I Demand... Sorry, I Apologize: Power, Collaboration, and Technology in the Social Construction of Leadership across Diversity

Heather Sadler Jones
University of South Florida, hsteachlove@yahoo.com

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by

Heather Sadler Jones

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Education
Department of Educational Leadership and Policy Studies
College of Education
University of South Florida

Major Professor: Leonard Burrello, Ed.D.
Vonzell Agosto, Ph.D.
Steven Downey, Ph. D.
Anthony Rolle, Ph.D.

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DEDICATION

I dedicate my dissertation work to my family. I have a special feeling of love and appreciation to my husband for being so supportive and encouraging. A special thanks to my Aunt Rita for always calling to check on me. And, of course a smile to my Mother who always seemed to know just the right time to send a text to make me smile.

Finally, to my father, I dedicate this to you for instilling the passion for success, the grit to push through and meet all my goals, and the graciousness to appreciate what I have accomplished. You have always been there for me, and I am to be blessed with such a wonderful father.

I love you all very much!
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I must acknowledge as well the many friends, colleagues, students, teachers, and others who assisted, advised, and supported my research and writing efforts over the years. Especially, I need to express my gratitude and deep appreciation to my husband for taking on so much during the last few months of this process, and being the most supportive and amazing friend a girl could hope for.
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ABSTRACT

This transformative case study used qualitative and quantitative methods to explore the social construction of collaborative and technology leadership among students in a graduate-level course on curriculum leadership. Analysis of interactions among students during an asynchronous computer-supported collaborative learning (CSCL) project using critical discourse analysis was completed. Student dialogue was analyzed for how students across different social groups interacted discursively to promote and inhibit the development of leadership in the domains of collaboration and technology, while socially constructing the knowledge context for learning about the societal curriculum for diverse social groups. Findings were that women more than men were verbose and promotive, and that much of their power/language exchanges involved mutual understanding. Black students were underrepresented in the graduate course, but gained power through language and course design. Latino students lacked self-advocacy and emphasized cultural diversity in their use of power/language. An interview with the professor provides insight into the structures that frame student’s experiences. These findings are discussed through a three-tiered Critical Discourse Analysis Framework and recommendations are made for educators, leaders and education leadership preparation programs that use on-line learning platforms that support collaborative learning experiences.

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CHAPTER ONE

Introduction

With the opportunities enabled by education technology, education institutions and the students they serve are exploring uncharted spaces in virtual worlds. In the past decade, higher education online course offerings have been steadily increasing, with online enrollment encompassing over 30% of total enrollment (Lederman, 2013). In the same suit, in education leadership preparation programs, there is an increasing trend toward integration of technology including hybrid programs, those including both face to face classes and online classes (Crow, Murphy, Ogawa & Young, 2009). A leading factor in the increase of virtual course offerings is cost efficiency. “Three-quarters of institutions report that the economic downturn has increased demand for online courses and programs” (Allen & Seaman, 2010, p. 3). Recent support for increasing online educational offerings as a solution to the financial crisis in education situates the relevance of this study high amongst the needs of institutional administrators.

Further, because of the increased demand for flexible education options, developing courses and framing the support of learning experiences has become a topic of increasing interest for educational leadership programs. A national study found that more than 6.7 million students took at least one online course through a university during fall 2011, up from roughly 6.1 million students the year prior—with over 32% of higher education students now taking at least one online course (Sloan Foundation, 2012). As increased momentum to adopt virtual education is fueled by federal and state education policies, we must meet these transitions with a critical eye.
As K-12 online enrollment also rises, future educational leaders should become prepared to be technology leaders in their schools. Florida Principal Leadership Standards require principals to use technology effectively to enhance decision making, efficiency, communication and collaboration. Not only do education leaders need to use technology to meet these ends, but they must also support their teachers’ and students’ use of technology. It is widely accepted that principals play an integral role in technology integration in schools, from guiding teachers on how to create ideal learning environments to supporting collaboration among their peers (Afshari Bakar, Luan, Samah & Fooi, 2009). Criticism of leadership preparation courses cite traditional preparation programs fail to prepare education leaders to operate in an environment of evolving technology. Further, programs’ lack of inclusion of women and minorities have been criticized. These heightened expectations have resulted in a call to reform program recruitment and preparation (Sherman, Crum & Beaty, 2010).

**Collaborative Learning and Teaching Online**

In the shift from face-to-face to virtual environments, traditionally trained practitioners are carrying their pedagogical armamentariums into these new spaces. One such strategy that has seen proven benefits across platforms is collaboration. As online courses progress, so is the trend toward increasing capacity for interactivity that includes active learning and collaboration (Alavi, 2001; Bogley, Durbolo, Robson, & Sechrest, 2002; Hong, 2011; Hannon, 2010; MacLachlan, 2004). With collaboration, the virtual experience has enhanced student experience, satisfaction, personal growth, and learning outcomes (Alavi, 1994; Knight & Wood, 2005; Means, Toyoma, Murphy, Bakia & Jones, 2009; Pratt & Pilloff, 2005; Weisenberg & Stacey, 2005; Wirth & Perkins, 2005). In a Department of Education funded meta-analysis, Means et. al. (2009) suggested collaborative, interactive instruction is shown to have a significantly positive (+0.28)
mean effect size on online learning effectiveness. As an explanation of this effect, Kramarski and Mevarech (2003) suggest increased performance can be attributed to higher quality of discourse. Additionally, collaboration in online learning communities can encourage student empowerment and self-reflection (Sherman & Beaty, 2007).

The rapidly growing globalized workforce demands for new employees to have a skill set that includes proficiency in collaboration (Bonk & Wisher, 2000; Chute, Thompson, & Hancock, 1999; Weisenberg & Stacey, 2005). According to a recent study of 1,709 CEO’s in 64 countries and 18 industries, collaboration was the number one trait CEO’s are looking for in their employees, with 75% of them calling it a critical skill (IBM, 2012). According to the Higher Education Research Institute, job preparation is the leading reason students go to college (Pryor, Eagan, Blake, Hurtado, Berdan and Case, 2012). If knowledge, economically coined human capital, is the new market in today’s industrialized world, one path to supplying this growing demand is through providing opportunities to develop collaborative skills.

**Inequalities in Virtual Spaces of Collaboration**

Despite the contribution of collaborative learning, inequalities in these settings have been observed in the form of student marginalization related to their gender, race, socio-economic background, and ability (Beach & Doerr-Stevens, 2009; Beal, Cuper, & Dalton, 2004; Berg, 2011; Goldstien, 2009; Hramiak & Irwin, 2010; Jun, 2007; McGarvey, 2010; McLean, 2010; Weiner, 2001). For example, in a quantitative analysis of online collaboration, Jun (2007) found a power inequality between the racial groups in one indicator of power manifestations, citation by others. Also, a study of online collaboration focused on cultural differences found many educators were not including cross-cultural material in their course work, and the study suggested that a culturally inclusive learning environment needs to consider diversity in course
design in order to ensure full participation by international students (Xiaojing, Shijuan, Seunghee & Magjuka, 2010). Brookfield (2000) notes that power is ever-present in adult classrooms, inscribed in the practices and processes that define the field, and unless educators create a space for those voices, the collaborative discourses in online programs will reproduce the structures of inequity based on race, class, and gender that exist in the wider society.

**Implications for Educational Leadership**

To mitigate these inequalities, education leadership programs need to address developing a critical frame when preparing aspiring leaders’ skills in collaborative and technology. Leadership is an important ingredient in successful collaboration. Collaborative leaders play a facilitative role, intentionally and skillfully managing relationships, encouraging and enabling others to work together effectively and succeed, while accomplishing a collective outcomes (Ansell & Gash, 2012; Kolis, 2013). Johnson and Johnson (2004) found that the greater the members’ teamwork skills, the higher will be the quality and quantity of their learning. Educational leaders must also come with the skills to lead in an every shift technological environment. Leaders must be prepared to be critical consumers of technology and use technology to improve their own practice and support the success of others (USF COE Frameworks, 2014).

As educators and leaders prepare to support students in these spaces, a focus on developing collaborative and technology leadership skills is essential. As leadership can be understood as a social construct, the meaning of which is created through dialogue (Ospina & Shall, 2001), understanding how knowledge of leadership is constructed through dialogue can support improved programs.
Purpose Statement

The purpose of this case study was to explore the intersection of discourse, collaboration, and pedagogy in the social construction of knowledge in online leadership preparation. Critical discourse analysis (CDA) informed the inquiry into the guiding question: What factors shape how students engage in the social construction of knowledge during asynchronous computer supported collaborative learning (CSCL)? In addition to student discourse and collaborative practices, the role of the facilitator will be considered. The sub-questions for the study are 1) How do students negotiate power during CSCL? 2) What factors influence CSCL?

Critical Discourse Analysis

Critically Framing Collaboration

Varying knowledge serves interests differently. Critical knowledge serves emancipatory interests, interpretive knowledge serves practical interest, and post-positivistic knowledge serves technical interests (Hoshmand, 1994). For this study, the critical perspective helps to focus on the imbalances in power among groups of students and how to use that knowledge to emancipate those oppressed by the specific situation being investigated (Paul, 2005). Critical theory spans all forms of research and perspectives. This concept goes beyond other perspectives because it not only is a means to share knowledge, but it also demands action to right the revealed oppression. Critical theorists claim that knowledge is a social construct, but expand that definition to define knowledge as the product “of agreement or consent between individuals who live out particular social relations, e.g., of class, race, and gender, and who live in particular junctures in time” (McLaren, 2009, p. 63). Critically framing these concerns supports the view that the educator and learning environment should empower learners to be confident participants in the collaborative process (Beach et al, 2009).
Au (1998) suggests that social constructivist perspective could be strengthened through a greater focus on diversity, giving greater consideration to issues of ethnicity, primary language, and social class. Literature on virtual collaboration identified the following critical factors that influence the collaborative process: culture, gender, race, socio-economic background, and ethnicity. While some articles addressed these critical concerns, even fewer were written within a critical epistemology (e.g., Bonk & Kim, 2003; Chan, Jahng & Nielsen, 2010; Jakobsson, 2007; Jeong, 2007; Jun, 2007). It has been suggested that online instructional providers, including instructors and instructional designers, should develop skills to deliver culturally sensitive and culturally adaptive instruction (Gunawardena & LaPointe, 2008, Parish, 2010).

**Overview of Methodology**

This transformative mixed methods case study used qualitative coding and quantitative analyses to explore CSCL. According to Creswell (2009), transformative mixed methods studies are those in which the researcher uses a theoretical lens as an overarching perspective within a design that contains both qualitative and quantitative data. This lens provides a framework for topics of interest. I employ the epistemological perspective and tools of critical discourse analysis (CDA) to support an overarching critical lens. Inspired by Freire (1993) the critical focus of this work will focus on factors that influence the manifestation of power during the process of CSCL in a graduate leadership course. Selective sampling was used to identify the courses and assignments to be analyzed. Student permission was deemed unnecessary because anonymity of the study participants was maintained by the professor and researcher, although students were made aware that their work may be used as research data in the syllabus. Students were also provided the option to not have their work as part of the research. Data collection was
completed through electronic document transfers from the professor and an interview of the professor. All methodologies were approved through the IRB review process.

The data from the CSCL experiences was from two separate semesters taught by the same professor. One collaborative assignment from each semester was the focus of the study. Data was summarized using descriptive statistics, quantitative analysis (non-parametric tests) and qualitative coding guided by the epistemological perspective and tools of critical discourse analysis (CDA). Findings from the CDA analysis will be discussed using literature and policy to understand the macro-level (policies and institutional influences), the meso-level (pedagogy and technology), and the micro-level (student characteristics and interactions) influences on the relationship between pedagogy, collaborative practice, and discourse and the implications for educational leadership preparation in online courses.

Limitations

This study investigates a single graduate level curriculum course taught by one professor over two years at a single institution. The pedagogy of the professor (philosophy, strategies) and related curricular and instructional choices influence the learning environment. Similar courses may operate differently in response to the professor teaching the course. While much of virtual education can be scripted or pre-planned, this course was not. Thus the changes made by the professor may not be revealed through the interview process. The geographic location of the institution provides a particular context for preparing educators and administrators (state standards, accreditation processes, certification exams, etc.) that may not be the case for similar courses in other contexts. Additionally, the geographic contexts and specializations of educators in the course were not considered. Their responses to the pedagogy and practices of collaboration may be informed by experiences related to their profession and personal contexts.
Diversity of the case was limited by the participants in the course, explorations of the lack of diversity are addressed in Chapter Four. Implications of the research can be used to inform practices of institutions with similar structure, policy, practices, and student population.

**Researcher Background**

According to Merriam (2009) the researcher is a human instrument and must reflect critically on the self as a researcher. As a middle-class White woman, my understanding of race, culture and gender might be different than the participant and students I am researching, and also different from other White women.

**On Culture**

Being raised in Miami, I have a unique perspective on the Latino culture, and also various social classes. Most of my friends were Latino, and I was known as “la Americanita” in their homes. Also, my parents were divorced, and while I was raised by my father, I visited my mother for holidays and summers, but she was more of a friend than a mother. My mother’s family was not the stereotypical White American family. They were involved in drug smuggling, they all spoke Spanish and lived between Florida and Costa Rica at times and had fake names. My mother remarried several times. From her second marriage, I have a half-brother whose father is from Ecuador. After graduating college, I also taught in Leisure City, a highly impoverished suburb in Miami-Dade County. While I am not Latino, the Latino culture is an intimate part of what defines me.

**On Gender**

As a woman raised mostly by a man that was also a cop, I also have a unique interpretation on gender. I find I prefer male bosses and authority figures, and I often challenge
women in power. These biases may have an influence on how I see the interactions between women.

**On Race**

Despite my father’s best friend being Black, I was told by my father at an early age that I was allowed to be friends with Black people, but I was not allowed to date them. This created a confusion growing up that took years to transcend. Even though I have Black friends, dated Black men, and lived in a racially diverse household, I realize there is a part of their lives that I may never understand.

As I advanced by academic career, my masters and dissertation programs were both delivered in a cohort form. In both of the programs, I made two “school” friends, meaning the person you sit with, the person you go to lunch with, the person you talk with about assignments, professors, and how you “totally have no life” because of school. Both of them were the only Black women in the cohorts. Maybe it was just my perspective, but both of the women seemed to struggle in the program. Additionally, they both seemed to have less voice in collaborative discussions. I found myself advocating for them on several occasions.

