participants had limited experience with blog participation, but no other social networking resources were identified in our interviews.

Throughout my interviews, it was apparent that my participants felt the limitations that come with experience or inexperience. Likewise, my interview questions and conversations were limited by those same parameters. As my participants expressed interest in technological implementation in the seminary classroom, I asked what resources they felt would be most beneficial in order to allow more students to have a voice in dialogical ways. Based on their experiences, they could only readily speak regarding the technologies with which they were familiar.

For each of the participants, a Facebook page seemed to be the best fit in order to provide a starting point for our conversation relative to technologies that could potentially support a curricular discussion outside of the seminary classroom. Cell phones, texting, and other familiar technologies did not seem to quite match the perceptions of appropriate forums for grouped conversation. A seminary classroom blog—because of prior experience—was also considered in our conversations.

In order to provide groundwork for discussion, I began to ask students what resources they thought would work the best. If the students were not comfortable providing immediate responses, I would give examples, like "What about a classroom Facebook page?" Or, "What about a classroom blog?" To help provide a context, I felt that questions like those may be helpful in bridging the gap between that which they were familiar with and the unknown.

Brandon, who appeared cautious in his approach to the subject, suggested that whatever it was, it needed to be simple. When referring to the seminary blog that he had been invited to participate in previously he said, "I'm not so sure. That was too complicated for me. There was a lot of stuff that you had to do, so I just didn't, and never could get on."

I asked about the ease of something that was more closely akin to a Facebook page. He responded:

> I don't know, I think it would sort of work because if it was something like a Facebook page or something, people would just be inclined, they would be like, oh well, they already have a Facebook page. I can just, you know, if I'm feeling the spirit good on the regular Facebook page, I kind of need to get on the seminary's Facebook. Um, I'm sure people would because you know if they want an experience to share or something like that, or they got inspiration after the lesson, they are like, oh, I could've said that or something. They can still do it.

Brandon appreciated the ease and familiarity associated with Facebook use. However, as our conversation continued, his ideas shifted slightly. I asked him if he felt that Facebook and seminary fit together well. After some thought, he replied with confidence, "They don't go together. It [the specific technology implemented] would need probably its own feeling—its own site. I would think that it would need to be its own separate thing. Maybe it could have a link to it on Facebook." Essentially, what Brandon liked was the ease of use, but not the particular technology itself. He felt that the two worlds of Facebook social networking and seminary curricular communication were not harmonious.

Prensky (2005) noted that the curriculums of the past are cutting into and interfering with the curriculums of the future. In this way, looking only at what students

have already been doing (Facebook) may actually interfere with what course of action is

to be taken in the future. Ironically, using Facebook for seminary may actually be

outdated, because students are already doing that in their social lives. When looking at

the future, something innovative may be a better solution.

Mandy agreed with the idea of something new and unique and suggested that a

separate website specifically designed for seminary discussions may be the answer. She

explained:

> Maybe just a website, cause I think we go through stages of, like Facebook, or
> MySpace, and so maybe later on you'll forget about Facebook and or MySpace
> and you don't look on there anymore. But a website—it kind of just stays, I guess.
> If that makes sense? And it's not really just like something that everybody is
> doing.

Mandy provides an interesting lens by which to view the future. She notes the fad-like

nature of social networking, even including MySpace that has largely been dominated by

Facebook in recent years. Instead of sticking with the popular technologies now

available, Mandy suggests that something be produced that is not included in the same

category as popular culture. Sara adds fuel to this same idea as her thoughts evolved from

favoring a seminary Facebook page to the creation of something else entirely:

> I was thinking about that actually over the weekend, 'cause on the bus,
> everyone—well, not everyone—but I heard a couple of conversations about
> Facebook and how they thought it was a waste of time, etc. I think it would work
> for some people, but for others, I still think there are some that question
> technology—that it's evil, or it's a place where, um. But I think it would depend
> on the person. I think if you made it seem like a good thing—that it wasn't a
> waste of time, then maybe since it is a gospel related, they wouldn't think it was a
> waste of time.… Like I didn't join Facebook for a long time, 'cause I thought,
> "this is kind of stupid." But once I got to dabble on it, and I could connect with
> my other friends, I thought, "This is kind of cool. I can talk with them even
> though they live on the other side of the state." So it probably depends on the
> person. Will it last? I don't know. I think technology is always changing, so that

would be a tough one to call. I think there will always be something like that that you can use, even if it's not Facebook specifically.

Sara highlights one of the important stigmas for many on social networking sites—that people are largely wasting their time online. This is an important point to highlight, as the purpose of a classroom discussion forum would be to spend time conversing about things that would veer sharply from the trivial and unimportant. Because of this previously established stigma on social networking sites, it may be wise in educational ventures to create some distance between online efforts for productive discussion and Facebooking use.

Kellner (2000) spoke of the need for new literacies for a new generation of learners. This suggests the need to do more than look at what is already in existence for student consumption relative to social and communicative technologies. Rather, there may be a need to look beyond the past and into the future.

Based on my experiences with my participants, I would recommend that a new and unique website be created for the sole purpose of seminary classmate gospel discussion. The website would need to have a different look and feel than those that students are using for other uses. This resource would be free from any stigma or association with blogs, Facebook, or any other current networking site. If done this way, students and researchers have a better opportunity to experiment upon, learn from, and adjust opportunities for productive technological communication.

Themes Relating to LDS and Frierean Lenses

One of the fundamental inquiries in this study relates to the hope that technology

can open doors to student participation and empowerment. Included in this is the assumption that communication is essential as we consider student learning and development. On the other hand, communication apprehension is potentially damaging when addressing educational progress and potential. Both the LDS and Frierean lenses used in this study focus on the need for students to participate in meaningful ways in their own learning. Empowering students and learning how to create a more student-centered and democratic climate for classroom learning is fundamental to this research.

A synthesis of these two lenses was employed to identify why my participants were hesitant to have their voices be heard. Likewise, in the spirit of liberation, I sought to understand principles and practices that would help to give voice and empowerment to these same individuals. Several themes emerged.

There Are Multiple Reasons for Communication Apprehension

When considering the underlying causes of communication apprehension in students, I was hopeful that a singular theme could be found among students who share this social inhibition. As is often the case, the reality is not conveniently simplistic. My participants had a variety of responses which—appropriately— illustrates how important it is to have a multiplicity of voices heard in democratic settings.

After my first interview with Mandy, I was quite excited to learn the root of her communication apprehension. I quickly began to assume that others fit into that same mold—only to find out in my interview with Brandon, that he was experiencing a different set of circumstances in his consideration of verbal participation in the

classroom. Likewise, each interview revealed something different regarding the reasoning behind the student's decision to participate in the classroom or to remain silent. Because of this finding, I will briefly describe elements of this theme as addressed by each of the student participants.

Mandy repeatedly referred to two related issues that surfaced as she described her apprehension to classroom communication. The first was connected to her age in comparison with some of her classmates. As a ninth grader, some of her classes were mixed with older students that she perceived to be more experienced and capable. In addition to that, many of them were strangers to her, which caused some degree of discomfort. When asked to describe a situation where she felt more comfortable raising her hand in class, and participating vocally, she responded:

> Well, for me, it's just all the classes where I have just freshmen, because I know most of them, and like, when I'm in classes with the older kids, I guess I'm more self-conscious about saying something 'cause I don't know them as well and haven't grown up with them. And so, it's just mostly like any of the classes that I have at least someone I know in. And they are not all strangers. Especially the older kids, 'cause you always feel like they think they're better than you cause they've been in high school longer.

Mandy's comments bring to light a couple of interesting points. One is her level of comfort with her peers—those her own age specifically. She referred to those whom she did not know as "strangers." The connotation of this term may almost always carry with it potential harm. From our earliest years, many children are warned frequently against communicating with those whom they do not know. Mandy admitted that this concern remains in the context of the classroom, where the potential of "stranger danger" is a distinct and potential threat.