In my master’s program, there was an instance that a professor was saying rather offensive remarks about Black students. I sat with my friend, her and me glancing back and forth at each other in shock. Needless to say, I spoke out. I challenged the professor, while my friend stayed silent. In that moment, I began to question why did she not speak out.

In my doctoral program, I also made a friend, another Black woman. She had such great ideas, but rarely shared them. I found myself being her voice at times when she was hesitant to share. Like, “That’s a great point, [Andrea] was just saying how…” One time she wrote me a
note in class, it read “You are a true friend. Thank you.” I am not sure why she wrote me that note, I never asked her, but I realized my actions had an influence on her experiences.

**On Technology and Collaboration**

Additionally, my past experiences as an online student shape my understanding of the professor’s and students’ experience. I have always been interested in online learning and I have found it is effective and flexible. Entering the field of education through alternative certification, I first experienced collaboration in online learning in 2003 in the courses I took to meet certification requirements through a local community college in Miami. I found the online discussions awkward. Students would post and comment, layering their responses, but the asynchronous online discussions never seemed to pull participants together to a shared understanding, instead they were pieces to puzzles, scattered and disorganized. This theme continued as I progressed through my education career as I took online courses to meet certification requirements.

I pursued by masters and doctorate in the field of education leadership. In both programs I enrolled in courses focused on education technology research and project management. During that time, I began to see a transition in the ways that educators were facilitating online courses. As technologies changed, interactivity between students increased. Through my experiences, even with advances in the technologies, I began to realize that collaborating in these spaces was so much more difficult that in face to face environments. Everyone had different ability levels in relation to technology, and they had different interpretations of how to work together in an online environment. Much of the work was divided, and then put together at the end. Instead of reflected a shared understanding, it was more like individual art pieces in a gallery… different styles, different artists, shared space.
Also, there were differences in participation. In my first online collaborative experiences, I took the little bird approach, “chirping” frequently to make sure my efforts were noticed by the professor. Also, in group projects, I was focused on the grade, and with that focus I often took control in group situations, that is until I met another “me” in these spaces. Another woman, controlling, delegating, and it resulted in a struggle in how the “job got done.” From that experience, I realized that sometimes you have to give, you have to share power, and it’s not just about “the job,” it’s about working with other people. This experience began my desire to explore the issue of power in online spaces. I began to question, “How can online courses better enable collaboration and a more equal distribution of power.”

As a previous educator, I also used collaboration in my face-to-face classrooms. I was amazed at how engaged students were. Despite my class always being the loudest, I had the least problems with discipline, and my students’ test scores were great. I was trained on how to integrate collaboration in my classes using the Kagan method. As I transitioned my career to the world of education technology, I carried by collaborative pedagogy with me. With that said, I must admit I hold a bias towards the use of technology to improve education.

In my role at a private education technology company, I facilitated a workgroup that evaluated research projects. The first few times I facilitated the meetings virtually, I thought I could hear crickets chirping. There was such little participation and conversation from the team. I asked a co-worker after why he thought that was the case. He shared that their opinions normally were not asked for, and it was a completely different way than they had ever worked before. I realized that collaboration in workplace environments, although a desired skill, it is not something people just come with, it has to be developed.
Summary

These academic and social experiences, combined with the critically framed courses of my doctoral program opened the door to my interest in empowerment and collaboration in the field of leadership education. My doctoral coursework involved critically focused curriculum coursework that involved reading Pedagogy of the Oppressed by Paulo Freire. It was instrumental in my understanding of oppression. These experiences shape my perceptions and frame my understanding of the data I interpret.

Anticipated Benefits of the Study

The study will create awareness of how individuals and groups navigate the construction of knowledge within a group project requiring an online collaborative process. By critically framing the study of collaboration, I hope to create awareness of dominating structures that have an effect on individuals and groups involved in the online collaborative process. The goal is to help future online educators, administrators, course designers, and curriculum developers provide more empowering experiences for the students they serve and avoid replicating the oppressive structures that may be in place. As educators and curriculum leaders are preparing to meet the rapidly increasing virtual experiences, a more firm understanding of the perceptions and experiences of educators and students in virtual collaboration must be established to fully support this transition for students, teachers and administrators in both K-12 and higher education.

Definition of Terms

Definitions of Collaboration

For the sake of identifying a clear direction for the study, it is important to be unambiguous when referring to collaboration. There are various interpretations of how to define
Some allege that the terms for collaboration and cooperation are interchangeable (Zhan, 2011, Smith & MacGregor, 1992), while others claim that the research suggests there is clear distinction between these terms (Gunawardena, Weber, & Agosto, 2010). The significance of the discussion lies in the fact that “the relationship between viewing collaborative learning as a group process versus as an aggregation of individual change is a tension at the heart of CSCL” (Stahl, Koschmann, and Suthers, 2006, p.3). Building upon the outline of Gunawardena, Weber, and Agosto (2010), Table 1.1 helps to visualize the differentiation between these terms within the field of education.

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<td>Well defined relationship</td>
<td>Mutually beneficial</td>
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<td>(2000)</td>
<td></td>
<td>Shared meaning and goals</td>
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<tr>
<td>Hoyt (1978)</td>
<td>Separated</td>
<td>Shared responsibility</td>
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<td></td>
<td>Autonomous</td>
<td>Shared authority</td>
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<tr>
<td>Montiel-Overall (2005)</td>
<td>Focus on responsibility</td>
<td>Focus on joint planning and integration</td>
</tr>
<tr>
<td>Stahl, Koschmann, and Suthers (2006)</td>
<td>Group members negotiating shared meanings that are accomplished interactively in group processes</td>
<td></td>
</tr>
<tr>
<td>Rochelle &amp; Teasley (1995)</td>
<td>Work is divided and the individual products are assembled at the end</td>
<td>A continued attempt to construct and maintain a shared concept of a problem</td>
</tr>
<tr>
<td></td>
<td>work is divided and the individual products are assembled at the end</td>
<td>continued attempt to construct and maintain a shared conception of a problem</td>
</tr>
<tr>
<td>Smith and MacGregor (1992)</td>
<td>Assigning roles</td>
<td>Learning is an active, constructive process</td>
</tr>
<tr>
<td>Paulus (2005)</td>
<td>Division of labor</td>
<td>Knowledge creation through dialogue</td>
</tr>
</tbody>
</table>

Based on a synthesis of the literature provided in the table above, cooperation is a process that produces a learning product that is a combination of individually constructed works focused on the individual’s experience. It involves processes such as division of labor, task specialization, and individual responsibility. In contrast, collaboration is an active learning
process that has a co-constructed learning outcome with shared purpose, process or task that relies on mutual engagement; whereby participants, who live out social relations can construct a shared meaning to achieve complex higher learning concepts and encourage a deeper processing of information (Thompson & Heng-Yu, 2006). The following brief definitions provide a reference point for understanding their use in the analysis and discussion of findings.

Collaboration: Any shared active learning process that has a co-constructed learning outcome with shared purpose, process or task that relies on mutual engagement; whereby participants, who live out social relations in a time-bound experience, can construct a shared meaning to achieve complex higher learning concepts and encourage a deeper processing of information (Paulus, 2005; Smith and MacGregor, 1992; Thompson & Heng-Yu, 2006).

**Related Terms**

Computer-Mediated Communication (CMC): Any form of communication between two or more individuals with the ability to be in different geographies connected through web enabled tools such as audio conferencing, web conferencing, video conferencing, chat, instant messaging, white boarding, and application sharing (Ashley, 2003).

Computer-supported collaborative learning (CSCL): “A field of study centrally concerned with meaning and the practices of meaning making in the context of joint activity, and the ways in which these practices are mediated through designed artifacts” (Koschmann 2002, p. 18).

Collaborative leadership: The intentional and skillful management of relationships that enables others to succeed individually while accomplishing a collective outcome (Kolis, 2013).

Empowerment: In critical theory, it is understood as something that cannot be done for someone else, rather it is a liberation through self-discovery or “conscio...
in which co-learners are engaged (Freire 1993). Some say it is centered “on creating self confidence, self-expression, and interest in learning” (Ingles, 1997). Relative to collaboration it also may imply a “willingness to enhance the other’s power (for example, the knowledge, skills, resources, and so on) to accomplish the other’s goals increases their power” (Duetch, 2006).

Hegemony: Drawing on Critical and Gramscian theoretical foundations, hegemony is the social, cultural, racial, ethnic, sexual, ideological, linguistic or economic influence exerted by a dominant group. It is a process rather than a system or structure. Relying mainly on volunteerism and participation, it convinces individuals and social classes to subscribe to the social values and norms of an inherently exploitative system-resorting to coercive measures only in extreme circumstances (Stoddart, 2007; Wodak, 2009).

Marginalization: The act of relegating or confining a group of people to a lower social standing or outer limit or edge of society. Overall, it is a process of exclusion, most commonly focused on race. It expels a category of people from useful participation in social life and subjects them to severe material deprivation (Young, 2004).

Powerless: The powerless are dominated by the ruling class and are situated to take orders and rarely have the right to give them. Some of the fundamental injustices associated with powerlessness are inhibition to develop one’s capacities, lack of decision making power, and exposure to disrespectful treatment because of the lowered status. Powerlessness is the strongest form of oppression because it allows people to oppress themselves and others through indoctrination. (Freire, 1993)

Technology Leadership: Effectively using technology to improve school outcomes, processes, and communication in an ever shifting technological environment. Leaders must be
prepared to be critical consumers of technology, and use technology to improve their own practice and support the success of others.

**Overview of the Chapters that Follow**

Chapter Two includes a review of the literature supporting the theoretical foundations of collaboration, varying interpretations of collaboration, and the factors that influence the online collaborative experience (i.e., course design and interpersonal dynamics). Chapter Three contains the methodology and further explores CDA, while Chapter Four contains qualitative and quantitative results exploring student discourse, teacher pedagogy, and power. Chapter Five provides a discussion of the online collaborative experience through a three-tiered framework. The micro-level discussion considers the students’ backgrounds and strategies (discursive, collaborative), the meso-level discussion considers the influences of pedagogy and technology, and the macro-level discussion considers the policies and institutional influences. Recommendations and implications for future research will also be discussed in Chapter 5.
CHAPTER TWO

Literature Review Introduction

While there is an upward trend in online collaboration, how it is defined, delivered and evaluated varies based on theoretical foundations and pedagogical preferences. Where collaboration is a goal in developing educational leadership, a more clear understanding of the factors that influence it could help to guide instructional design and professional development. Studies of CSCL pave the path for those preparing educational leadership programs to identify means of assessing educator impact and help develop direction for current and future educators that may teach in distance education (Bunz & Rice, 2006; Del Litke, 1998). The following section highlights the historical literature providing the foundational knowledge on collaboration. This section is followed by a review of recent literature on collaboration and gaps in the knowledge base for understanding the relationship between professor facilitation, collaborative practices, and discursive strategies in the online learning context.

The Foundations of Collaboration

To understand the diversity in thought surrounding collaboration, it is helpful to investigate the pangensis of learning theories upon which it is based. Earlier methods of classroom instruction often used the didactic approach, a teacher-centric form of instruction in which information is transmitted from the teacher to student until mastery of exact knowledge is achieved (Kern, 2011). While more traditional instructional practices, often referred to as “recitation and regurgitation” or “book and lecture style” teaching, do still occur, as instructional pedagogy trends shift away from the “sage on the stage” towards student-centric environments,
this form of instruction for day to day classroom and virtual instruction as the norm is on the decline (Hannon, 2010, Lord, 1998). In contrast, the constructivist perspective, increasingly becoming the standard and preferred method taught in teacher and educational leadership programs, suggests each learner “constructs” knowledge or meaning through teacher facilitated learning experiences, whereby past and new knowledge is connected through learning processes and tasks (Akar, 2003; Copley, 1992; Tam, 2000). The agreement among constructivists degrades, however, when theorists attempt to interpret and explain how this act of learning occurs.

Jean Piaget’s theory of cognitive constructivism positions new learning experiences inside the domain of an individual’s head, termed “mental experience”, where each new experience is connected to a past experience as a function of the mind. As a behavioral science based theory, it suggests that any act of learning is interpreted as a function of internal qualities of perception or intellect (Piaget, 1962). While Vygotsky (1962) recognized the importance of Piaget’s theories, he refuted parts of his works suggesting they were too theory based and did not recognize the social and cultural context in which the learning occurred. Collaboration is a form of constituent involvement closely aligned to constructivist principles (MacLachlan, 2004).

Social constructivism reflects the view that people create knowledge from their social interaction with others and the objects in their environment. Vygotsky considered learning to be culturally constructed in a social process involving collaborative activities based on three main principles:

1. Meaning making occurs within a community that influences the learning of the individual.
2. Tools for cognitive development such as culture, language and important adults determine the pattern and rate of development.
3. The Zone of Proximal Development identifies that certain tasks can be accomplished individually, other tasks only with the assistance of other learners, and some tasks fall between these two extremes.

While mental capacity and readiness do influence the experience, social and contextual factors may have an even greater influence on readiness. A broad sampling of literature supports grounding studies of collaboration in social constructivist theory, especially studies involving online learning (Bunz & Rice, 2006; Stahl, Koschmann, Suthers, 2006; Zhan, 2010).

**Influences on Collaboration**

An initial search was performed using the three major education research databases Education Full Text, EBSCO Academic Premier Search, and ERIC. The search parameters included full text searches with varying of the terms “dialogue”, “Collaboration”, “collaborative”, “virtual”, “online”, and combinations “Distance Education”. Inclusion of the search term “dialogue” is justified because dialogue has a strong influence on what students learn and how they learn it. Dialogue on these platforms is critical to collaboration because it creates self-awareness of the learners’ understanding of the concept and awareness of others’ perspectives, which can lead to a shared perspective (Paulus, 2005).

Because education research falls within the social sciences, the study of collaboration must consider there are a number of variables that may have an influence on the collaborative process, from micro-variables such as individual learner characteristics to macro-variables such as the larger socio-political context that frames the experience. According to Stahl, Kochman & Suthers (2006), initial empirical research sought to explore group variables such as size, composition, nature of task, mode of communication, and so on, but found these variables interacted in a way that made it almost impossible to establish a causal link between the
conditions and effects of collaboration. Transitions in collaborative research have gone from focusing on how individuals function in a group to the properties of their interaction, and the role variables play in mediating interaction and tools for modeling and analyzing interactions (Dillenbough, et. al., 1996; Paulus, 2005; Stahl, Kochman & Suthers, 2006). A more process-oriented focus has led to studies investigating the role that the variables play and establishing parameters for effective collaboration (Stahl, Kochman & Suthers, 2006).