The second perception that Mandy recounted referred to the fear of being identified as inferior, or lesser than her peers. When asked for the number one reason that students hesitate to participate in class, Mandy quickly answered, "I think it is just because being judged is pretty much the main reason." To her, opening up and commenting was also an invitation for others to evaluate and pass judgment. That risk was instrumental in whether or not verbal participation was taking place for her in the classroom. That risk seemed to be exacerbated when older students were present in the classroom. By relative standards, older students may be expected to have something more meaningful and important to say. Likewise, the younger students may feel that their comments will not likely match up. Because of this phenomenon, the apprehension may dictate that verbal participation does not take place under those conditions.

Both Brandon and Tim had similar fears relative to being judged by other students in the classroom. Their inhibitions differed from Mandy's, however, in their perceptions of themselves. Mandy seemed to feel capable and smart enough to be involved in discussions. She was simply afraid that others would not see her that way. Brandon and Tim, on the other hand, did not express that same confidence in themselves. According to Brandon:

> I have those moments where you want to say something but I can never just get it all to come together in time, and then, by the time I do, I'm like, oh well, that was like, last week sometime during the lesson (laughter). You know that's how I do it. I'm sure other people have the same thing you know. They are trying to put stuff together and other people are a lot faster, and a lot more references and know more so they can pull stuff together. They're like, I've got this to say and you're like, I kind of had something like that but I just couldn't quite catch it, you know. I think there is people like that that you know, cause if you look around the classroom you see kids that are really thinking, and want to say something, but they are still processing it.… The thing would be for me is there is always that

there is like two people in your class that just seem to know everything about the scriptures and so every time you raise your hand, there is a little insignificance in what you have to say, not that I don't want to, but I kind of want to hear what they have to say more than what I think. Who would want to hear what I have to say?

Brandon suggested that he struggles in two distinct ways. First of all, he feels like he takes longer than others to come up with something proper to share. It is not that he does not have the desire to be involved in class—he just is not quite ready when the time is right. Brandon seemed to feel that his mind is not processing as quickly as others. The second struggle that he alludes to also involves a comparison with others, much like Mandy. Brandon feels that others have better things to say that are of greater benefit to the class. In essence, he feels that his contributions do not have the same value as others, and may be wasting the time of others. This belief of inferiority was common among several of the participants whom I interviewed.

Tim appeared to be more reserved and hesitant as he established his reasons for holding back in a classroom setting. Interestingly, he was the only student who used the word "shy" when explaining his apprehensions. When I pressed further about what causes a person to be shy, he opened up slightly. I then asked how important he felt it was that everybody in the classroom have a voice to speak and participate. He responded, "It's important, but sometimes you don't want to. Cause people might think…yeah." I further inquired what the concern may be regarding what other people think. Referring to comments that could be made in class, Tim said, "Just maybe, that's someone else's [comments or opinion] is better, like way good, and yours is like, not so good after all."

More than the others, Tim seemed to be intimidated by the capabilities and intelligence of his classmates. But similar to the others, there was fear of being judged as

dumb, inadequate, or not matching up to the intellectual or spiritual stature of his peers.

Even during his interview, it seemed as if Tim was continually worried that his responses

were not good enough.

When I spoke to Shauna about this same challenge, she seemed confident and less

concerned about what others were thinking about her. However, she also indicated "peer

fear" as a reality in her life:

> There are sometimes I wish I was more [vocal in class], but I think I'm pretty—I
> like participating, I guess. 'Cause it helps me think things through better, saying it
> out loud. But there is sometimes when there are people there who I think might
> judge me if I say something. Or I don't want to start a big discussion that will
> cause contention, so I kind of keep it to myself and wish that I'd be more apt to
> talking than I am.

Although Shauna admitted that she did enjoy participating in class and showed a greater

tendency to do so than some of the other participants, she still shared some of the similar

restraints. Because the classroom involves other stakeholders, she does not want to risk

ruffling some feathers or being judged based on a comment that might not jive with

others in her class. Creating or participating in contentious discussions is considered

inappropriate in LDS religious education classrooms. Jesus taught this principle to the

people in the Americas, "For verily, verily I say unto you, he that hath the spirit of

contention is not of me" (3 Nephi 11:29). Shauna was admittedly cautious about

approaching this indiscretion.

Sara also admitted to a similar peer fear, but adds a few new variables that may

relate in different ways to the other participants. When asked why she may not want to

raise her hand at times in class to comment, she replied:

> I think it depends on the class. And how well I know the people in it. Also if I feel

like it's stupid, then I won't say it. Most the time I don't feel like they [her comments or opinions] are relevant to the conversation that is going on.

When asked what she meant about how well she knew people in the class, she said:

Like a couple months ago when I had open periods [no scheduled class], I got to go to different classes and my home classroom, so to speak, was easier for me to share something, because I knew them already and talked with them. And other classes I don't know them, and what kind of things they say or personalities. I just don't know them.

I then asked if the fear of judgment goes away if she knows individuals in her class. Sara quickly responded, "Not really. It's just that I know they won't make fun of me as much! [laughter]"

For Sara, lack of familiarity and experience with classmates hinders her willingness to participate vocally. However, when asking about technological media for communication, something else came out regarding in-class communication.

I think that most of the time words just slip out in person, and then you look back on them later, and think—why did I say that? That was stupid! But with online you can decide what you say, and it's not as bad.… I don't have to worry about sitting here and thinking about what I'm trying to say—I can just sit there with my phone (texting) and think about what I'm trying to say.

Much like Brandon, Sara did not feel like she has adequate time to formulate the right words to say in a face-to-face setting. If something comes out poorly, some form of retribution is possible. However, she hints that the fear of retribution—or the reality of the retribution is lessened, depending upon personal relationships and familiarity with classmates. This important theme will be discussed in greater detail later on.

In summary, there are many common roots that relate to communication apprehension. References to peer fear were present in some form with each informant that was interviewed. However, subtle nuances were also evidenced in the participants'

responses. Some were concerned more about their inadequacies in expression. Others

expressed greater concern about the judgments of others. Some comments indicated that

students felt that their experiences did not match up well in comparison to others. Others

felt that they could be considered "dumb," or young and inexperienced. Regardless of the

individual, there are numerous potential reasons for students to feel without power and

voice in the classroom. Understanding these reasons can help lead to liberation and

empowerment as students are given a voice to participate and be involved in meaningful

ways.

The Expressed Desire to Participate
Vocally Varies Among Individuals

Given the assumption that learning is fostered through communication, it

becomes important to evaluate whether or not participation is seen as inherently desirable

with all students. Certainly it would be helpful to know whether students with

communication apprehension truly want to be empowered with a voice in the classroom,

or if they are satisfied with their current state. Advocates for change need to know if tools

could be successfully implemented in order to provide students with opportunities to

succeed, or if those tools will only apply to the students who have a desire to change and

be more involved in classroom settings.

Each informant was asked questions regarding their desires to participate vocally

in class, and whether they felt that empowerment was available through these means.

Almost all of the participants expressed a desire to participate more than they do, but

acknowledged that they currently feel inhibited for various reasons. When Sara was

asked if she wanted to participate vocally in class more than she currently was, she

replied, "Hmmm. Yes and no. Would I like to? Probably not. Should I? Yes! [laughter]."

Later, when asked if every individual wanted his or her voice to be heard, she said, "I

think everyone—at least for me, at some point, whether it's just my close friends I share

it with. At some point you just have to tell someone. No one just wants to just think their

own thoughts themselves without sharing them with someone." These sentiments match

the LDS belief that the desire to improve our own lives, and the lives of those around us,

in an inherent part of our nature, as we seek for betterment.