Figure 2.1. Factors that influence online collaboration.
While there are a vast number of variables that could be analyzed concerning the online collaborative learning process, several themes emerged within a review of recent literature. The majority of literature reviewed focused on two main themes, course design and social and interpersonal dynamics. The topic was broken down further into subcategories as shown in Figure 2.1.

In a discourse analysis of online learning, Paulus (2005) identified task type, available technology, group size, facilitation, incentive, individual accountability, and individual differences as context variables that may affect collaborative outcomes. Additionally, Nicol, Littlejohn & Grierson (2005) found shared knowledge within teams can be influenced by technology used, tasks, and teacher intervention. After analysis of literature, these variables helped to guide the discussion.

Course Design

Course design is the underpinning for sustaining collaboration within the distance education environment (Paulus, 2005; Doering, Miller, & Veletsianos, 2008). The use of “appropriately designed and implemented educational, social, and technological affordances is the foundation for stimulating, engaging, and maintaining collaboration amongst learners” (Doering, Miller, & Veletsianos, 2008). Because of the importance of design, design-based research has been identified as a research method to understand the context of the learning environment (Doering, Miller, & Veletsianos, 2008). Within the literature, four main themes emerged within course design including technology, task, format, and support. Before an online course even begins, each of these areas must be carefully planned to promote authentic collaboration.
Online education research is saturated with frameworks and models to guide course design (Adreas et al., 2010; Atkin and Cole, 2010; Calvani, Fini, Molino, & Raniere, 2010; Dickey, 2010; Fulford & Sakaguchi 2001; Jermann, Soller & Muehlenbrock, 2001; Frazier & Jeong, 2008; Jung, 2001; Lending, 2010; McLoughlin, 2002; Ruey, 2010; Soller, 2004; Tam, 2000). The goals of these models are to create a framework to support collaboration and guide evaluation. Figures 2.2, 2.3, and Table 2.1 are commonly cited frameworks for collaboration in education.

Figure 2.2, created by Redmond and Lock (2006), is an online collaborative framework grounded in social constructivism to guide pre-service teachers in their online experiences.

Figure 2.2. Online collaborative framework (Redmond and Lock, 2006).

Figure 2.3, a model by Garrison, Anderson, and Archer (2001) was created to assess outcomes in online collaboration in higher education course environments. A combination of
these two models could potentially guide educators’ instruction and student evaluation with the assumption that the educator understands the concepts accounted for in each of the models, supports critical and constructionists perspectives, and understands how to create, frame, and guide collaborative experiences with scaffolding techniques.

Figure 2.3. Practical inquiry model (Garrison, Anderson, and Archer, 2001).

While both models mentioned discourse, they do not explore what that looks like. Cecez-Kecmanovic and Webb (2000) fill that gap with a critical approach to collaboration and propose a communicative model of collaborative learning built upon Habermas’ theory of communicative action. Not to be confused with Computer Mediated Collaborative Learning (CMCL), the communicative model of collaborative learning (CMCL*) represented in Table 2.1, is both a pedagogical tool for practical application and a methodological instrument for empirical investigation of collaborative learning, especially in online environments. In comparison to Figures 2.2 and 2.3, CMCL* identifies what specific linguistic acts refer to and their intended outcome, with the ideal learning situation as the context for these exchanges. According to
Cecez-Kecmanovic & Webb (2000), the ideal learning situation is a critically framed collaborative activity in which each participant has unrestricted rights to participate and contribute. The ideal situation is a dominant orientation to learning, which “manifested as a wish to know, to interact with others to increase mutual understanding.” Table 2.1 highlights the ideal situation according to the model.

Table 2.1. Communicative model of collaborative learning (Cecez-Kecmanovic & Webb, 2000)

<table>
<thead>
<tr>
<th>Knowledge domains</th>
<th>Subject matter</th>
<th>Norms and rules</th>
<th>Personal experiences, desires and feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orientation to Learning</strong></td>
<td>Raising claims related to subject matter in order to establish mutual beliefs; providing arguments and grounds for a claim aiming at knowledge sharing</td>
<td>Acts establishing mutually acceptable norms and rules regulating, organising and directing the process of interaction</td>
<td>Acts expressing personal views, assessment of or expectations from the learning process aiming at mutual understanding</td>
</tr>
<tr>
<td></td>
<td>Testing and disputing claims with reasons, providing counter-arguments and grounds with the aim of reaching understanding</td>
<td>Acts of disputing (assumed or accepted) norms and rules seeking cooperative resolution</td>
<td>Acts expressing an individual reflexive relation to the learning process</td>
</tr>
<tr>
<td></td>
<td>Argumentation guided by the force of the better argument</td>
<td>Acts of cooperative assessment of legitimacy, social acceptability and rightness of individual behaviour</td>
<td>Acts expressing personal attitudes to cooperation, respect for others and their different opinions, views and values</td>
</tr>
</tbody>
</table>

Figure 2.4 was developed by Weisith, Munkvol, Tvedte, and Larsen (2006) as a conceptual framework for e-collaboration developed in industry. Cited in over 30 times according to Google Scholar, the framework provides a holistic perspective on collaboration subprocesses and tools, and has proved useful as the basis for the entire process related to defining, acquiring, and implementing a new solution for integrated e-collaboration. As compared to the education-based models, one key feature of the industry based model is that it frames the collaborative experiences in the context as Figure 2.3 does, but it also elaborates on varying influential factors and the tools in which the experience occurs.
Comparing industry and work place collaborative models with learning collaborative frameworks reveals a stark division of thought. Learning models focus more on supporting the individual and the interactions between individuals, while the workplace model focus more on the collaborative function and processes. In addition, the work place model frames the collaborative experience in the virtual space and technology. The distinction between fields can also be realized through an interpretation of Gunawardena, Weber and Agosto’s (2010) exploration of collaboration across disciplines, which demonstrates organizational science.
focuses more on mission, structure, planning, and resources. While education focuses more on meaning making.

According to the Higher Education Research Institute, job preparation is the leading reason students go to college (Pryor, Eagan, Blake, Hurtado, Berdan and Case, 2012). The rapidly growing globalized workforce demands for new employees to have a skill set that includes proficiency in collaboration (Bonk & Wisher, 2000; Chute, Thompson, & Hancock, 1999; Weisenberg & Stacey, 2005). According to a recent study of 1,709 CEO’s in 64 countries and 18 industries, collaboration was the number one trait CEO’s are looking for in their employees, with 75% of them calling it a critical skill (IBM, 2012). If knowledge, economically coined human capital, is the new market in today’s industrialized world, one path to supplying this growing demand is through developing students’ collaboration skills.

To better prepare learners for collaborative experiences in their careers, future research in the divide between organization and education collaborative models might have the potential to better prepare students for greater success in the workplace. Equally, preparing students with education framed collaborative experiences might have the potential to shift the workforce collaborative paradigm in the future.

**Technology.** In online learning, technology has a large influence on how knowledge is shared and created. Technology has the potential to support or hinder collaboration (Johnson & Johnson, 2004). How technology is used and navigated has potential to empower or silence learners in the online collaborative experience. Although many feel that technology is culturally neutral, this is an ethnocentric view. Many of the LMSs and technologies that are supported within them have been created in the Anglophone world, and reflect that culture (Godwin-Jones,
2012). There is a growing acknowledgment that technology and online learning are not culturally neutral (Farrah, Guth & Helm, 2012, Reader, K., Macfadyen, L., Roche, J. and Chase, M., 2004).

Computer Supported Collaborative Learning (CSCL) is a basic building block of online learning. Pedagogical shifts towards student-centric environments have led to the development of technologies to support knowledge production and collaboration (Hannon, 2010).

Acknowledging the computer is the hardware foundation for all virtual learning experiences, two other types of technologies were identified within the literature that enable collaboration. The first were course delivery technologies. These provide the platform for integration of various other collaborative technologies, which constitute the second category.

Trends in course delivery were identified in the coding and analysis of the literature reviewed. The majority of courses referenced in the studies were conducted completely online, although some studies that referenced using a learning management system (LMS) within a blended format, which is face-to-face learning combined with online learning. Course delivery technologies included Blackboard, Edmodo, Canvas, ConnectEDU, and Moodle. While the learning management systems only house the groupware technologies and shared workspaces that promote collaboration, the design of these systems lay the groundwork for further lesson design and implementation (Nicol, Littlejohn, & Grierson, 2005; Wang, Dannenhoffer, Davidson, & Spector, 2005). Flexibility within these systems is a key for utilization. Faulty learning management systems and lack of access have been identified to negatively impact the collaborative experiences of learners (Del Litke, 1998; Weiner, 2001; Berg, 2011). A survey of education leadership programs revealed that the greatest barrier to implementing virtual components in their curriculum was technological in nature (Sherman & Beaty, 2007).
In line with the use of technology to support DE, much of the literature discussed how collaboration could be supported with technology design and software. Computer mediated communication (CMC) technologies are widely used to support collaborative environments in distance education (Maushak, & Ou, 2007). Highly effective first generation collaborative technologies that have a history of successful use include discussion boards, emails, IM, and chat sessions. The literature suggests that discussion board threads should be pre-structured and have an established rationale for organization. Second generation technologies include wikis, webconferencing, blogs (Weblogs), podcasts, groupware, forums, and social media. Groupware technologies, also known as collaborative software can support learning through creation of a shared information workspace and shared files by structuring learning and resources. (Beldarrain, 2006; Stahl et. al., 2006; Daalsgard & Paulsen, 2009; Nicol, Littlejohn, & Grierson, 2005). Examples include collaborative project management tools (CPMT) like online calendars and shared spreadsheets. They also include collaborative management tools online white boarding softwares, Google Docs, and Sharepoint. With the increase of virtual and technology enables classroom collaboration, there has been a rapid increase in the availability of these groupware and sharing technologies. Limited research has been conducted to compare these resources. More recent use of mobile devices has also led to rapid use of mobile technologies that support communication in the forms of shared white-boarding apps, texts, and response systems (Rice & Bunz, 2006). Students can now access their LMS resources, text and video chat, and even take tests on these newer devices.

According to a recent meta-analysis published by the Department of Education, Means et. al. (2009) claim there is also an increase use of social simulations and collaborative role-play in interactive games. In these cited examples, teachers become the co-learners and facilitate the
collaborative experiences. Rickel and Johnson (2000) have even illustrate the enormous potential for face-to-face, task-oriented collaboration between students and synthetic agents in virtual environments. In virtual environments like Second Life, students adopt virtual representations of themselves and can interact and can engage in collaboration in virtual environments. While these technologies have been identified as effective means of support collaboration, managing the introduction of new technologies and facilitating their use is just as important to support learner interaction (Paulus, 2005; Spector, 2005; Maushak, & Ou, 2007; Beldarrain, 2006).

Task. Constructivist pedagogy dominates collaborative research, with an emphasis on project based learning, goal oriented tasks, and real-world problems. To design authentic collaborative experiences in distance education courses, two main factors to take into consideration are whether the tasks promote dialogue and effectively use supporting technologies (Paulus, 2005; Nicol, Littlejohn, & Grierson, 2005). The type of content presented in the task is one factor that can influence student participation and motivation in online learning environments, thereby impacting the collaborative process. The literature suggests that using “real life” situations within a meaningful context supports learning (Weiner, 2001, p.140; Berg, 2011). Beach et. al. (2009) found students were more engaged in authentic argument on a topic that had both real significance and impact in their lives. Similarly, Beal et al (2004) established “When given authentic choices and the opportunity to interact in a meaningful, relevant way, students are eager to learn” (p. 8). Interest in the course material may also have an impact on CMC in the course as well (Thompson & Sevenye, 2007). To foster greater collaboration in group tasks, instructors can provide accommodations by team characteristics and interests.
Merrill & Gilbert (2008) posit that a problem oriented tasks with peer-collaboration allows for student application of newly acquired knowledge. Smith and MacGregor (1992) agree that collaborative learning activities frequently begin with problems, and assert that rich contexts challenge students to practice problem solving skills and develop higher order reasoning. Paulus (2005) varies slightly from this thought. Application tasks, those tasks that have students apply content to solve a problem are more likely to promote cooperation over collaboration. On the other hand, synthesis tasks, tasks that require learners to discuss the content, are more likely to support collaboration over application tasks. Through collaborative tasks such as discussing, summarizing, clarifying, and integrating course content into an overall framework, learners gain a deeper understanding of the content (Belenich, Wisher, & Orvis, 2004). MacLachlan (2004) found that students felt chat and discussion tools had greater value in encouraging social learning than supporting problem solving and collaboration. In contrast, they felt email was more effective for this type of task, although they still felt some anxiety in connecting with their peers.

The divide between these findings suggest that a greater understanding of group dynamics should be a focus of future research to help online educators more effectively create tasks (Beldarrain, 2006). Future studies should focus on task design and effectiveness from a critical perspective as well as how some tasks may restrict open communication and sharing based on learner characteristics, linguistic skills, and past experiences.

**Format.** Format of collaborative discussions includes how groups are made up and whether they communicate synchronously, asynchronous, or both. Organization and planning is an important factor in designing online collaborative experiences. The influence of group design on the collaborative process was a theme throughout the literature. Small groups provided an inclusive experience for all learners and allows for more accountability within the group and
greater chance for collaborative dialogue (Paulas, 2005; Thompson, & Heng-Yu, 2006; Maushak, & Ou, 2007; Spector, 2005). Some studies also suggest that group design should involve defined roles with revolving group leadership (Slaghter van Tryon & Bishop, 2009), while others support ill-defined problems and group initiated guidance (Sims, 2008). When identifying the format for online collaboration, factors that may influence choice based on the literature include learner characteristics, group size, task, roles, and intended outcomes.

Once group dynamics are planned, how those groups collaborate was also a common topic in the literature. Synchronous technologies include those that occur in real time, while asynchronous communication is less bound by time. Most dialogue is supported by synchronous and asynchronous communication through message threads, video chat, debates, wiki’s discussion boards, web-based chatting, email, blogs, and electronic chats (Stahl, et. al., 2006). Choice of format should be influenced by task, as neither has conclusive support to be better than the other in support of collaboration (Mabrito, 2006; Maushak, & Ou, 2007). Although, asynchronous discussions have the potential to support more participation when students are not bound by the constraints of time (Zorko, 2009).

Support. Another theme identified within the literature is the need for support during online learning. Students and instructors in interviews have identified that by providing support in key areas, the collaborative process is enhanced (Friend Wise, Padmanabhan, & Duffy, 2009). Paloff and Pratt (2005) identified factors that impact success during collaborative learning include creating the environment, or addressing the rules of engagement, modelling the process, guiding the process, and evaluating the process. Other areas of support include interpersonal skills development and social support, Netiquette, technology support, and conflict resolution.
Regardless of the collaborative technology chosen for the course, there is a resounding consensus within the literature suggesting that the course and its technology be easy to use and access (Paulus, 2005; Doering, Miller, & Veletsianos, 2008; Nicol, Littlejohn, & Grierson, 2005). To engage learners and increase likeliness of participation, it is suggested that instructors prepare learners by offering the training needed to best use the technologies and opportunities for guided practice before they are graded. This will limit the frustration students will encounter when they must interact using these technologies.

To facilitate collaboration, research on course design and participation suggests providing a relationship building activity in addition to a course orientation. This type of activity allows learners to get to know one another and provide the teacher with the opportunity to model expected styles of interaction (Beldarrain, 2006, Maushak, & Ou, 2007; Wang, Dannenhoffer, Davidson, & Spector, 2005; Slagter van Tryon & Bishop, 2009). Instructors should model best practices (Wheeler, 2006, Smith, 2008) and encourage emotional expression, thus facilitating a social presence within the class. In an evaluation of technologies that support collaboration in virtual education, Beldarrain (2006) suggests supporting social presence, or the feeling of belonging, promotes collaboration.

Paloff and Pratt (2006) explore the impact of preparedness as an effect on success and suggest that if students are clear about the nature of the activity and how to complete it, they are more likely to be successful with minimal teacher intervention. Things like reviewing the syllabus and and discussing expectations of assignments can support student success in online courses.

For collaborative discussions, modeling and scaffolding collaborative experiences has been identified as a technique to support collaboration (Jeong & Jeong, 2007, Weinberger et. al.
2005). Just because students are put into groups, does not mean that they will collaborate, but by providing guidance, the likeliness of collaboration will increase (Maushak & Ou, 2007). In an study that used scaffolding to promote more effective collaboration, Goldstien (2009) suggested that one student seems to often have more decision making power, which may result in some student having missed opportunity for engagement and participation, thus disadvantaged in their rhetoric skill development. The results of the study were inconclusive, although the research did not critically frame those power imbalances deeply. Simonson et al. (2009) is support of scaffolding suggested in threaded discussions, instructors’ involvement should be higher in the beginning of the course, and as learners take more responsibilities for their own learning later in the course, the instructor posts should decrease, primarily just to keep the discussions on track. Other techniques to support collaboration include using argument scripts or discussion feedback. More recently, there has also been an explosion of new software programs to support online collaborative discussions through dialogue identifiers. Environments and lessons structured with guidance, teacher communication, and pacing support lead to increase success and student motivation (Weiner, 2001; Del Litke, 1998).

Further, by design, there must be a measure to hold all teammates accountable. Facilitators should also establish a support system for groups, including established consequences for “social loafers” and those students that do not interact within group norms, This is further enforced by the group (Thompson & Heng-Yu, 2008). Hungwei, Heng-Yu, Chien-Hsin, and Ling (2009) suggest the use of measuring teamwork performance, collaborative attitude, and satisfaction with a scales to support the collaborative process to support groups and provide accountability. While it was not addressed in the literature, this type of support provides voice for some learners in the context of the collaborative activity.
Social and Interpersonal Dynamics

A common foundation for online research is Moore’s theory of interaction. According to Moore (1989) there are three types of interactions: the learner-content interaction, the learner-teacher interaction, and the learner-learner interaction. Mabrito (2009) claims that instructor–student and student–student interaction should be a key feature of any interactive online course. Hawisher and Pemberton (1997) report a correlation between the success of an online course and the value instructors placed on communication with and among students. Similarly, Bull, Kimball, and Stansberry (1998) found that learning is more effective in an online course if there is interaction among learners.

In addition to teacher-student and student-student interactions, dialogic or linguistic, and learner characteristics may also influence the online learning process. While it may seem instinctive to assume that each of these could be accommodated for in course design, not all outcomes can be reduced to functions of course design.

Teacher-student influence. The traditional power role of the instructor is transitioning towards that of a facilitator or data manager as education shifts from teacher-centric to student centered learning. To prepare for this shift, design must accommodate this increased student voice to support pedagogical best practices and flexibility of support from the facilitator (Thompson & Heng-Yu, 2006; Sims, 2008; Hungwei, T., Heng-Yu, Chien-Hsin & Ling, 2009). McKinley (1983) suggests that “a free exchange of ideas, opinions, and feelings is the lifeblood of collaborative learning” (p. 16). Participation in a well-designed collaborative activity can act to empower all participants. Duetch (2006) explains,

Willingness to enhance the other’s power (for example, the knowledge, skills, resources, and so on) to accomplish the other’s goals increases their power. As the other’s
capabilities are strengthened, you are strengthened; they are of value to you as well as to the other. Similarly, the other is enhanced from your enhancement and benefits from your growing capabilities and power.

On the topic of teacher power and student empowerment, Hramiak and Irwin (2010) explored how the teacher and the technology itself had power in defining elements learning community and participants’ expression of identity. Lapadat (2007) also explored the concept of teacher power. Although it was not the focus of the study, Lapadat shared that the teacher, because of their position of power, can influence the perspectives of learners to argue towards the teacher’s epistemological beliefs in hopes to align themselves with the teacher to be considered good students (Lapadat, 2007).

In a study on student centered constructivist learning activities in an adult nursing class, Bergstrom (2010) found students felt they had a deeper understanding of the content than the didactic approach, however expressed concern with limited instructor feedback and direction. Critically framing these concerns, the teacher and learning environment should empower learners to be confident participants in the collaborative process (Beach et.al., 2009). The teacher must be cognizant of his or her role in the learning process and must analyze the course design to ensure equal student empowerment, so that no student is more disadvantaged than the rest based on instructional design.

Based on the literature reviewed, areas identified in need of more research include studies identifying diverse populations as target participants (Beal et. al. 2004; Berg, 2011; Goldstein, 2009; McGarvey, 2010; McLean, 2010; Weiner, 2001) and exploration of cultural, technological, and educational hegemonies (Farrah et al, 2012, McLaren, 2009, Thompson & Sevenye, 2007). While there was a clear direction in the literature towards student empowerment, future research
could explore development of tools to evaluate student empowerment from both teacher and administrative perspectives, as well as more research on student empowerment in K-12 environments.

**Student-student interaction.** According to Stahl et. al. (2006) the role of the computer is second to the interpersonal collaboration process among students. When creating groups, preferably smaller in number, they should be developed into a community of inquiry. Within these learning communities there must be communication, trust, respect, and shared group norms, goals and understandings (Beldarrain, 2006; Smith, 2008; Slagter van Tryon, & Bishop, 2009; Thompson & Heng-Yu, 2006; Wise, Padmanabhan, & Duffy, 2009; Wang, Dannenhoffer, Davidson, & Spector, 2005). They must also have a shared understanding of the material and tasks. Group members must be able to provide mentoring, critique, and have consequences for not adhering to group norms. Groups must adhere to identified roles or create their own, with revolving leadership. Pilkington and Walker (2003) suggest assigning roles in CMCL to impact group dynamic and behavior. Ikpeze (2007) also explored the role of the facilitator in groups, finding that participation and group interaction, group processing behavior, and leadership structures/students' characteristics, all affect learning in small online collaborative groups.

Further, group members must be aware of others’ past experiences, motivations, personal strengths, and have a team orientation with fair division of labor, place value on communication, and establish a sense of trust between one another. (Hungwei, Heng-Yu, Chien-Hsin, & Ling, 2009; Koppi, Bogle & Bogle, 2005; Merrill & Gibert, 2008). As students work together in the collaborative process, Tuckman (1965) suggests that their interactions follow a sequence of stages including forming, storming, norming, performing as they grow, work together and find solutions. As students navigate these stages, varying types of interactions will emerge as they
build trust and become more confident participants. As a way to overcome conflict and mitigate differences, Thompson and Heng-Yu (2006) suggests instructors should advocate the five C’s of communicate, cooperate, compromise, complement, and commitment within all group interactions (Ku, Cheng, & Lohr, 2006 as quoted by Thompson, L., & Heng-Yu, K., 2006).

When assigning activities, as previously mentioned, the trend is towards constructivism within a collaborative setting to promote learning communities with shared goals, norms, outcomes and a mutual respect.

**Dialogue indicators.** Because dialogue has a strong influence on what students learn and how they learn it, the dialogue on these platforms is critical to collaboration because it creates self-awareness of the learners’ understanding of the concept and awareness of others’ perspectives, which can lead to a shared perspective. “Collaborative dialogue for new knowledge construction, then, may be one intended outcome of educators assigning group tasks in online learning environments” (Paulus, 2005). When the goal is to promote collaborative dialogue within a group, understanding the nature of the dialogue that occurs is useful in course design (Paulus, 2005). The literature examples suggest there is limited diversity of text sources. Most of the dialogue originated from synchronous and asynchronous message threads, transcripts of discussions, debates, wiki’s discussion boards, web-based chatting, and electronic chats.

There is a trend within distance education research to categorize dialogue into coding schemas to identify types of interactions (Maushak & Ou, 2007, Paulus, 2005; Wheeler, 2006). Maushak and Ou (2007) code dialogue into five interaction: Mutually Constructing Knowledge, Mutually Negotiating, Mutually Supporting, Group Facilitating, and Group Processing. (Maushak & Ou, 2007). Paulus (2005) used a conceptual versus non-conceptual coding schema. While Wheeler (2006), with the most detailed coding system, identified 12 different types of dialogue within the
coding schema. Both task type and climate seem to have an influence on collaborative dialogue according to the literature (Hawkes, 2007; Ke & Carr-Chellman, 2006)

Distance education collaborative dialogue follows suit with this tendency. Text coding varied on task type, intent, theme, frequency, time posted, patterns of learning behavior, pattern of response exchanges (Calvani, 2010; Chan et. al., 2010; Pilkington & Walker, 2003; Chio and Kang, 2010; Frazier and Jeong, 2008; Ikpeze, 2007, Jeong, 2007; Lending, 2010). Jeong (2007) on the other hand explored the effects of language on group dynamics, identifying means to promote higher levels of discourse between participants. Along the same vein, Lapadat (2007) explored the discourse devices that create coherence, maintain community, and negotiate discussions.

Many new computer based systems have been created to analyze and guide collaborative dialogue between learners in DE environments including systems that monitor the state of interaction, reflect actions and those that offer advice such as COLER (Jermann, Muehlenbrock & Soller, 2001). In a study of Computer Mediated Learning Environments (CMLE), Gonzalez and Suthers (2002) used COLER (Collaborative Learning Environment for Entity-Relationship Modeling) which is a web-based system to guide small groups to develop group solutions. The system offered advice to students to mediate the collaborative process from a personal coach, which students could accept or reject. Suggestions that were identified as useful were those that pointed out differences between individual solutions, encouraged them to share and discuss their ideas, explain their reasoning, contribute to the group diagram, and suggest they verify their work when their contribution to the group was different than their original solution. In a comparison of face-to-face and online teams, Lui and Burns (2007) used the TEMPO coding system in order to develop a discourse analysis for each team. A modification of the “time-by-
event-by-member pattern observation” (TEMPO) process coding system (Futoran, Kelly, & McGrath, 1989) was also used by Straus (2008) in a similar empirical study to analyze group processes.

According to CDA frameworks, the question to ask of these texts is: Are the linguistic details in these articles being framed in the larger social, historical, and cultural contexts in which the interactions emerge (Rogers et. al., 2005). A scrutiny of the study by Hramiak and Irwin (2010) reveals the unique analysis of elements of grammar such as pronoun use for patterns across them in the areas of community boundaries, lexis, culture, and power revealed the pre-service teachers’ experience coming to know their identity as a teacher. Also, Jun’s (2007) quantitative CDA, which use frequency analysis, established a weak tie to the larger social context by stating, “This study explored the extent to which the structural power inequities that exist in society are reproduced in an online classroom of adult graduate students” (p. 376). However, the researcher did not place the results of the findings within the larger cultural context in which the interactions emerged. While dialogue is being explored as a source to understand the collaborative experience, few researchers have critically framed their research.

**Intrapersonal.** Because each learner is different, it cannot go unsaid that individual differences must be accommodated when designing a collaborative learning environment (Beal et.al., 2004; Del Litke, 1998; McGarvey, 2010). Personal experience, learning preferences, and social and physical characteristics have all been identified to influence the collaborative process.

Critically framed studies explored the socially and physiologically framed learner characteristics as a means to understand their effect on groups (Bonk & Kim, 2002; Chan et.al., 2010; Hramiak and Irwin, 2010; Jakobsson, 2006; Jeong, 2007; Jun, 2007). Critical factors
identified to influence the collaborative process include culture, gender, race, socio-economic background, and ethnicity.

Because the identity of individuals participating in computer mediated communication (CMC) is limited to what they have shared and the interpretations of their communications by the receiving party, there is a higher threshold for anonymity, but also a greater subjectivity to interpreting the source of those assumptions. Unless course design specifically includes a task for participants to identify such characteristics, identities can become blurred. Weiner (2001) purports that race and ethnicity are less obvious online, which allows more open communication and less room for prejudice and discrimination to spread as freely. In a study of online learners, students felt that because of the anonymity, they were judged less with regards to their gender, ethnic background, and appearance. Also, empowerment through collaboration is suggested as a means to transform the world around them (Beach et.al, 2009).