Both Shauna and Mandy shared similar sentiments to those of Sara. Each felt that

it was important for each student in the classroom to have a voice—and that utilizing that

voice is an important element of classroom learning. However, when applied to oneself,

there was an apparent disconnect for some. Mandy, for example, when asked if everyone

wants to be heard, replied, "Sometimes you just want to be heard, but never get a word

in, or you don't dare speak your mind 'cause you are afraid you'll be judged." Then,

perhaps as a consequence of this fear, when asked if she personally wanted to be involved

more than she was in classroom participation, she said:

> Not really. I'm pretty content with just listening. Sometimes I'll like to share, but
> I just like listening more to what others have to say, rather than speak myself. And
> it just, I don't know, I think I learn more maybe, and it's just I don't know, more
> pleasant, I guess.

Later, I asked Mandy if she ever wanted to make a comment, but did not, and then

afterward felt regret. She quickly admitted that she had often felt that feeling. At least

occasionally then, Mandy did want to be involved vocally in classroom discussions.

It would appear that students like Mandy do feel the need to participate—and

even want to—but are driven back by their apprehensions. These apprehensions seem to lead to a state of contentment, where students decide to take the less vulnerable role of simply being a listener in class.

This interesting phenomenon is perhaps illustrated most completely by Brandon. In our interviews, he was hesitant to proclaim that every student needed to be heard. To me, he seemed to know that my follow-up questions would be directed towards him, and his need for personal participation. When Brandon was asked if every student needed to be heard, he replied:

> I don't think everyone wants their voice to be heard at the same particular moment though. Maybe in the classroom setting if you think that they want to speak up--a particular person--maybe they want their voice--maybe they don't want it heard now. Maybe in the future they will, but maybe now they just want to kind of sit back and observe rather than speak their mind. So I think that it is true--it's just not at the same time. It's people feeling more confident if some people do, and others feeling less confident if other people do. Or if no one is, maybe they'll go [raise their hand and participate].

Brandon was pretty settled in the recognition that students are feeling different each day, and that some days they have greater confidence and desire than on other days. When asked more specifically if he felt that every student actually wanted her or his voice to be heard, he responded:

> I don't think it's everyone has to at the same time, or like, everybody today needs to talk, you know, because some people might just want to think. I have those days, and I'm sure everybody does, where you don't want to really do anything. You want to come and feel the spirit but you just want to feel it and have it be better for you, and you don't want to necessarily get up in front of people and you know have your day go bad because you don't want to do that and if he gets forced to, it just you, sometimes it doesn't make your day any better, it kind of makes it worse and you're like, ahhhhh! It should be a good thing but I didn't really want to, but I think that they should eventually [participate] like a couple times a week or two weeks you know. I don't think every day though. But, that doesn't happen every day though, so I think it's pretty good.

To Brandon, it seems clear that he values student voice and participation, but is very reserved about being compelled or coerced in that direction. His focus on *feeling the spirit* refers to the LDS belief that individuals can experience feelings of peace, comfort, direction, affirmation and guidance as they study and learn gospel principles. For him, these feelings were available whether he participated in classroom discussions or not. More than anything, Brandon seems to want to make the choice himself whether or not he is involved in participatory ways in the classroom. And, according to him, that choice will be affected by the specific variables that relate to the day at hand. However, when asked again later if he wanted to be more involved in classroom discussions, he said, "Yes, I feel I would like to be. It's just one of those things that on a personal level I still can't. You know, I still share, and I talk when I'm asked to do so, I do. It's still hard for me to just come out and share what I want. I'm more of a listener."

With each interview, the informants seemed to have within them the hesitant desire to speak more, and participate more meaningfully in classroom settings. However, their personal inhibitions—whatever they are—compel them to remain within a more safe standing as a classroom bystander and hesitant-participator. Principles of liberation and empowerment are directly applicable when addressing these feelings of constraint and apprehension.

Communication Apprehension Is Alive and Well in Online or Texting Settings

The discovery that my participants were much more observers than participants in online social settings gave way to a quest to discover if similar feelings of

communication apprehension existed when these students were utilizing technological

modes of communication. Although each individual is unique, there seemed to be a

pattern of reticence in technological settings that was similar to the feelings expressed in

the face-to-face settings.

For example, Mandy was the participant who seemed to share the fear of being

judged as her primary reason for vocal inhibitions in the classroom. As I investigated

whether this same fear existed in online settings for her, I asked if she felt like she was

being judged when writing things using technology. She responded, "I don't know.

'Cause like even when you're like writing something on Facebook on your status, even

though you're putting it online, I would still even feel worried about being judged for

what I was saying, so I don't know if it would be completely be eliminated, but it would

probably help a little bit." Later, I asked if she would—with those fears—be able to write

something online that would be read by her peers, she said:

> Probably if there was something I really wanted to share, I probably would go
> ahead and share it if I wanted to, but I think I would be a little hesitant because I
> couldn't—I'd know that there would be a bunch of people reading it, and so I
> don't know. I'd still be a little bit hesitant, but if it was something I wanted to
> share, I would probably share it…then if I knew that they could see what I was
> saying, like I'd put something that it wouldn't bother me if somebody read it, if
> that makes sense.

Obviously, Mandy was still concerned about her social interactions in an online

setting. Although her fears of being judged may be alleviated to a degree, she still felt the

reality of others viewing her words and forming judgment as a result. Her final

confession indicated that the words that she would be willing to write would be restricted

to that which was considered safe by her. Ultimately, it may not truly reflect her true

thoughts and feelings—and may not offer the empowerment and voice that was intended.

Shauna indicated some similar concerns as well. When asked about writing online, she said:

> I'm very cautious about what I write on there I think. Even when I get on a chat thing—'cause I know my friend when she went to write me something, and it got send to someone she didn't want to send it to, so I'm very cautious about that, 'cause I don't really like it. I'm really careful what I say on there. I guess I just don't write things that I don't want people to know.

Interestingly, Shauna's comments are reminiscent to her reasoning for being hesitant to speak in a face-to-face setting. She expressed that she did not want to say anything controversial, or start a debate, or be offensive to anyone. For Shauna, she seems to see communication as a potential weapon, in some cases. Because of that, she is hesitant to communicate verbally, and through technology. When pressed concerning whether she would be brave enough to communicate through technology in a seminary setting, she responded, "I think I'd be a little cautious, and I think I'd be a little different than I really was, 'cause I'd be afraid what people would think—which is not a good thing. But yeah, I think I'd be kind of cautious, but I would comment I think."

Again, we see a similar pattern of reluctant willingness. Both Mandy and Shauna seem to have a desire to speak, but a fear seems to limit their perceived application of that desire. Even though the faces of the peers aren't present during the typing of text, the perception of the faces, and their potential judgments, still remains.

Finally, I asked Tim why he felt that some students wrote a lot online, while others did very little. He said, "I don't know. 'Cause they are not afraid to tell what they are doing, I guess. And I kind of—I don't know—shy I guess." Just like the other

participants, the responses to online communication apprehension mirrored those that they gave regarding face-to-face communication. Tim always referred to himself as "shy." Because of this, he did not like to get into the mix of conversation.

When I asked Tim about his Facebook habits, he admitted to being more reserved than others. In fact, he had his Facebook page blocked, so that only his friends could see it. "I don't want no one else seeing what I put on there. Just people I say that can…. Cause you really don't know them, and don't want them to get your information, I guess."

Although there was some sense of cyber-social immunity professed by some of the participants, for the most part, there was a reluctant feel about full-immunity in online settings. Expressions of communication apprehension were quickly given, even when indicating a willingness to participate in online settings.

Relationships of Trust Empower Students
to Communicate in the Classroom

One interesting dichotomy of this study lies in the participants themselves. Although each reported significant levels of face-to-face communication apprehension based on survey results, they have also reported high levels of social interaction through technology. Because of this apparent inconsistency, I was eager to come to a better understanding of variables that contribute to, or detract from, communicative behavior among students. The responses from student-participants were similar on all accounts. Each informant expressed confidence in communicating with those they know and trust. When these elements exist, the doors of communication open wide.