Collaborative group studies has identified gender as a factor that can influence group discussions. Jun (2007) conducted a critically framed quantitative study exploring gender and race. He found that online environments support theories of gender privilege but undercut race privilege, although inequalities still existed with regards to race. Jeong (2007) explored how gender influenced group discussions and how males post twice the number of personal rebuttals, but gave no context within the discussion in relation to gender empowerment. Chan, Jahng and Nielsen (2010) identified gender as one factor that could influence successful collaboration in small groups, but gave no direction of its implication for group dynamics or learner empowerment. Using quantitative analysis, Jakobsson (2007) determined gender had no impact on learning outcomes, although women had less experience with technology and were less satisfied with the online format. Further, one study identified men to be more independent,
whereas men from diverse backgrounds are more willing to learn in a “discussion based” or collaborative manner (Weisenberg & Stacey, 2005). Ultimately, as identified by Stahl et. al. (2006), effects of gender on collaborative learning may be influenced by the context in which the collaborative process occurs including age, domain, teacher, and so on.

Factors such as culture, ethnicity, and socio-economic background were also explored. While having the ability to collaborate in online environments is advantageous as a skill for the workplace, some groups based on cultural norms tend to be at ease with online collaboration, while others tend to rely on more independent learning methods (Weisenberg & Stacey, 2005). Jakobsson (2007) also explored socio-economic background and ethnicity as factors that may affect learning in collaborative DE environments. He found students whose fathers had a lower educational background scored higher than those who had a father with higher education.

Further, the foreign language group (those participants that were not native speakers) expressed more satisfaction from the course, although performed poorer than their native speaking peers did. Pilkington and Walker (2003) also explored differences in native versus nonnative speakers, but found that non-native speakers outperformed their face-to-face peers in group activities. Weasenforth et. al. (2002) highlight the ability of these types of learning environments to have the capability to empower learners, especially those from English Language Learners (ELL) backgrounds in asynchronous discussions. Disappointingly, both Jakobsson (2007) and Pilkington and Walker (2003) failed to tie the identified differences in student characteristics to the oppressive structures that may be influencing these student populations. Future research to clarify the differences highlighted above could offer insight to teachers and administrators.

student behavior, and recommended that cultural differences need to be taken into account to foster cross-cultural online collaboration. In the study by Beach et. al. (2009), student said they felt they lacked power to create change in real world situations and lacked confidence in collaborative structures, especially those from marginalized populations. Based on this data, as well as the characteristics of the collaborative members, equal participation in the knowledge construction may be inhibited if interaction is dominated through hegemonic discursive practices. Awareness of cultural and linguistic diversity and the encompassed diversity in communication styles is also important when designing courses and fostering collaboration (Sims, 2008; Scarino, Crichton & Woods, 2007; Koppi, Bogle & Bogle, 2005). It has been suggested that instructional providers, including instructors and instructional designers, especially those working in online environments should develop skills to deliver culturally sensitive and culturally adaptive instruction (Gunawardena & LaPointe, 2007; Parish, 2010).

In addition to critical elements, learner past experience plays a large role in collaboration because of its influence on individual schemas developed to process social situations (Friend Wise, Padmanabhan & Duffy, 2009; Slagter Van Tryon & Bishop, 2009). Even the simplest characteristics such as having taken an online course before may have an impact on computer mediated communication (Thompson & Sevenye, 2007). Both student and teacher awareness of these influences can only enhance collaboration.

According to McGarvey (2010), some students felt that requiring online collaboration defeated the purpose of an online course because it reduced the flexibility of the course, which was the original reason they enrolled in the online course. This was addressed in the study by Beal et. al. (2004) by identifying the learning styles of the participants prior to assigning the project. In most cases, students who worked in groups could opt in or out of the group
depending on the assigned. Learning styles and preferences can affect collaboration. Because each learner has a unique learning style and method of processing knowledge, the individual learner must assess their own learning style to understand the effectiveness of this form of learning. Adolescent students involved in a Russian Cultural Exchange project by Beal et. al. (2004) showed increased motivation and engagement with their collaborative partners because the curriculum was framed to meet the needs and interests of the students involved as defined by their interest surveys prior to engaging in the project.

The use of the term literacy has evolved as emerging skill sets have been identified and developed with advances in technologies. Media literacy, computer literacy, digital literacy, and information literacy seem to also fall under the umbrella of these 21st century skills or literacies (Bunz & Rice, 2006). Some characteristics of successful DE learners that have been noted in the past are active listening skills, a positive attitude, diligence, and the ability to work independently, as a result these skills would also indirectly have an impact on the ability of learners to be successful in online collaborative experiences (Sherry, 1995). In a literature review of collaboration published by Pearson Learning, Lai (2011) suggested that because collaboration has been identified to trigger critical thinking skills, those students whose strengths lie within critical thinking may be better collaborators in face-to-face environments, which may hold true for online learners as well, which include tasks such as negotiation, compromise, turn taking. It was identified that collaborative groups should have mutual respect, trust, and tolerance, but no guidance was provided on how that equates to a skill, and how to develop it when needed. Further, in a study to identify support activities to develop collaboration skills in online university students, Napier and Waters (2001) outline the procedure and its success, but do not identify what collaboration skills were enhanced. Johnson and Johnson (2004) claim the
greater the participants’ teamwork skills, their learning will be of higher quality and quantity. From this literature, there is limited information to indicate which skills may have a positive or negative impact on the success of a student involved in the online collaborative process, and should be a concern for future research. Cecez-Kecmanovic and Webb (2005) identify types of linguistic acts responsible for establishing, maintaining, and carrying out collaborative learning as identified in Table 2.1. Further research equating those outcomes into skills may be one area of future research. Even a search of “collaboration skills” renders results that discuss how to prepare learners and ways to develop collaborative skills, but at no point do they list what those skills are. This gap in research should be a priority in future research.

**Summary of the Literature**

An analysis of virtual collaborative environments reveals a complex, personal, and subjective view of collaboration. While there were references to empowering students (McLoughlin, 2002; Chio and Kang, 2010; Ikpeze, 2007, Lapadat, 2007) and student and teacher roles (Hramiak and Irwin, 2010; Bonk and Wisher, 2000; Pilkington and Walker, 2003), understanding of interpersonal dynamics and relationships between individuals can be valuable when designing online courses. It is essential to go beyond the analysis of identifying types of interactions when the goal is collaboration. To accomplish true collaboration, the dialogue must be analyzed critically to explore the interplay of group members and the power some have over others in group interactions, and ultimately group understanding and learning.

Additionally, the majority of collaborative-centered literature that explores dialogue lacks a critical perspective. Dialogue on these platforms is critical to collaboration because it creates self-awareness of the learners’ understanding of the concept and awareness of others’ perspectives, which can lead to a shared perspective (Paulus, 2005). When the goal is to
promote collaborative dialogue within a group, understanding the nature of the dialogue that occurs is useful in course design (Paulus, 2005).

Finally, the literature also fails to explore these experiences from a holistic view. When text is explored, it is often not being framed within the larger circumstance it occurs in. According to Kerschner and Erkens (2013) current CSCL research lacks a contextual frame. Future research could focus on framing the social experience by exploring the role of the teacher and other school or system based influences. Providing a thick description helps achieve external validity and helps the reader evaluate the extent to which the conclusions drawn are transferable to other times, settings, situations, and people (Lincoln and Guba (1985).
CHAPTER THREE

Methodology

The purpose of this case study was to explore the social production of knowledge in relationship to professor facilitation, student collaborative practices, and student discourse. The context of the case study was as online group project assigned to students enrolled in a masters level education curriculum course taught by a professor in 2012 and 2013. By understanding the power dynamics among students collaborating virtually to develop a group project, educators, leaders and policy makers can be better prepared to empower learners through design and facilitation in these emerging spaces.

The study is a transformative mixed methods study that uses qualitative and quantitative methods. The study data includes policy and course documents, transcripts from online discussions, and interview transcripts to support an understanding of the collaborative experience. Primary and secondary coding of the data were completed. Quantitative analysis of power language and collaborative interactions were completed. Qualitative coding was used to triangulate the data. Critical discourse analysis is used to tie together the findings and themes. Figure 3.1 helps to define the study.

Researcher’s Stance

Throughout my career, I have been fortunate to hold many roles in the field of education. I have been an educator, an administrator, and a technology advocate and trainer. From each of these roles, my understanding of the power of online collaboration has developed. I have seen engagement of students in the poorest schools, educators engaging in inquiry, and policy makers
amazed at the potential of this type of learning. Through personal experiences, scholarship and my work, I have seen first-hand the power of promotive actions through collaboration.

Collaborative leadership and technology leadership are two topics that I feel highly vested in. I believe that educational leaders should be leaders in their schools in the use of technology, as they are the key to successful use. Additionally, collaboration is the foundation to an empowering learning environment. My personal investment in this study is my hope that education leaders will see the value of online collaboration within schools for both student and teacher empowerment. For the purpose of this study, I sought to understand how participants construct knowledge in the online graduate level curriculum leadership course. I based it on the theories of social constructionism which emphasizes the interactions between people and how they use language to construct their reality.

**Role of the Researcher**

As the researcher, I am a tool in the research process. In qualitative research, my role involves interpreting experiences of the student and teacher based on the transcripts and the interview, and then constructing meaning from those interpretations (Merriam, 2009). The case study methodology requires the researcher to be organized as she makes sense of the data and requires self-reflection. Researcher biases should be bracketed to prevent personal emotions and assumptions may influence my interpretations (Merriam, 2009). To avoid the biases I wrote about my own experiences, which are summarized in the sections Researcher’s Background and Researcher’s Stance in Chapter One and Chapter Three. Research that involves interviewing also requires the researcher to be skilled, which takes practice. In my role as a Curriculum Specialist, I would interview teachers on a weekly basis to write about their experiences. This helped to develop my interviewing skills, the foundation of which was established in my
qualitative methods courses. This practice lead me to understand the flexibility required when asking open ended questions. Throughout the transcript coding process, I reflected critically on my assumptions, and recorded these reflections as comments when I would read the transcripts. To assess the transcripts from multiple angles, I read them multiple times, each time looking at a different quality of discourse. As themes and ideas emerged, they were recorded as comments in the transcript documents.

Social constructionism situates experiences in the social experiences, but claims the knowledge constructed in these experiences is a result of the discourse between participants (DeCiccio, 1988) and places less emphasis on the cognitive process that accompany knowledge (Andrews, 2012). Specifically, it supports the idea that language “makes thoughts and concepts possible and not the other way around. Language predates concepts and provides a means of structuring the way the world is experienced” (Andrews, 2012). Social constructionism accepts that there is an objective reality (ontology), but is more concerned with how knowledge is constructed and understood (epistemology) (Andrews, 2012).

From a social constructionist view of knowledge, meaning cannot be derived directly from an object, as all meanings are a construct of our social interpretation of those objects (Kim 2001). Thorne (2003) explains, Cultural artifacts such as internet communication tools are produced by and a product of socio-historically located subjects. These artifacts take their functional form and significance from the human activities they mediate and the meanings that communities create through them” (p.21). The constructionist lens also allows leadership to be understood as a social construct. It is something that happens when people construct meaning in action (Ospina & Shall, 2001).
From a critical perspective, this is significant because as educators and leaders socially construct shared understandings in these emerging spaces, traditional dynamics of power and established practices can be challenged and overturned. According to Freire (1993) collaboration is the process which human dignity is achieved. From a critical epistemology, my role is to explore the data, uncover hidden meanings, search for disagreements in power through analysis of the texts and interactions and make connections between phenomena in the experiences. To realize those aims, I carefully interpreted the transcripts and multiple sources of data to inform my findings using critical discourse analysis (CDA).

**Research Design**

In this transformative mixed methods case study I use both qualitative and quantitative methods through an overarching lens of critical theory, namely critical discourse analysis (CDA). According to Creswell, transformative mixed methods studies are those in which the researcher uses a theoretical lens as an overarching perspective within a design that contains both qualitative and quantitative data. This lens provides a framework for topics of interest (Creswell, 2009). Transformative mixed methods is a preferred methodology for investigating issues of social justice (Mertens, 2007). Creswell and Clark (2011) assert the main advantages of a transformative study include

- The researcher positions the study within a transformative framework and an advocacy or emancipatory worldview.
- The research helps to empower individuals and bring about change and action.
- Participants often play an active, participatory role in the research.
- The researcher is able to use a collection of methods that produces results that are both useful to community members and viewed as credible to stakeholders and policy makers.
Quantitative methodologies explore the question of “if.” In this study the quantitative analysis of power through text can be explained through student characteristics, and if there was a difference between collaborative interactions across gender, race and ethnicity. Qualitative case study methodology explores the “how” and provides tools for researchers to study complex phenomenon within their context (Baxter & Jack, 2008). The study explores the process of CSCL and how various factors influence that process. According to Stake (1995) instrumental case studies examine a particular case to provide insight into an issue. The case plays a supportive role to facilitate an understanding of the process of CSCL in leadership preparation programs. The case was chosen because it is expected to advance our understanding of this process.

The mixed method case study uses concurrent transformative strategy to as a way to compare findings between qualitative and quantitative data through the critical paradigm (Creswell, 2009). CDA was chosen because it focuses on the use of text. Online courses contain a trail of artifacts in the form of text from which meaning can be uncovered and explored. Additionally, it situates that text within a socio-cultural experience in a location and time. This helps bind the exploration of the experience (Baxter & Jack, 2008). Providing the context of the experience contributes to understanding the “how.” CDA provides a framework for examining the collaborative experience and a method for collecting data.

This methodological choice contributes to the literature on CSCL framework that support collaboration and guide evaluation. The CDA methodological framework situates the experience of CSCL in the virtual space and technology and focuses on the collaborative process as seen in workplace models like the model described by Weisith, Munkvol, Tvedte, and Larsen (2006). The proposed methodological framework also explores the interactions and the experience of the
individual as seen in Redmond and Lock (2006) and the outcomes (social production of knowledge) as described in Garrison, Anderson, and Archer (2001). Finally, this framework includes a focus on critical dialogue as discussed in Cecez-Kecmanovic and Webb (2000).

![Critical Discourse Analysis framework applied](image)

**Figure 3.1. Critical Discourse Analysis framework applied**

In support of this methodological framework Kerschner and Erkens (2013) also suggest a similar three-tiered framework for investigating CSCL exploring the Level of Learning, the Unit of Learning and the Pedagogical Measures. They too cite a lack of more contextual research in the current CSCL literature, especially relating to the role of the educator. Despite mentioning social empowerment, their framework lacks a critical frame, further supporting the usefulness of the CDA methodological framework of this study.