Tim, who was my most challenging interview, offered insight on this issue. I

knew that he had been uncomfortable with almost all classroom participation scenarios,

so I asked him how he felt about the common seminary practice of asking his neighbor in

class for a response to a question created by the teacher. He said, "I don't know. Like if

you know your neighbor real well, or it's your friend or something, then it's okay. But

after you do the new seating chart or whatever, it's like, 'okay.' You don't really know

them, I guess." I then asked Tim if it was miserable talking to a new neighbor that he did

not know. He responded, "Yeah. Until you get to know them."

Understandably, Tim found it much more easy to communicate with someone

considered a friend, and very difficult to interact with a stranger. Mandy adds insight to

the issue as well, as she puts vocal participation into context with her inhibitions.

> Well, I notice that the more time that you spend with them [classmates], and if
> they like to share with you and you actually spend time talking, you trust them
> more each time you do, and you're willing to share more because you know them
> and you know that they are not going to be like, "oh that's stupid" if you say
> something cause you just talk to them and you know their personality a little
> bit…. I just think, like, letting us share if you already do, increases trust because, I
> don't know, you just have more opportunities to share and then, like, if you notice
> that everybody else is sharing too, you feel more comfortable to do so.

Mandy shares two important insights regarding classroom communication. First, the peer

fear factor—or, in her case, the fear of looking stupid—is decreased with a feeling of

friendship and trust. When we know people, and they know us, or fear of injurious

judgment is lessened, and our comfort level with communication is enhanced. Second,

she refers to what others in class are doing as well. If others are speaking, sharing, and

interacting appropriately in class, then it is easier to open up and do it yourself. In the

case of Mandy, she seemed to find great comfort in not standing out, but in being just like

everybody else.

Brandon likewise agreed with these same sentiments.

Simply because you know them, or if it is your friend, you are not afraid to say something stupid. If you say it and it was kind of stupid, they are not going to think you're stupid. They know you, and you can revise it. And they are like, "I know exactly what you're saying," but if you don't know them, you say something stupid, and you're like, "ah, crap!" and then you kind of are back to that awkward situation again. So if you know them, it's just easier. Some people don't have any problem walking up to strangers, and some people do.

I then asked Brandon if he had any concrete examples of where he had seen that happen with an entire classroom of people. He eagerly added:

Like last year, my Junior year, I had Mr. Allen. It was my A2 class, I think. Everyone in there--I think we had 2 sophomores. I don't think that there was more than 1 or 2 freshman. And it was all juniors and seniors. And we pretty much all knew each other. Everyone either knew each other or were friends, and it was fantastic, because everyone talked, and no one was afraid to say anything. You could express yourself openly, and people understood you 'cause they're your friends. I don't know, it was just really easy, and then I've had already a couple classes this year where you have a group of friends, and you don't have any idea who they were, they knew and accepted each other, but it still had a little bit of awkwardness in there. You don't really know them. I think some people have a hard time just opening up a little more. It's not that the spirit of the class wasn't there, 'cause it was. It was still a good time in seminary. You still enjoyed it, and felt the spirit. It just wasn't the same. The people you don't know. I just think it always makes it a little awkward.

Interestingly, Brandon was quick to share an example in which there were nice and friendly kids in different classes who did not know each other as well, and so the spirit of communication was awkward. His experience and willingness to be involved in class was determined largely by his comfort level with his classmates.

In an effort to establish hope with the likely scenario that the classroom is full of strangers, I asked Shauna if she felt it was possible for a group like that to change. She thought for a moment and then recounted her experience from this school year.

> I think this class this year at the first of the semester were quiet to share, I think, then it got better. I felt like I couldn't even share in class at the first of the semester, 'cause I didn't know them, but now that I've got to know them more and spent more of the semester with them, I can talk more. And I think that's how our class has gone.

Like the other participants, Shauna was able to relax and communicate more as she got to know her classmates in a more meaningful way. As relationships of trust were formed, she was able to open up and become more involved in communicative ways. Essentially, empowerment and liberation were tied to her levels of trust with her peers.

Understanding variables that contribute to, or detract from communicative behavior is fundamental to this study. Certainly there is a relationship between these variables that exist in a face-to-face setting as we look deeper into the world of technological communication. As these variables of communication are understood and acted upon, teachers can assist students in finding individual voice and empowerment in an appropriately crafted democratic classroom environment.

Students Largely Feel That Some Form
of Technology Could Be Helpful in an
Effort To Empower and Give Voice
to Apprehensive Students

Recently, I was informing a class of seminary students about a couple of apps (Ipod applications) that had been developed to help seminary students to learn important scripture references. Immediately, an excited student raised her hand and said, "I just downloaded that last night. It is awesome!" Another student added that she had also already downloaded this app. There was an excitement and enthusiasm about these new technological opportunities.

A few days later a student came up to me during class and showed me an app on his IPod that helped to illustrate something that we had discussed in class that day. He was excited to show me something that helped him, and could be beneficial to his classmates as well. As I shared these "app ideas" with other students, there was an excitement and interest in these new types of technologies.

These recent experiences harmonize with the Skiba and Barton's (2006) insistence that teachers are dealing with a new generation of learners. Modern students have different learning styles and expectations than previous generations. They have definite preferences for things that are new, diverse, immediate, and creative.

Not all my participants shared identical opinions. Mandy, for example, liked the idea of incorporating technology in the seminary classroom. To her, it was something different. She also felt that communicative technology could really help students who were uncomfortable to have a voice in the classroom. When I asked for specifics, she expressed that it could "help them to share their experiences or maybe gain a greater testimony [conviction]."

This opinion is especially poignant when viewed through the LDS theoretical lens. To "gain a greater testimony" is to be empowered with knowledge that is liberating and potent. It is coming to know things that have eternal significance to self and others. In the New Testament, Jesus taught, "And ye shall know the truth, and the truth shall make you free" (John 8:32, King James Version). Interestingly enough, Mandy also suggested that this greater testimony can be found as students share their experiences with each other through technological means. This matches Hale's (2002)

recommendation that spiritual experiences are most likely to occur as students take a more active role in teaching and testifying to their classmates. If this is true in a traditional classroom setting, it may also be true if conversational technologies were implemented outside the classroom for student use as well.

To me, Prensky's (2005) invitation to listen to the digital natives makes sense when looking at where students spend their time, energy, and interests. If students are naturally drawn towards technology as a source of stimulation, then it would seem logical for educators to seek to tap into that resource for educational purposes too.

When I spoke with Sara, she admitted that technology implementation in education made a lot of sense to her. When asked why, she said, "Just because, it's a new generation coming up, 'cause a majority of teenagers spend their time online." Because of this reality, Sara felt that it was somewhat natural and intuitive that students could be communicating about curricular things via technology. I asked her if she felt that students would be excited to communicate in that kind of setting. She was quick to agree, and felt that many would say, "Oh, good! Finally a place where I can speak my mind."

Tapscott (1998) agreed that this *net generation* is naturally inclined towards communication in alternative settings. He even went so far as to suggest that modern students have a greater desire and need to express themselves than did generations before. Because of this, technology provides a forum that enables this communication to take place with ease.

Even Tim, who was by far my most inhibited informant, gave his approval of communicative technological implementation in the seminary classroom. When I asked

him what his biggest reason was for liking the idea, he responded, "Because, I guess—I guess you'd be home, and you'd have a seminary chat thing with people and you'd share what you feel or something. 'Cause you're not there, you're not in the room or something." I then asked if he felt that more students would be comfortable communicating in that setting, as opposed to communicating in the traditional classroom setting. He readily replied, "Yeah."

Even though these students can only predict how helpful these technologies could be if implemented in the seminary classroom, they largely seem eager to try something new. With over a decade of schooling behind them, they have experienced the same types of educational methods and practices. They are eager and desirous for change—for something new and interesting.

Conclusion

In this chapter I have discussed the findings derived from both of the student surveys. Descriptive statistics were also given that provided a cultural context for this study. The results of these surveys were also instrumental in selecting the five interview participants.

The remainder of this chapter has provided a thorough analysis of themes identified through the participant interviews. These themes were analyzed and outlined with technological, LDS, and Frierean lenses in mind.

CHAPTER V

INTERPRETATION AND CONCLUSIONS

Introduction

Each informant in this study lives a life that is unique and independent from the

lived experiences of the other participants. Although there may be many similarities

among the participants in perspective and cultural context, every student is different—

and their outlook is inevitably varied from that of the others. With this in mind, nothing

that was expressed or perceived by one informant can be deemed to be representative of a

larger population. Instead, with each interview, the participants were given the

opportunity to bring to light phenomena that may be helpful in addressing specific

research questions. It is the researcher's role to highlight the student's perspectives and

give meaning—through interpretation—to the data that has been presented.

This chapter will focus on the interpretations and conclusions that I have drawn

from my interviews and experiences with the student-participants. I will primarily focus

on principles that I have extrapolated that directly relate to my findings. My conclusions

will be presented in an interpretive form, while utilizing theory, student comments, and

personal perspectives throughout the narrative.

Some Elements of Communication Apprehension
May Be Diminished in Technological Settings

Owston (1997) suggested that one of the primary advantages to the worldwide

web is that it is very compatible with the way students now prefer to learn. Students are

comfortable and at home when using technology. On the other hand, students may not

feel as comfortable and at home in a classroom setting. Meyer (1995) recommended that

students can really appreciate the sense of immunity that comes from online

communication, rather than speaking it face-to-face. He suggested that when students

communicate online, there are no observable facial reactions or intimidating and

potentially embarrassing elements of feedback. Meyer's assertions led me to investigate

whether my participants felt that this was true or not. I asked them how they felt about

statements such as, "Quiet students are more active online," or "I feel empowered to

speak my mind in online settings." The participants shared some interesting comments.

> Shauna admitted:

> I know I'm different when texting. I'm not afraid to say things that I would be
> afraid to say to their face. I'm more likely to say things that I wouldn't face-to-
> face. So, I guess there's not as much pressure with what you have to say face-to-
> face with people getting mad at you or whatever. It can just happen over text and
> you just don't get it face-to-face, I guess.

According to Shauna, it was easier to speak her mind when the recipient is not standing

in front of her. Brandon also believed that there were some empowering benefits

available through technological communication. When asked specifically what these

benefits were, he remarked:

> Yeah, it would bring people out of their shell a little bit. They would come out
> and probably speak a little bit more freely and talk and get to know people a little
> bit better. So I think it would be good to get to know people more, and they would
> be able to share what they want to say. Kind of free off the pressure.

The benefits of online communication that Brandon mentions are twofold. First of all,

students can feel the freedom to speak and interact in a more comfortable setting.

Secondly, relationships can be fostered where the students can "get to know people a

little bit better." When this happens, conversation flows even more easily, and may even transfer to classroom participation as communication barriers are brought down.

King (2001) found that even the most marginalized or shy students seemed to open up in online discussion forums. Tim, my most shy informant, appeared to agree with this preference as he shared the benefits that come from being immune to the negative social potential of face-to-face settings. When asked why he preferred the thought of online communication, he said, "Because they are not there…[I] know the people, but they are not face-to-face, so [I] can't mess up or something." In his mind, the pressure-reducing nature of online communication provides opportunities to not "mess-up" and to better represent himself.

Each of the participants' comments coincided with Jun's (2007) assertion that online learning has the potential to alter the power dynamics of discussions as the impact of physical appearance, size, body language, and tone are eliminated. As these variables are neutralized, more students are comfortable sharing more in online settings (King, 2001; McGuire et al., 1987; Meyer, 2006; Warschauer, 1996).

One of the most insightful conversations on this subject came while discussing the matter with Sara. When talking about online discussion in terms of "typing on a computer," students seemed to be comfortable with the idea of communicating in this way. Sara explained:

> I think that on the computer, when you are typing what you think—like the quiet person—they don't share their opinions very often with anyone and so the computer provides like a friend, so to speak. I think that they can just type it out, and feel like they're talking to someone even if they are not really. But in person they are shy. So I'm not sure where I was going with that. Yes they're the same person—they're just more comfortable saying it on the computer.

To Sara, the computer can become a friend—a safe one—that will not judge, rebuke, or even talk back.

Interestingly, when students feel that they are speaking to the computer there is a sense of cyber-social immunity, where there is room to speak, share, and give voice to personal thoughts and opinions. By and large, my participants seemed to feel that online communication helped to create an environment where more students would be comfortable participating in dialogical ways with their classmates.

Based on these evidences, I would recommend that social networking technology has the potential to open doors to increased communication in behalf of apprehensive students. As a result, marginalized or shy students may be empowered to participate in democratic ways with their classmates in ways that are not currently possible in traditional classroom settings. Although we do not yet know how empowering technological tools are for each and every student, it does appear to be a resource with potential, that is worthy of consideration.

Some Elements of Communication Apprehension
Still Exist In Technological Settings

Even though Owsten (1997) suggested that students are most comfortable living and learning in technological settings, Kennedy and others (2007) found that students may not be as familiar and comfortable with all modes of technology as we may think. Likewise, Thomas (2002) found that even though students were technically participating more when using online discussion forums, their comments seemed forced, impersonal, and without depth. Empowerment, in the truest sense, may not have resulted from the

increased frequency of responses. Because of this dissonance, I began to wonder to what degree apprehension was actually alleviated through the use of technology.

In my first interviews with my participants I asked each of them what was difficult about participating in traditional classroom settings. The responses were interesting and helpful, as various explanations of peer-fear were given. Mandy was concerned about being judged. Brandon did not want to look dumb in comparison to others. Sara felt that her words would not come out right and might be misunderstood. Tim did not feel that he had anything good to say, and Shauna was worried that she might stir up the discussion pot a little too much. In each case, my participants had some reason to feel apprehension when communicating in face-to-face settings. Intuitively, I thought that some of these fears would naturally exist in online settings as well, even though they were hinting towards a feeling of immunity online.

With each of the participants, I asked them direct questions relative to their specific apprehensions if transferred to an online setting. The more I mentioned the reality of other students on the other side of their online communications, the more they seemed to admit the continued presence of some degree of communication apprehension—even when communicating with technology. For example, Mandy expressed that she liked not having to worry about being judged by her appearance when communicating through technology. However, I pressed a little further and asked her if she were given an opportunity to explain, share, and testify of gospel principles in an online setting, would the fear of peer judgment be eliminated? She answered, "I don't know. 'Cause like even when you're like writing something on Facebook on your status,

even though you're putting it online, I would still even feel worried about being judged

for what I was saying, so I don't know if it would be completely be eliminated, but it

would probably help a little bit."

I asked Mandy further if it would bother her to know that lots of people could be

viewing and commenting on what she had written online. Her reaction was somewhat

concerning, "Um, maybe it would a little bit, but then if I knew that they could see what I

was saying, like I'd put something that it wouldn't bother me if somebody read it, if that

makes sense?" Essentially, Mandy limits her freedom of expression, based on her

perceptions of the readers themselves. As I inquired even further, she said:

> Probably if there was something I really wanted to share, I probably would go ahead and share it if I wanted to, but I think I would be a little hesitant because I couldn't. I'd know that there would be a bunch of people reading it, and so I don't know. I'd still be a little hesitant, but if it was something I wanted to share, I would probably share it.

The word "hesitant" resonates well with the previous explanations of

apprehension in face-to-face settings. In a similar vein, I asked Sara if shy people were

more prone to be involved in communicating online. She responded, "I think the shy

personality still comes out." In the case of Tim, who seemed to by my most "shy"

informant, I asked if he would be more likely to read a comment or write a comment if

given an opportunity to be involved in online communication. He candidly reported that

he would most likely be a reader, instead of a commenter. Likewise, Brandon, when

asked the same question, gave an identical response.