**Participant Selection**

According to Miles and Huberman (1994) there are six criteria upon which to evaluate selective sampling:
1. The sampling strategy should be relevant to the conceptual framework and the research questions addressed by the research.

2. The sample should be likely to generate rich information on the type of phenomena which need to be studied.

3. The sample should enhance the ‘generalizability’ of the findings.

4. The sample should produce believable descriptions/explanations.

5. Is the sample strategy ethical?

6. Is the sampling plan feasible?

I worked with my dissertation committee to identify participants for the study. The first participant asked volunteered for the study. She was chosen for several reasons. 1. The participant chosen had experience using collaboration as an instructional strategy in the online setting. 2. Her focus on critical theory aligned well to the research question and conceptual framework. 3. Gathering data across two semesters increased the likeliness that there was a rich data set to explore a varied set of instructional techniques, discourses, and technologies. The broad data set helped make generalizations about student discourse and professor pedagogy.

The professor. Through selective sampling, the professor that volunteered for the study taught an online graduate curriculum course available to all College of Education graduate students. The participant in the study was a graduate-level professor at the large public university in the South East. She is a middle aged Latina woman that identifies as mixed race and ethnicity, both African American and Mexican American. In addition to teaching graduate level curriculum courses, she critically frames much of the work students engage in while enrolled in her courses. Her research interests include curriculum leadership, culturally
conscious leadership, critical theories, and anti-oppressive education. She has been teaching the curriculum course explored in this study since 2009 and first taught it online in 2012.

Her experiences situate her well for the answering the questions of this study as she has experience as an online educator, and is knowledgeable in the field of curriculum and is focused on empowerment. In addition to providing transcripts and documents, the professor was interviewed, and responses from her interview were used to inform the research questions and clarify questions from the student transcripts. The format of the course was ideal for discourse analysis because it captured the communications between students and between the professor and her students, and these artifacts were housed within the LMS. In addition, the professor’s critical lens helped to provide opportunities where students would be exploring curriculum focused on diversity.

**The students.** Each of the 33 students involved in this study comes from a unique background, differing in skills, resources, careers, culture, and social norms, just to name a few. An exploration of their differences helps the researcher and reader come to understand their experiences. The professor provided demographics of online students. She provided the racial categories based on appearance such as skin tone from photos of students in Canvas connected to their registration and the photos some chose to post of themselves in Voicethread. Other indicators or racial heritage she relied on were names and comments in which students discussed aspects of their personal backgrounds. Also, the professor mentioned many were current educators or future administrators, and students referenced their roles in the discussions.

In addition to students’ work practices, their gender, racial, and ethnic backgrounds have the potential to influence their perceptions of collaboration. There were 33 total participants, 21 in the first semester, and 12 in the second semester. Groups included 4-6 participants. The
student makeup included: Men n=10, Women n=23, Black n=1, White n=32, Latino n=5, not Latino n=28.

Table 3.1. Demographics Comparison

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Students in Class</th>
<th>Total Florida Teachers</th>
<th>Total Florida Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>82%</td>
<td>73%</td>
<td>58%</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>3%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>15%</td>
<td>12%</td>
<td>23%</td>
</tr>
<tr>
<td>Women</td>
<td>70%</td>
<td>79%</td>
<td>51%</td>
</tr>
<tr>
<td>Men</td>
<td>30%</td>
<td>21%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Participant demographics are similar to those of Florida Teachers as seen in Table 3.1, but not completely representative. There was a divide in the number of Black participants compared to Florida’s percentage of Black teachers and university enrollment. Black students make up 11% of the enrollment at the university, and average 12% of the make-up of COE students enrolled in graduate degree programs. Black women in Florida with a graduate degree was found to be 7%, which is still greater than the percentages represented in this study (US Census, 2013). Even more critical is the fact that there were no Black men enrolled in the course. According to the US Census, only 40,116 Black men in Florida have graduate degrees, which equates to 4.5%.

With a critical lens, it is also important to note the noticeable difference between the percentage of students (and Florida teachers) that are White, non-Hispanic compared to the state population. There is a disproportionate amount of representation of the population in the course and teaching profession.

In addition to the divide in numbers according to race and ethnicity, there was also a greater number of men, and a corresponding lower number of women, compared to the total percent of teachers in Florida. According to the Florida Department of Education, women
account for almost 80% of the instructional staff, but only 60% of the administrative staff (FLDOE, 2009). This difference may account for the higher number of men enrolled in the graduate curriculum course, which is one requirement for the COE’s Educational Leadership program. Limitations of the data sample should be recognized when interpreting the findings of the study. This concern will be further addressed in Chapter Four.

**Data Collection**

For this study, data was collected in the forms of recording and notes from a semi-structured interview of the professor, observation/transcripts of online dialogue from one project across two semesters, collection of documents, and student learning products. Critical discourse theorists suggest that that every interaction can be understood at three levels: textually, interpersonally, and situated in a wider societal context (Rogers et al, 2005). The diverse data set to be described will support each of these three levels. Table 3.2 summarizes the data to be collected in the study.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Collection Method</th>
<th>Data Source</th>
<th>Data Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Researcher</td>
<td>Policy Documents</td>
<td>Online resources</td>
<td>Qualitative Coding</td>
</tr>
<tr>
<td>Professor</td>
<td>Interview</td>
<td>Live recording</td>
<td>Qualitative Coding</td>
</tr>
<tr>
<td></td>
<td>Course Documents</td>
<td>Electronic files</td>
<td>Qualitative Coding</td>
</tr>
<tr>
<td></td>
<td>Student Transcripts</td>
<td>Electronic files</td>
<td>Qualitative and Quantitative coding</td>
</tr>
</tbody>
</table>

A diverse dataset is used in this study to provide a rich understanding of the context of that frame students’ collaborative experiences. One limitation of only using online dialogue mentioned by Del Litke (1998) was that many of the conversations that occurred were over the phone, which transcripts were not available for. MacLachlan (2004) used mixed methods with focus group interviews and a survey as a way to triangulate the data as perceptions of online students were explored. Others sources of data that have supplemented discourse analysis
research include observations, interviews, survey, field notes, observation of face-to-face meetings, reflective journals, documents, photographs, video and audio clips, weekly reports, online discourse statements, individual as well as group projects, individual phone interviews, casual conversations with the learners, online knowledge sharing activities, focus groups, student action log, and student questionnaires (Dickey, 2010, Guilar and Loring, 2008; Ikpeze, 2007; Ruey, 2010; Soller, 2004; Tam, 2000; Berg, 2011; Olszewski et. al., 2004; Beal et.al., 2004; MacLachlan, 2004; Mclean, 2010; McGarvey, 2010; Weiner, 2001).

**Transcripts of student interactions.** Transcripts were used to understand the textual, interpersonal, and contextual levels of the students’ collaborative experiences. The course instructor provided electronic copies of all communications relevant to the online collaborative assignment including communication between students and emails/communication/comments between teacher and students. Due to the nature of the assignment, not all students’ communications were captured (emails, phone calls, etc.). For those groups that did not use the discussion board, analyses were not performed. The anonymized student transcript data was gathered from the professor via Dropbox. The students' names were redacted on the screen shots or removed from the electronic documents by the professor. The data were organized and stored in private files on the researcher’s Google Drive.

All discussion board communications between students were read and coded for qualitative and quantitative analysis. A qualitative analysis of the dialogue was accomplished through a process of primary and secondary coding. Primary coding was accomplished through the initial coding process, the process of relating codes categories and properties to one another (Saldana, 2009). Primary coding involves closely reading the transcripts and exploring the questions of, “What are these data a study of?” and “What do the data suggest?” As part of a
secondary coding process, the transcripts were coded against several criteria including student collaborative practices, hegemonic discourse, power language, and teacher pedagogical and instructional practices. Both qualitative and quantitative analyses were completed using the coded transcripts. As a co-researcher, the professor was consulted to provide clarification in the student-student and teacher-student dialogue. The use of the participant is a qualitative research approach that helps to validate the experiences of the participant (Given, 2008).

**Documents.** In order to gain an understanding of the wider societal context of the constructs that influence the design, implementation, and support for integration of collaborative experiences into the virtual class, a collection of documents was conducted. These documents included the university’s online course guidelines and state and federal education policy documents. According to Creswell (2009), collection of documents is unobtrusive, although it requires a search of information through various channels. The use of the constructionist frame to review documents is favorable (Jones, Torres & Armenio, 2014). The collection of document will define the macro-level discussion in Chapter Five to frame the collaborative experience.

**Interview with course facilitator.** One interview with the course professor was completed after I read and coded the transcripts. Because CDA is situated within the hermeneutic tradition, there is no clear separation between data collection and analysis (Wodak and Meyer, 2001). The interview was completed after the discourse analysis had begun. The facilitator interview shed light on the interpersonal aspect of the students’ interactions from the professor’s perspective, and further supported an understanding of the larger pedagogical and social context in which they occurred. The interview was a semi-structured open-ended interview, shaped by the students’ texts (Merriam, 2009). The questions can be found in Appendix A. The professor provided clarification about student discussion and differentiated between students and content.
The professor discussed interactions during student-student and student-teacher dialogue. Finally, the teacher was asked a series of questions regarding the course design and mindset towards online collaboration. The interview was recorded with the participant’s consent.

It was conducted using Skype. The interview was recorded after receiving permission from the participant. As mentioned by Del Litke (1998), one limitation of only using online dialogue was that some conversations occurred were over the phone or through private emails, which transcripts were not available for. The interview was use to triangulate the data and uncover those things that may not be as visible through the dialogue (Rubin and Rubin, 2005).

Data Analysis

While qualitative methods are preferred in the CDA paradigm, as researchers look to supplement their CDA research with more electronic discourse sources, mixed methodologies is a promising choice (Mautner, 2005). CDA theorists support shifts towards methodological diversity as it is a means to strengthen the CDA framework and method with the justification of triangulation of data (Creswell, 2009). Discourse analysis has been increasingly used by education researchers as a way to make sense of the ways in which people make meaning in educational contexts (Rogers et al, 2005).

One method to explore social power dynamics in online environments is critical discourse studies. Critical discourse analysts separate themselves from other discourse analyses, because their analyses “move beyond description and interpretation of the role of language in the social world, towards explaining why and how language does the work that it does” (Rogers et al., 2005). Critical discourse studies are rooted in the traditions of discourse studies, feminist post-structuralism, critical linguistics, and within the canopy of critical theory.
Formally emerging in the 1980’s with works of Norman Fairclough, Ruth Wodak, Teun van Dijk and others, CDA explores the

“the reproduction of sexism and racism through discourse; the legitimation of power; the manufacture of consent; the role of politics, education and the media; the discursive reproduction of dominance relation between groups; the imbalances in international communication and information” (Kress, 1990, p.87).

Fairclough (2000) describes a three-tiered framework that includes an analysis of texts, interactions, and social practices at the local, institutional, and societal level:

Each discursive event has three dimensions: It is a spoken or written text, it is an instance of discourse practice involving the production and interpretation of texts, and it is a part of social practice. The analysis of the text involves the study of the language structures produced in a discursive event. An analysis of the discursive practice involves examining the production, consumption, and reproduction of the texts... The third dimension, sociocultural practice, is concerned with issues of power-power being a construct that is realized through inter-discursivity and hegemony (cited in Rogers et al, 2005, p. 371).

An interpretation of the dimensions as applied to this case study is explained in Figure 3.1. To inform the inquiry expressed in this study, each of these levels will be explored to understand the context of the discourses to be addressed.

An analysis in Chapter 5 will be used to allow the reader to see the intersectional relationships that exist between teacher pedagogy, technology, student discourse, and the social production of knowledge during CSCL.

- Through a micro-level analysis, this study explores how students negotiate power during the social production of knowledge.
- The meso-level analysis explores how technology and pedagogy influence the online collaborative process.
- According to CDA, experiences are framed by the large social, political, and economic context in which they occur. For the final part of the discussion, the macro-analysis will discuss how institutional and legislative policy influences online collaboration.

**Textual analysis.** Some people “have” power while others “have-not.” The powerless are dominated and inhibited in developing one’s capacities, lack of decision making power, and exposure to disrespectful treatment because of the lowered status (Young, 2004). To explore the extent to which manifestations of power and powerlessness can be explained by the personal characteristics of students, a quantitative analysis power of language was completed. It explored linguistic features and power language at a textual level. Jun’s (2007) indicators of power were used to explore power language use in the online discussions of students in this course across the two semesters. The indicators that were used were verbosity, number of comments, and self-diminishment language. For this study, the variables of citations by others and post length were excluded from this study as indicators of power based on the structure of the assignment and communications. Additionally, because of the diverse nature of communications being provided by the instructor, the variable “comments” has been synonymized with “posts.” Table 3.3 is a modified version of Jun’s analysis framework.

I first counted the total number of words of each participant’s post. I then counted the total number of posts. I created a table in Microsoft Excel to organize the data. I added each participant’s race, gender, and ethnicity as provided by the professor the table. I then coded each post for powerlessness language.
Table 3.3. Conceptualizing Power

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rationale</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbosity</td>
<td>The more a person talks, the more s/he demands attention</td>
<td>Total number of words in transcripts</td>
</tr>
<tr>
<td>Comments/Posts</td>
<td>The more times a person comments or posts, the more times s/he demands attention</td>
<td>Total number of posts</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>The more times a person uses self-diminished words, the less s/he demands attention from others</td>
<td>SD words/total times 1,000</td>
</tr>
</tbody>
</table>

*Note. Self-diminished written words consisted of disclaimers, tag-questions, and hedges.*

Below is a table of all of the words of self-diminished from the case. This list was guided by an even more diverse list within Jun’s (2007) study. Some phrases represented in this study are unique to this study and not represented on Jun’s list.

Table 3.4. List of all Words Coded as Powerless Language

<table>
<thead>
<tr>
<th>Disclaimers n=87</th>
<th>Tag Questions n=9</th>
<th>Hedges n=72</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sorry</td>
<td>I’m still not really sure?</td>
<td>About</td>
</tr>
<tr>
<td>Not trying to take control</td>
<td>Correct?</td>
<td>Anything</td>
</tr>
<tr>
<td>Open to anything/whatever</td>
<td>Right?</td>
<td>Could be</td>
</tr>
<tr>
<td>I am not sure</td>
<td>Could</td>
<td>Just</td>
</tr>
<tr>
<td>My brains not working well</td>
<td>What do you think?</td>
<td>Just a thought</td>
</tr>
<tr>
<td>If everyone agrees</td>
<td>Correct?</td>
<td>Like</td>
</tr>
<tr>
<td>Unless there is another</td>
<td></td>
<td>May</td>
</tr>
<tr>
<td>I Say/feel/favor</td>
<td></td>
<td>Might</td>
</tr>
<tr>
<td>I think/ believe</td>
<td></td>
<td>Mostly</td>
</tr>
<tr>
<td>In my opinion</td>
<td></td>
<td>My suggestion</td>
</tr>
<tr>
<td>I guess</td>
<td></td>
<td>Not too bad</td>
</tr>
<tr>
<td>My vote</td>
<td></td>
<td>Perhaps</td>
</tr>
<tr>
<td>Having a hard time</td>
<td></td>
<td>Possibly</td>
</tr>
<tr>
<td>We don’t have to use it</td>
<td></td>
<td>Pretty beginner</td>
</tr>
<tr>
<td>If you want</td>
<td></td>
<td>Pretty good</td>
</tr>
<tr>
<td>I am not sure</td>
<td></td>
<td>Suggest</td>
</tr>
<tr>
<td>I seems to me</td>
<td></td>
<td>That much</td>
</tr>
<tr>
<td>Something like that</td>
<td></td>
<td>That much</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Would</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Would be</td>
</tr>
</tbody>
</table>
The use of this coding technique was used to provide a quantitative score for each participant’s conceptualized power in the collaborative activity. These power indicators were explored as variables across the cases of race, gender, and ethnicity. This helps to identify how hegemonic practices are being replicated in the use of text. Using SPSS, descriptive statistics were generated for each variable (verbosity, postings, self-diminishment): means, standard deviation, standard error, and min and max values. The statistical significance across differences identified between groups were also explored.

**Interactional Analysis.** At the interactional level, the case study explored the effectiveness of the collaborative experience as expressed in the dialogue according to Maushak and Ou’s (2007) five interactions: Mutually Constructing Knowledge, Mutually Negotiating, Mutually Supporting, Group Facilitating, and Group Processing. The coding method used identifies eight types of collaborative interactions, and five interaction types (Mashuka & Ou, 2007). The process and examples from the transcripts of this case study are in Table 3.5, a modified version presented in Maushak and Ou’s (2007) table.

The collaborative analysis was constructed through analysis of the student discussions, both qualitatively and quantitatively, and it was triangulated with comments from the professor. Student transcripts were coded against each of the 8 interactions. A spreadsheet was created to organize the data. The data from each semester were calculated separately and together. Descriptive statistics of mean were calculated for each interaction and category. This provided descriptive statistics related to the collaborative process, specifically total number of each collaborative interaction and a percentage of total interactions.
<table>
<thead>
<tr>
<th>Interaction Categories</th>
<th>Collaborative Interaction</th>
<th>Codes</th>
<th>Examples from the transcripts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutually Constructing Knowledge</td>
<td>Giving and receiving help and assistance</td>
<td>HA</td>
<td>Is there anything else I can do?</td>
</tr>
<tr>
<td></td>
<td>Exchange resources and information</td>
<td>RI</td>
<td>Here are some resources I've used in the past...</td>
</tr>
<tr>
<td></td>
<td>Giving and receiving feedback</td>
<td>FB</td>
<td>Those are great ideas. I especially like the one on bullying and the one on under-representing cultures.</td>
</tr>
<tr>
<td>Mutually Negotiating Knowledge</td>
<td>Challenging each other’s reasoning</td>
<td>CH</td>
<td>A: I suggest a public service announcement directed at bullying and its connection to suicide</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: I'm not going to bother suggesting a different topic, but rather, demand we do this one</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C: We have to brainstorm 5 problems relevant to curriculum and then choose one that we all</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>agree to. I want to suggest two topics to complete the assignments as it was required…</td>
</tr>
<tr>
<td></td>
<td>Mutually influencing each other’s reasoning and behavior</td>
<td>MI</td>
<td>A: Hi guys. I definitely like the idea of “one word says it all.”</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: Wow guys! This is good stuff.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>C: I love the contrast idea. Let’s run with that since everyone agrees.</td>
</tr>
<tr>
<td>Mutually Supporting Knowledge</td>
<td>Advocating increased efforts to achieve</td>
<td>MS</td>
<td>A: Okay group, We need to really start making some final decisions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>It seems that the people who have participated like the idea of bullying and the idea of using windows movie maker.</td>
</tr>
<tr>
<td>Group Facilitating</td>
<td>Engaging in the interpersonal and small group skills needed for effective teamwork</td>
<td>GF</td>
<td>A: Hey guys, Has anyone started thinking about what type of PSA they would like to do?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>I was thinking maybe just creating a movie in windows movie maker, or maybe someone has the iPad app to create movies?</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: That's a great idea. Let's say everyone gives their vote by Saturday morning?</td>
</tr>
<tr>
<td>Group Processing</td>
<td>Processing how effective group members are working together and how the group’s effectiveness can be continually improved</td>
<td>GP</td>
<td>A: I think we should assign job for each member just like the previous assignment. It would make it easier for us.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>B: Is there any way we can just create discussions like this one when we need to communicate? Just so we don't have to look in so many places.</td>
</tr>
</tbody>
</table>
In addition to exploring the individual cases and both classes together, these collaborative indicators were explored as variables across the cases of race, gender, and ethnicity through descriptive statistics and evaluation of those differences through statistical significance. SPSS was used to determine if there was a significant difference between means across groups. This quantitative analysis helps to understand the text at an interactional level and support analysis at a contextual level. This was used to triangulate findings and provide a richer context to understand the students’ experiences.

The reliability of the quantitative coding process is confirmed through previous studies’ methods. Further, to support the critical discourse analysis, primary coding was used to identify themes to explore the differences in collaborative interactions and triangulate quantitative findings. The use of quantitative studies supporting discourse analysis in online collaboration is limited. Jakobsson (2006), among that group, acknowledged the need for qualitative research and explained future qualitative articles would be published to further analyze the collaborative dialogue. Guilar and Loring (2008) posit that, in order to understand dialogue, qualitative methods are required because dialogue aligns with a more humanistic than social scientific focus. In discourse analyses, types of discourse and dialogue analyzed ranged widely and included online student reflective journals, scaffolded instant messaging, email, discussion boards, online texts, and other synchronous and asynchronous communication formats (Olszewski et.al., 2004; Beal et.al, 2004; McGarvey, 2010; Weiner, 2001; Berg, 2011).

**Contextual Level.** This section will explore student characteristics, and explore subcases across race, ethnicity and gender, combining data from the power/powerlessness analysis and the collaborative analysis to explore how students negotiated power in the online environment within each subcase. It uses the quantitative findings from the textual and
interaction level in combination with excerpts from the text to tell the stories of the The Case of
one Black Student, the Latino Voice, and Across Genders. The use of qualitative coding to
provide context explores the role of the professor and the role of technology. Finally, the
contextual level explores discourses of diversity in transcripts of students’ reflections of the
learning product.

**Ethical Considerations**

In this study, CDA was used as a methodological approach for data analysis, coding, and
interpretation. Consideration of ethical issues is important to respect participants and the sites of
research (Creswell, 2009). To ensure the selection practice was ethical, IRB recommendations
and processes were followed. Confidentiality of the researcher and the students in her course
were strictly guarded. To further protect the identity of the participant, the university was not
provided as well. The participant’s rights were explained, including her right to not answer and
questions and to stop participating in the study at any time. No data was collected until the IRB
form was signed by the participant. In accordance with IRB requirements, the data for the study
will be held on a locked drive for 5 years, and then deleted off the drive, and the drive will be
destroyed.

**Validity Criteria**

Expectations of validity and reliability vary between qualitative and quantitative research.
The methodologies used for the quantitative analysis gain validity through having been used
successfully in other studies. The reliability of the quantitative coding process is confirmed
through previous studies’ methods. The reliability of the quantitative data is less certain due to
the small samples size.
While the sample size was representative of the population, to help improve the dependability of the data, triangulation with discourse analysis and teacher interview (Creswell, 2009). Similarly, triangulation of data between the teacher interview and the student dialogue help to strengthen discursive themes emerged.

Credibility ensures that the results of the research reflect the experience of participants or the context in a believable way (Lincoln & Guba, 1985). Credibility of how the student transcripts were interpreted was gained through the teacher interview process. Credibility of the interpretations of the teacher interview were gained through member checking. The initial draft was shared with the participant to rule out misinterpretation. This also contributed to authenticity to make sure that subtle differences in voice were represented. This type of member checking, also called respondent’s validation helps to further strengthen the authenticity and trustworthiness of the study (Merriam, 2009).

To ensure criticality, a systematic research design was used with multiple forms of data to support triangulation between sources. The role of the researcher was explored, and biases were noted. Reliability through integrity was maintained through careful transcription and coding. When quantitative data was collected, each spread sheet was rechecked to ensure that the data was carefully converted.

Addressing factors of trustworthiness, the study presents findings with “thick” descriptions of the phenomena to provide transferability so that other researchers can apply the findings of the study to their own (Gowen, 2005).
CHAPTER FOUR

Research Findings

The purpose of the case study was to explore the intersection of pedagogy, technology, student discursive practices, and power on the social production of knowledge during asynchronous CSCL. The case study will support a more informed critical perspective of collaboration in online leadership preparation programs. The case explored a collaborative assignments across two semesters in a graduate curriculum course. By understanding how power influences social learning outcomes, education leaders and stakeholders can be better prepared to design these emerging spaces and facilitate students’ experiences.

Chapter Four begins with the context of the study and explore the student text through the lens of CDA according to Fairclough’s three dimensional conception of discourse. First, the textual level of analysis focuses on the power–language relationship. At this level the quantitative analysis aims to reveal the extent to which manifestations of power and powerlessness can be explained by the personal characteristics of students. Second, the interactional level analysis explores discourse as a social practice by analysis of collaborative interactions. It contributes to understanding to what extent collaborative practices can be explained by personal characteristics of students and the skills they employ. Third, the contextual level of analysis provides context of the interactions between collaboration, power/language, and identity (i.e., ethnicity, race, and gender). To provide an addition layer of contextual analysis for the exploration of discourse, the role of technology and the teacher in the social production of
knowledge. These levels of analysis are qualitative and quantitative. The following themes will be discussed:

Theme: Power manifestations through language
Theme: Professor philosophy and policy shaped pedagogy
Theme: Technological literacy as power
Theme: Influence of technology-based curriculum

Context of the Case

University

Highly regarded for its online education offerings according to The Guide to Online Schools, the university serves more than 47,000 students at its campuses. The education program serves over 3,000 students annually, with close to half being graduate students. With such a wide range of students and focus on online education, the setting is likely to be generalizable to a broader audience.

The Course

The course is an online graduate level curriculum course titled Foundations of Curriculum. The course was focused on developing education curriculum leaders, and included both teacher leaders, education administrators, and other education related professionals. The content of the course situates the study to be of interest to both education leaders and professors.

Data from the course was collected relating to a single assignment from two consecutive semesters. Table 4.1 provides a description of the course from the online syllabus and explains the audience for the course, the objectives, and the methods of instruction. The full syllabi from both semesters can be found in Appendix B.
**Table 4.1. Syllabus Excerpt**

**Course Description:** This course is open to all graduate students. There are no prerequisites. This is an introductory graduate course in curriculum (and instruction) and is basic to all specialized courses in the field of curriculum studies. Its emphasis is on the foundations, concepts, theories, influential figures, and trends in curriculum.

**Course Objectives:** This course aims to introduce students to the foundations of the field of curriculum studies and prepare them for studying curriculum at a higher level. The objectives complement the theoretical frame of the College of Education (see below) in consideration of the standards of NCATE/ELCC and FLDOE (Appendix).

1. Introduce students to the major concepts, issues, and leaders (past, present) influencing curriculum.
2. Present the philosophical, historical, psychological, social, and ideological underpinnings of the field.
3. Enable students to read, write, discuss, and reflect upon key issues and trends concerning curriculum.
4. Enable students to construct a bibliography of library and electronic sources related to curriculum issues.
5. Enable students to demonstrate research, analytical and writing skills related to curriculum in the areas of diversity and ethics.
6. Enable students to demonstrate technological skills for inquiry and communication: word processing, email and data retrieval through the Internet, library resources and other electronic media.

**Methods of Instruction:** Small and large group discussions, lecture, media, case studies, problem analysis, student facilitation, dramatization, directed activities (acquisition, application), guests. Note that small group or individual conferences or lectures may be called and scheduled during the course.

**The Technology**

Both courses were taught online. The 2012 semester was facilitated through Blackboard, a well-known learning management system. The second semester, the institution transitioned to Canvas based on a university review of resources. Due to these changes, the semesters may be referred to separately, but findings will be combined to inform the research questions.

The professor use the LMS to post assignments and communications to student groups. Each semester, the professor provided a number of documents through the LMS to guide
students through the expectations of the course. Figure 4.1 and 4.2 are screen shots of assignments and resources housed within the LMS in the second semester.

<table>
<thead>
<tr>
<th>Date</th>
<th>Day</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sep 3</td>
<td>Tue</td>
<td>Assignment Week 1: Due Sept. 3 (Tuesday due to Holiday) Curriculum Inventory (Indicates Enrollment) due by 11:50pm</td>
</tr>
<tr>
<td>Sep 9</td>
<td>Mon</td>
<td>Assignment Week 2: Due Sept. 9th Discussion Posts due by 11:50pm</td>
</tr>
<tr>
<td>Sep 16</td>
<td>Mon</td>
<td>Assignment Week 3: Due Sept. 16th VoiceThread due by 11:50pm</td>
</tr>
<tr>
<td>Sep 23</td>
<td>Mon</td>
<td>Assignment Week 4: Due Sept. 23rd: Who Controls the Curriculum? due by 11:50pm</td>
</tr>
<tr>
<td>Sep 30</td>
<td>Mon</td>
<td>Assignment Week 5: Due September 30th due by 11:50pm</td>
</tr>
<tr>
<td>Oct 7</td>
<td>Mon</td>
<td>Assignment Week 6: Due Oct 7 at 11:59pm</td>
</tr>
<tr>
<td>Oct 14</td>
<td>Mon</td>
<td>Assignment Week 7: Due Oct. 14th due by 11:59pm</td>
</tr>
<tr>
<td>Oct 28</td>
<td>Mon</td>
<td>Assignment 10 week 9: Due Oct. 28th due by 11:20pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assignment 9: Due Oct. 28th Peer Review due by 11:20pm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assignment 8: Due Oct. 21 Review due the 28th due by 11:20pm</td>
</tr>
<tr>
<td>Nov 18</td>
<td>Mon</td>
<td>Final Project Due on or before Nov. 18th due by 11:20pm</td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td>Assignment Week 1: Due Sept. 3 (Tuesday due to Holiday) Curriculum Inventory (Indicates Enrollment) due by 11:20pm</td>
</tr>
</tbody>
</table>

Figure 4.1. LMS Assignments

Figure 4.2. LMS Files

Students used the asynchronous online discussion boards in the school’s learning management system (LMS). While there were some groups that seemed to communicate outside the discussion boards for convenience/availability purposed, most communications were
facilitated through the LMS. For each semester, the data were converted to electronic document files by the professor.