Krejins and others (2003) explained these online hesitancies and apprehensions by

reminding educators that we cannot ignore the ways that social groups are formed. If a

student is afraid of peer judgment in classroom settings, they will probably have some of those same issues in online settings as well. Issues of friendship, trust, and judgment apply to all modes of communication.

The style of communication may also have an impact. Ahern and others (1992) noted that informal settings and formal settings need to be part of our consideration as well. Just because a student is comfortable making small talk with friends on Facebook, does not mean that they will be comfortable communicating with peers in a formal online educational setting. Apprehensions not present with the informal setting may be magnified many times over when a formal opportunity is available.

This reality was made manifest with each of the participants as they expressed positive attitudes about the prospects of empowerment that are available through technological communication, but were a little less encouraging when addressing the real-life application of communicating with peers in a formal educational setting. Although some degree of communication apprehension may be offset, there remain many of the same apprehension concerns reported in face-to-face communication.

Based on these findings, educators need to be aware that technology may not necessarily resolve all apprehension issues among students who are largely without a voice in the classroom. Likewise, students' familiarity and frequent use of informal social technology may not directly correlate with their potential use of social technology for formal and educational purposes. On the other hand, I found evidence to suggest that communication apprehension levels may be lessened by technological implementation and thus provide educators with an empowering educational tool for a portion of

apprehensive students. As educators use many tools to foster social learning in the classroom, a greater number of students may find access to growth and empowerment.

Apprehensive Student's Current Use of Technology
Does Not Necessarily Harmonize with
Freirean Notions of Empowerment

Freire's vision of the democratic classroom involved much more than enabling simple conversation among friends and family. Rather, he was seeking to liberate those who felt powerless in the classroom. Freire (1970) suggested that learning and empowerment result from an active dialogue of interaction where students acquire knowledge "through invention and re-invention, through the restless impatient, continuing, hopeful inquiry, human beings pursue in the world, with the world and with each other" (p. 72). This authentic liberation emerges as individuals act upon the world in order to transform it.

The technological lens used in this study suggests that there are media available to engage students in liberating and empowering conversations at any given moment of any given day. In this study, the survey results regarding student use of technology confirmed that students do have access to, and are frequent users of many of these technologies. However, my interviews with the participants highlighted more convenience-related benefits, rather than liberating qualities stemming from technological use.

Mostly, students were communicating with those individuals with whom they had already formed relationships of trust. Doors to additional voice and liberation were not necessarily being accessed through technological means. Simply put, the technological tools were giving students greater access to the same individuals with whom they were

reasonably comfortable communicating with in face-to-face settings. There was little reference or allusion to the liberating or empowering qualities of these technologies.

Additionally, Freire (1970) highlighted the need for a democratic dialogue where students feel free to discuss ideas, express opinions, and interact in an equitable learning environment. Although technological tools may grant easy access to that possibility, the participants of this study admitted to much more superficial interaction through their technological communications. In Sara's college English course chat room, she admitted that most students left the formal chat room, for a more informal setting where they can just talk about "random stuff." Likewise, the students I interviewed admitted that their most common activity on Facebook was to check out updates and status changes among their peers—not to have meaningful and educative conversations.

Interestingly, all three theoretical lenses used in this study speak to the potential of the student in regards to learning, growth, and empowerment. Both Freirean and LDS lenses suggest that educators can help inspire and lift students to be more than they are-- in such a way that they can become more capable leaders today, while preparing to become the leaders of tomorrow. The technological lens suggests that tools are available to help students engage in liberating and empowering practices, both inside and outside of the classroom. Unfortunately, the reality of this merger between technological tools and emancipating dialogue has not yet taken place in the educational experiences of the participants of this study. Although a harmony of these ideals may be possible, the realization of these ideals will require deliberate efforts from educators and students alike.

It Is Ultimately the People Using the Technology
That Empower the Apprehensive—
Not the Technology Itself

Because of these previous findings, it is important to identify the variables that actually contribute or detract from human interaction. Skiba and Barton (2006) suggested that educators need to adapt teaching styles and curriculum to accommodate a new generation of learners. Ultimately, today's learners have access to tools and technology that can greatly enhance their learning. While this may be true, the available technological tools should not overshadow the principles underlying their successful implementation.

Throughout my interviews, I was repeatedly reminded how important the people involved in the communicative acts are to the communication itself. Vygotsky (1962) emphasized a collaborative setting for learning that involved either teacher and student, or student and student. This community of learners (Brown & Campione, 1994) is the fundamental component of empowering students—not the tools and modes of communication.

In my interviews, I found that students are primarily communicating with family and friends—people with whom they are comfortable and secure. Not one of my participants admitted to putting themselves in vulnerable situations socially, simply because they had the technology to do so. Rather, each of my participants indicated that they are much more likely to have productive conversations with people whom they already know and trust. These relationships of trust create an atmosphere where interaction, opinions, and open sharing can be carried on without the fear of retribution.

I mentioned previously Brandon's experience with classmates that he knew well, "…We pretty much knew each other. Everyone either knew each other or were friends, and it was fantastic, because everyone talked, and no one was afraid to say anything. You could express yourself openly, and people understood you cause they're your friends."

Like Brandon, my participants repeatedly mentioned how their relationships of trust with the people at the other end of the communicative act were the trigger that allowed the conversations to take place. Likewise, none of my participants mentioned technology as the impetus for commencing productive interaction and communication. Because of this, it may not be wise for educators to simply jump on every available technological tool without considering the principles that govern their successful operation. Ultimately, it is the people using the technologies who empower the apprehensive, not the technological tool itself. This matches with VanSlyke (2003), who suggested, "I don't think students learn from computers or teachers—which has been the assumption of most schooling. Rather, students learn from thinking in meaningful ways. Thinking is engaged by activities, which can be fostered by computers or teachers" (p. 4).

These findings do not disregard the potential that technological tools have for empowering students with a voice. However, they do remind educators that we need to focus on people-principles more than focus on the technological tools. Ultimately, learning and empowerment result from interactions with real people rather than interactions with technology. To the degree that technology can assist individuals in creating these types of human interactions, it will be a productive and beneficial educational tool. If social interaction becomes secondary to the tool itself, minimal

benefit can be expected.

In the seminary classroom, it is especially concerning if students feel uncomfortable participating in the classroom due to fears of social reprisal. The LDS belief that students are spiritual brothers and sisters indicates a family relationship that is meant to be comfortable and accepting of all. If a student does not feel comfortable and safe in the classroom, teachers and students need to foster relationships where friendships and trust are established and maintained. Ultimately, it is people that empower the apprehensive, not the technology. This priority on individual empowerment should be a top priority in religious education.

Constraints and Limitations

As is the case with any descriptive research, this study is intended to shed light on, and give insight to an important educational phenomenon. The intent is not, however, to provide data that is representative of all seminary students and will thereby be generalizable to every other settings.

The primary source of data collected in this study has been limited to the thoughts and opinions of five seminary students. Their individual biases, coupled with mine as the analyst have undoubtedly played into the reporting and findings throughout the research process. Also, my role as a teacher in the seminary building may have had an influence on some of the interviewees' responses.

The intent of this research is to provide suggestions that would aid in the emancipation of a marginalized group of students (those who are apprehensive to in-class

verbal participation). These suggestions are based on the data received, but may or may not represent the best possible choices for implementation. Further research will be required following the findings of this study to determine the value of specific recommendations for classroom implementation.

When I began this study, I had mistakenly assumed that students had much more experience with technology in education than they actually had. I had become engrossed in literature that suggested that modern students live a life that is saturated with technology. Kellner (2003), Skiba and Barton (2006), and Prensky (2005) all acknowledge this fact, and advocate the need for an educational curriculum that responds to this reality. However, at least for my participants, this new curriculum for digital natives had not yet been implemented in their behalf.

In each of my interviews, I was excited to get the students' perspectives of what the future might hold in terms of technology in religious education. My premise was that the best resource for deciding methods and modes of technology implementation would stem from the thoughts and experiences of the students themselves. However, whenever I asked my participants for their ideas regarding technology implementation in the seminary classroom, there seemed to be a definite hesitancy in their responses. Simply put, they did not have much to say, because they had very little context and experiences to qualify their answers. Instead of being able to give a suggestion, and thereby backing it up with related experiences, they were left with their best guesses of what might work. Perhaps, these guesses represent better ideas than their "digital immigrant" teachers, nevertheless, they are speculation.

This finding becomes a significant limitation in this study, as students were not able to give concrete suggestions for future technology implementation with confidence. Even Sara, who was accessing a chat room with her classmates for a college English course, was not able to connect that experience with anything of educational value. In this case, students were simply using this technological resource to talk about "random stuff."

Two of the participants were able to address limited experiences with a short-lived seminary blog the year before. However, their experiences could not be compared to any other technology incorporation in other courses, so they were left with listing pros and cons of that resource alone. Again, student suggestions for future technology use were, by necessity and lack of experience, more supposition than anything else.

Conclusion

At the outset of this study, I had several beliefs regarding technology and education. I agreed with Prensky (2001) as he suggested that students need a curriculum that better prepares them for the 21st century. I also held to Kellner's (2000) belief that there are technologies available in modern society that have the potential to empower groups and individuals that have been traditionally excluded and marginalized in some form or another. In truth, I had hoped that my study would validate these beliefs and shed light on steps that could be taken towards liberation. As is true in many cases, I found some things that I had anticipated, and uncovered other things that I had not expected.

The students that I interviewed were largely interested in having a greater voice in their classroom and learning environments. They realized that individual participation

and involvement are fundamental in the educational process. Despite these realizations, these students also came to class with apprehensions that were real and powerful. These apprehensions limited the willingness of these students to participate vocally in classroom settings.

Each of my participants was familiar and comfortable communicating with family and friends via technology. These experience gave these students confidence that some type of social technology may be helpful in increasing student voice in a classroom setting for those with communication apprehension. Although my participants were not confident regarding what specific technologies should be utilized, it was felt that something unique and directly associated with seminary and church education would be most helpful.

The data derived from my interviews suggested that not all communication apprehension is eliminated with online or technologically mediated communication, but that this apprehension may be diminished in some degree. However, my participants also indicated that they would most likely prefer to be an observer rather than an active participator in socially mediated sites.

This study repeatedly highlighted the ease of freely and comfortably communicating with individuals that we know and trust. This practice relates to the online world as well. My participants' experiences indicated that their conversations were limited to those with whom relationships had previously been formed. Giving precedence to relationships instead of technological tools is a major finding of this study. It is the people who communicate that empower each other, not the communicative technology

itself.

Finally, one of the most important recognitions of this study is how little is currently understood relative to the relationship of technology and empowerment, democracy, and individual voice. Ultimately, the door to understanding is opening, but there is much room for discovery and further understanding.

Suggestions for Future Research

This study was limited to a small group of individuals in a rural community. Ultimately, only five students were interviewed who reported significant levels of communication apprehension. It would be interesting to consider the responses stemming from a much larger group of respondents. Similarly, it may be helpful to know how students who did not report significant levels of communication apprehension feel about the role of technology in attempts to increase student voice and participation. Since this group of individuals represents the larger portion of students, it would be important to consider their opinions as well.

Because of the inexperience with technology and education, some pilot-studies and action research would be helpful in determining what specific technologies promote the most meaningful discussions outside of class. Students do not yet have concrete ideas, and will need to experiment with various technologies in order to formulate helpful opinions.

Additionally, longitudinal studies may be considered in order to determine whether or not online communication helps or hinders classroom participation. Naturally,

it is assumed that the more students feel comfortable speaking to each other via technology, the more comfortable they will become participating in real-life classroom settings. However, studies have not yet been performed over time to determine how online communication affects the classroom environment.

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APPENDICES

Appendix A

Participant Selection Process

Participant Selection Process

Students with communication apprehension are identified

Students who are apprehensive to classroom participation, but socially connected outside of class are identified

5 students are purposefully selected for interview and further study

Appendix B

Communication Apprehension Survey Instrument

Personal Report of Communication Apprehension

Instructions: Please shade in the circle that best represents your feelings about each statement below.

	strongly agree	agree	undecided	disagree	strongly disagree
1. I dislike participating in group discussions.	○	○	○	○	○
2. Generally, I am comfortable participating in group discussions.	○	○	○	○	○
3. I am tense and nervous while participating in group discussions.	○	○	○	○	○
4. I like to get involved in group discussions.	○	○	○	○	○
5. Engaging in group discussion with new people makes me tense and nervous.	○	○	○	○	○
6. I am calm and relaxed while participating in group discussions.	○	○	○	○	○
7. Generally, I am nervous when I have to participate in class.	○	○	○	○	○
8. Usually I am calm and relaxed while participating in class.	○	○	○	○	○
9. I am calm and relaxed when I am called upon to express an opinion in class.	○	○	○	○	○
10. I am afraid to express myself in class.	○	○	○	○	○
11. Communicating in class usually makes me uncomfortable.	○	○	○	○	○
12. I am very relaxed when answering questions in class.	○	○	○	○	○

13. While participating in a conversation with a new acquaintance, I feel very nervous.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
14. I have no fear of speaking up in conversations.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
15. Ordinarily I am very tense and nervous in conversations.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
16. Ordinarily I am very calm and relaxed in conversations.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
17. While conversing with a new acquaintance, I feel very relaxed.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
18. I'm afraid to speak up in conversations.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
19. I have no fear of giving a talk.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
20. Certain parts of my body feel very tense and rigid while giving a talk.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
21. I feel relaxed while giving a talk.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
22. My thoughts become confused and jumbled when I am giving a talk.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
23. I face the prospect of giving a talk with confidence.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○
24. While giving a talk I get so nervous, I forget facts I really know.	strongly agree ○	agree ○	undecided ○	disagree ○	strongly disagree ○

Appendix C

Experience with Technology Survey Instrument

Experience with Technology Questionnaire

Instructions: Not including your access at school, please indicate your level of access to different types of technologies

Types of Technology	Access exclusively for my own use	Access any time I need it, shared with other people	Limited or inconvenient access	No access	Not sure
Desktop computer	☐	☐	☐	☐	☐
Electronic organizer (e.g. PDA, Palm, PocketPC	☐	☐	☐	☐	☐
Dedicated MP3 player (e.g. iPod)	☐	☐	☐	☐	☐
MP3 player with video capabilities	☐	☐	☐	☐	☐
Dedicated digital camera	☐	☐	☐	☐	☐
Mobile phone	☐	☐	☐	☐	☐
Mobile phone with a camera	☐	☐	☐	☐	☐
Mobile phone with an MP3 player	☐	☐	☐	☐	☐
Video capable mobile phone	☐	☐	☐	☐	☐
Memory stick (e.g. flash drive, USB stick	☐	☐	☐	☐	☐
Dedicated video game console (e.g. Xbox, Playstation, Wii, etc.)	☐	☐	☐	☐	☐
Web cam	☐	☐	☐	☐	☐
Dial-up internet access	☐	☐	☐	☐	☐
Broadband internet access (DSL or cable)	☐	☐	☐	☐	☐
Wireless internet access	☐	☐	☐	☐	☐

Use of technology

Below is a list of different ways in which information and communication technologies can be used. Please indicate HOW OFTEN, on average, you have used technology in each way over the past year. If you have never used a particular technology, please check "Not Used."

Ways in which technology can be used	Several times a day	Once a day	Several times a week	Once a week	Once/twice a month	Every few months	Once/twice a year	Not Used
Use the web/internet to send or receive email (e.g. Hotmail, Yahoo, Outlook, Gmail, etc.)	☐	☐	☐	☐	☐	☐	☐	☐
Use the web/internet for instant messaging/chat (e.g. MSN, Yahoo, ICQ, etc.)	☐	☐	☐	☐	☐	☐	☐	☐
Use social networking software on the web (e.g. Facebook, Myspace, Trendster, etc.)	☐	☐	☐	☐	☐	☐	☐	☐
Use the web to make phone calls (e.g. Skype, etc.)	☐	☐	☐	☐	☐	☐	☐	☐
Use the web to keep your own blog or vlog	☐	☐	☐	☐	☐	☐	☐	☐
Use the web to read other people's blogs or vlogs	☐	☐	☐	☐	☐	☐	☐	☐
Use the web to comment on blogs or vlogs	☐	☐	☐	☐	☐	☐	☐	☐
Use a cell phone to call people	☐	☐	☐	☐	☐	☐	☐	☐
Use a cell phone to text/SMS people	☐	☐	☐	☐	☐	☐	☐	☐
Use a mobile phone to send or receive email	☐	☐	☐	☐	☐	☐	☐	☐

Appendix D

IRB Parental Permission/Youth Assent Form

Department of Teacher Education and Leadership
2805 Old Main Hill
Logan UT 84322-2805
Telephone: (435) 797-0390

PARENTAL PERMISSION/YOUTH ASSENT
Increasing Student Voice and Empowerment through Technology:
The Perceptions of Communication Apprehensive LDS Seminary Students

Introduction/ Purpose Dr. Steven Camicia, in the Department of Teacher Education and Leadership at Utah State University (USU), and Doran Christensen, a doctoral candidate in the School of Teacher Education and Leadership at USU, are conducting a research study to learn more about the potential of social technology incorporation in the LDS seminary classroom. Your child has been asked to take part because of his/her enrollment in LDS seminary, and his/her unique perspective as a student. There will be approximately 100 participants at this site taking part in this research.

Procedures If you allow your child to participate in this research study, s/he will be asked to complete two surveys. The first survey asks questions regarding your child's level of comfort communicating with others in different social settings. The second survey asks questions regarding his/her use of social technologies outside of the classroom. It is expected that the completion of these 2 surveys will take approximately 10 minutes. After reviewing the survey results, 5 students who indicate that they are highly involved with social technologies outside the classroom, but are somewhat apprehensive to classroom communication will be selected to be interviewed regarding his/her perception of technology implementation in the LDS seminary classroom. These students will be interviewed one-on-one in an empty classroom during their class hour. The classroom door has a window for viewing in/out of the classroom. The interviews will be audio recorded and transcribed. No names will be recorded. It is anticipated that these students may spend an additional 90 minutes participating in this study.

Risks Participation in this research study is considered minimal risk. Student responses to survey and interview questions will be kept strictly confidential, and individual names will not be used in any reporting of the data.

Benefits There may or may not be any direct benefit to your child by participating in these procedures. The investigator, however, may learn more about student perspectives of technology incorporation in the LDS seminary classroom as a tool to further classroom participation and discussion. The findings of this study may serve as a basis for further studies of technology incorporation in religious education, and may also lead to potential curriculum alteration in the future.

<u>Voluntary nature of participation and right to withdraw without consequence</u>
Participation in this research is entirely voluntary. Your child may refuse to participate or withdraw at any time without consequence or loss of benefits. Additionally, your child has been made aware that his/her participation or non-participation will have no impact on his/her grade or standing in the class.

<u>Confidentiality</u> Research records will be kept confidential, consistent with federal and state regulations. Only the student researcher will have access to the data which will be stored on a password protected hard drive. Those children who will interviewed, a code will be assigned during the reporting of data to protect the privacy of your child. Interview transcripts and identifiable information will be destroyed one year following the completion of the study including the audio recordings. Student privacy and safety are a primary concern.

Explanation & Offer to Answer Questions: Doran Christensen will be available to explain this research study to you and respond to any questions that you may have. He may be reached at (435) 722-3251. If you have other questions or research-related problems, you may contact Dr. Steven Camicia at USU at (435) 797-0372.

<u>IRB Approval Statement</u> The Institutional Review Board for the protection of human participants at USU has approved this research study. If you have any pertinent questions or concerns about your rights or a research-related injury, you may contact the IRB Administrator at (435) 797-0567 or email irb@usu.edu. If you have a concern or complaint about the research and you would like to contact someone other than the research team, you may contact the IRB Administrator to obtain information or to offer input.

<u>Copy of Parent</u> Permission You have been given two copies of this Parent Permission document. Please sign both copies and keep one copy for your files.

<u>Investigator Statement</u> "I certify that the research study has been explained to the individual, by me or my research staff, and that the individual understands the nature and purpose, the possible risks and benefits associated with taking part in this research study. Any questions that have been raised have been answered."

Dr. Steven Camicia	Doran Christensen
Principal Investigator	Doctoral Candidate
(435) 797-0390	(435) 722-3251

<u>Parent/Guardian Permission</u> I have reviewed these materials and authorize my son/daughter to participate in this research study.

Parent/Guardian Signature	Date

<u>Youth Assent:</u> I understand that my parent(s)/guardian is/are aware of this research study and that permission has been given for me to participate. I understand that it is up to me to participate even if my parents say yes. If I do not want to be in this study, I do not have to and no one will be upset if I don't want to participate or if I change my mind later and want to stop. I can ask any questions that I have about this study now or later. By signing below, I agree to participate.

_____   _____
Student participant's signature   Date

Appendix E

Initial Interview Questions

Initial Interview Questions

<u>Voice/Empowerment Outside of Class</u>

1. What technological devices do you use to communicate with others most frequently? Why?
2. What is your preferred mode of connecting with friends outside of school? Why?
3. What do you really like about online communication and/or texting?
4. Why might a person choose to communicate via computer/text, rather than simply phoning someone or speaking to them in person?
5. Do you feel it is easier to speak your mind online, or by texting, or in person? Why?
6. How comfortable are you communicating in technological ways with others that you don't know really well? Is this easier than face-to-face meetings for you?

<u>Life Inside of Class</u>

1. Is there anything that you dislike or find uncomfortable about participating in a classroom setting?
2. Do you feel that interacting with peers and a class is an important part of learning?
3. Do you feel that you would like to be more involved in classroom discussions and commenting?
4. Why do you think some students participate a lot in class—and others only a little?

<u>Technology and the Future Seminary Classroom</u>

1. Do you currently use technology as part of your studies in any way?
2. Do you feel it would be helpful to incorporate technology into your studies?
3. What role do you think technology could have on the future seminary classroom? Do you think it would work?
4. If you could suggest any technological resource be implemented in the seminary classroom that would help students to participate more comfortably, what would it be?

CURRICULUM VITAE

DORAN H. CHRISTENSEN

Education

Ed.D. Specialization in Curriculum and Instruction, Utah State University, 2012

- Dissertation: *Increasing Student Voice and Empowerment Through Technology: The Perceptions of Communication Apprehensive LDS Seminary Students*

M.Ed in Secondary Education, Utah State University, 2003

- Masters Project: *A Closer Look at the Efficacy of Teacher In-services*

BS in Psychology, Brigham Young University, 1997

Experience

Religious Educator, Church Educational System of the LDS Church, 1997-Present.

- Currently serving as a seminary principal, 2010-present
- Presenter at BYU-Idaho Education Week, 2010
- Regional Professional Development Scripture Studies Instructor, Summer of 2006
- Presenter at Area-wide Teaching Convention, 2005, 2002, 2000
- New teacher mentor, 2004-2005, 2010-2011
- Completed a Masters project researching the relationship between teacher training and teacher improvement, 2003
- Guest Instructor for Roosevelt Institute of Religion, Summer of 2001
- Participated in a Professional Development Seminar designed for religious educators in Rexburg, Idaho, Summers of 1998, 1999, and 2000
- Student Council Advisor, 2008, 2006, 2004, 2000