In addition to the LMS and discussion boards and collaborative technologies were used to create and reflect on the learning product. Students used online discussion boards as their primary source of communication. Asynchronous discussion boards have a history of being highly effective to support collaboration, and have been found to be the primary collaborative technology used in leadership preparation programs (Sherman & Beaty, 2007). The literature suggests that discussion board threads should be pre-structured and have an established rational for organization (Brooks and Jeong, 2006).

In the first semester, the professor had students create a public service announcements (PSA), which was shared via VoiceThread, a cloud-based repository. Students reflected on the shared products using the functionalities with VoiceThread. Figure 4.3 is a sample VoiceThread. The main recording is in the center, and commenter’s posts can be navigated by clicking on their pictures on the right and left sidebars. Those that comment have the option to record their feedback as an audio recording or as recorded text as demonstrated in Figure 4.3.

Figure 4.3 VoiceThread
Students commented on their own and other groups’ VoiceThreads. Transcriptions of the VoiceThreads were used to support the CDA.

VoiceThread was not used in the second semester to reflect on the PSA. Instead, with the transition to the Canvas LMS, Google Docs was used as a main format for student product creation and collaboration (as it was part of the Canvas LMS). The documents were provided by the professor with comments. Identifies were removed by the professor.

By covering two semester, the use of varying types of technologies helps provide a richer context in which to explore student interactions. Currently, online collaboration in education leadership courses is mostly completed through asynchronous discussion boards (Sherman & Beaty). This helps to provide relevance to the field of education leadership, but also explores other emerging technologies.

**The Assignment**

The study focuses on a single collaborative assignment completed in two different semesters of a post graduate curriculum course taught at a large public university in the South East. The assignment required students to complete a PSA. Students were asked to communicate via discussion boards and through electronic communications with the instructor and other students. In addition, the professor employed critical reflection as part of the collaborative assignment. Students were grouped differently across semesters. In the first semester students were randomly assigned. In the second semester, students maintained the same groups throughout the course. In both courses, the students has completed a prior collaborative project. This ensured that this was not their first time students were collaborating online.

In the first semester, she asked students to reflect on the PSA using VoiceThread, and in the second semester, the reflection was supported by a theory based paper using Google Docs.
The professor introduced the assignment through an announcement to the course participants via the LMS as seen in Table 4.2.

Table 4.2. Assignment Announcement 2012

<table>
<thead>
<tr>
<th>From: Professor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject: PSA Info</td>
</tr>
<tr>
<td>Hello all,</td>
</tr>
<tr>
<td>I (Blackboard) have randomly assigned you to groups to work on a Public Service Announcement over the next two weeks. See the “Groups” link which offers you various tools to support your collaboration (wiki, blog, discussion board). This is where you plan and document your process (skills assessments of members, brainstorming, resources) according to the criteria in the rubric. This will become clearer as you view the presentations and the rubric. I have provided some links to video examples but PSA's are also aired on the radio so you can do audio and/or visual. Due Oct. 14 (midnight). If your group has an idea and want feedback or help narrowing down your options - or cannot agree - let me know and I may be able to help.</td>
</tr>
</tbody>
</table>

Once the assignment was complete, the learning product (PSA) was posted to VoiceThread.

The second course was the following semester in 2013. Students were assigned a similar project to the first semester, but instead of using VoiceThread to comment on their projects and the projects of others, the professor assigned a group paper as a way for students to reflect on their PSAs as seen in Table 4.3.

Table 4.3. Assignment Announcement 2013

| Working in your previous groups, you will PLAN to create a Group Public Service Announcement that bridges concern for the school learning environment and society at large. Consider your audience. Will this be directed toward students (as school curriculum), in the curriculum of educators or administrators (as professional development), or to the community (societal curriculum)? This week is Phase 1 (planning in Groups), next week is phase 2 (production of a 30 or 60 second PSA and 1-2 page supplement (google doc). In the supplement you get to include a list of initial issues, data, statistics, or research that was supportive but not included in the PSA, and most importantly the connections to the course material thus far. The collection of products (the PSA and 1-2 page supplement) provide the space for addressing the criteria. See the documents below (2-3 hours). |
Groups still could use the discussion boards as a collaborative tool, but also the professor suggested to participants to use Google Docs as a shared collaborative platform. The rubrics for the assignments can be found in the Appendix B.

**Discourse as Text: Manifestation of Power through Discourse**

Student background have the potential to shape how meaning is created. In an analysis of higher education online discussions, Jun (2007) explores the manifestation of power through discourse. He identifies verbosity, postings, length of comments, citations by others and self-diminishment as indicators of power. Linguistic qualifiers (e.g., I think, may/might, often, perhaps) are examples of self-diminishment words. Jun’s original study found that there were no statistical differences between ethnicity and race for the variables verbosity, number of comments, and words of self-diminishment.

**Quantitative Power Language Analysis**

To explore the extent to which manifestations of power and powerlessness be explained by the personal characteristics of students, a quantitative analysis power of language was completed. It explored linguistic features and organization of concrete instances of hegemonic discourse at a textual level. Jun’s (2007) indicators of power were used to explore power language use in the online discussions of students in this course across the two semesters. The indicators that were used were verbosity, number of comments, and self-diminishment language. For this study, the variables of citations by others and post length were excluded from this study as indicators of power based on the structure of the assignment and communications. Additionally, because of the diverse nature of communications being provided by the instructor, the variable “comments” has been synonymized with “posts.” Table 4.4 is a modified version of Jun’s analysis framework. The use of this coding technique was used to provide a quantitative
score for each participant’s conceptualized power in the collaborative activity. These power indicators were explored as variables across the cases of race, gender, and ethnicity. This helps to identify how hegemonic practices are being replicated in the use of text.

Table 4.4. Conceptualizing Power

<table>
<thead>
<tr>
<th>Variable</th>
<th>Rationale</th>
<th>Operationalization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbosity</td>
<td>The more a person talks, the more s/he demands attention</td>
<td>Total number of words in transcripts</td>
</tr>
<tr>
<td>Comments/Posts</td>
<td>The more times a person comments or posts, the more times s/he demands attention</td>
<td>Total number of posts</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>The more times a person uses self-diminishment words, the less s/he demands attention from others</td>
<td>SD words/total times 1,000</td>
</tr>
</tbody>
</table>

Note. Self-diminished written words consisted of disclaimers, tag-questions, and hedges.

Descriptive statistics were generated for each variable (verbosity, postings, self-diminishment): means, standard deviation, standard error, and min and max values. The statistical significance across differences identified between groups were also explored.

**Test of normality of the variables.** The statistical analysis process includes two parts, checking whether data meets all assumptions and performing the test. The first step includes checking for the following assumptions:

- **Assumption 1:** Dependent variable should be measured at the ordinal or continuous level.
- **Assumption 2:** Independent variables should consist of two categorical, independent groups.
- **Assumption 3:** The data should have independence of observations, which means that there is no relationship between the observations in each group or between the groups themselves.
- **Assumption 4:** There needs to be homogeneity of variances.

DeCarlo’s macro test was used to screen the data for normality and outliers. Based on the guideline if any variables have values for skewness (g1) or kurtosis (g2) that are greater than 2.0, then the variables are non-normally distributed. According to these guidelines, Verbosity...
(g1=2.33, g2=6.19), Comment (g1=1.77, g2=2.75), and Self-diminishment (g1=2.29, g2=6.59) are not normally distributed.

**Statistical analysis.** The Mann-Whitney U test is used to compare differences between two independent groups when the dependent variable is either ordinal or continuous, but not normally distributed. The Mann-Whitney U test was conducted using SPSS 21, with gender, race, and ethnicity as the independent variables. Descriptive statistics, mean and standard deviation, were generated for each variable. In addition, the Pearson correlation analysis was conducted to see if the measures used were valid. Pearson correlation showed that there is a significant strong positive correlation between variable “Verbosity” and variables: “Comments” (r=.617) and “Self-diminishment” (r=.541). Furthermore, Pearson correlation showed that variable “Comments” is positively correlated with “Self-diminishment” (r=.700).

Table 4.5. Correlations Among the Five Indicators for Power Language Use

<table>
<thead>
<tr>
<th></th>
<th>Verbosity</th>
<th>Comments</th>
<th>Self-diminishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbosity</td>
<td>1.00</td>
<td>.617**</td>
<td>.514**</td>
</tr>
<tr>
<td>Comments</td>
<td>.617**</td>
<td>1.00</td>
<td>.700**</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>.514**</td>
<td>.700**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

Table 4.6. Mean and SD of Power Indications for Gender, Race, and Ethnic Group

<table>
<thead>
<tr>
<th>Power Indicators</th>
<th>Full Sample (n=33)</th>
<th>Gender</th>
<th>Race</th>
<th>Ethnicity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean, SD</td>
<td>Mean, SD</td>
<td>Mean, SD</td>
<td>Mean, SD</td>
</tr>
<tr>
<td>Verbosity</td>
<td>345.48, 428.20</td>
<td>116.40, 106.21</td>
<td>445.09, 477.33</td>
<td>348.22, 434.76</td>
</tr>
<tr>
<td>Comments</td>
<td>5.18, 4.26</td>
<td>3.2, 1.99</td>
<td>6.04, 4.71</td>
<td>5.21, 4.32</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>17.28, 19.09</td>
<td>15.86, 17.54</td>
<td>17.90, 19.31</td>
<td>17.5, 19.31</td>
</tr>
</tbody>
</table>

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Table 4.3 provides descriptive statistics of means and standard deviations for each variable according to gender, race, and ethnicity. To understand if power language variations were significant between groups of gender, race, or ethnicity, frequency analysis and the Mann-Whitney U test were conducted, using gender, ethnicity and race as the independent variables.

Table 4.7. Statistical Significance by Gender

<table>
<thead>
<tr>
<th>Power Indicators</th>
<th>Men n=10</th>
<th>Women n=23</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Rank</td>
<td>Sum of Ranks</td>
</tr>
<tr>
<td>Verbosity</td>
<td>10.20</td>
<td>102.00</td>
</tr>
<tr>
<td>Comments</td>
<td>12.35</td>
<td>123.50</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>16.30</td>
<td>163.00</td>
</tr>
</tbody>
</table>

There was a significant difference between women and men for the indicator of verbosity (p=.008). Women in this case used more words overall than men.

Table 4.8. Statistical Significance by Race

<table>
<thead>
<tr>
<th>Power Indicators</th>
<th>White n=32</th>
<th>Black n=1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Rank</td>
<td>Sum of Ranks</td>
</tr>
<tr>
<td>Verbosity</td>
<td>16.88</td>
<td>540.00</td>
</tr>
<tr>
<td>Comments</td>
<td>16.95</td>
<td>542.50</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>17.09</td>
<td>547.00</td>
</tr>
</tbody>
</table>

There was no statistical significant differences between White (n=23) and Black students (n=1) in this case.

Table 4.9. Statistical Significance by Ethnicity

<table>
<thead>
<tr>
<th>Power Indicators</th>
<th>Latino n=5</th>
<th>Not Latino n=28</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Rank</td>
<td>Sum of Ranks</td>
</tr>
<tr>
<td>Verbosity</td>
<td>18.90</td>
<td>94.50</td>
</tr>
<tr>
<td>Comments</td>
<td>17.00</td>
<td>85.00</td>
</tr>
<tr>
<td>Self-diminishment</td>
<td>14.00</td>
<td>70.00</td>
</tr>
</tbody>
</table>

There is no statistical significance in the power language used based on these three indicators between Latino (n=5) and non-Latino (n=28) students in this case. There was one outlier in the Latino sample that may have skewed the findings. This post was left in because
there was no clear way to justify removing it from the other post data set as the set was not normally distributed.

Summary

A statistical analysis revealed there were no significant differences in the power language variables for race and ethnicity. For gender, there were significant differences in verbosity, with women having a greater verbosity. Because of the small size of the population, generalizations beyond this case study cannot be made.

In the comparison of means of the African-American (n=1) and Caucasian groups (n=32), the larger Caucasian group had higher means through all indicators of power language use than did the African-American group. No statistical significance was found.

In the comparison of means of the Latino (n=5) versus non-Latino groups (n=28), the larger non-Latino group has higher means through all indicators of power language, except for verbosity. In the Latino group, there was one outlier that skewed the sample. There were no statistical difference found between the two groups.

In the comparison of means of the men (n=10) and women (n=23), the women that formed the majority in the current study had higher means than those of the men group. The quantitative analysis revealed that there was a significant difference between groups in verbosity between men and women, with women being higher.

The exploration revealed that participants’ power did vary based on their power language score, but those differences associated to belonging to a particular ethnic or racial group were not significant. Women were found to be empowered in this CSCL experience based on the statistically significant difference of their power score in the category of verbosity compared to their male peers.
Discourse as a Social Practice: Negotiating Power through Collaboration

The textual analysis revealed few differences in power language use. An answer to how student were being empowered may lie in how they negotiated power during collaborative interactions. Examples of each of these interactions from the transcripts within this case study are in Table 4.10, a modified version presented in Maushak and Ou’s (2007).

Table 4.10. Collaborative Interactions with Examples from Current Study

<table>
<thead>
<tr>
<th>Interaction Categories</th>
<th>Collaborative Interaction</th>
<th>Codes</th>
<th>Examples from the transcripts.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutually Constructing Knowledge</td>
<td>Giving and receiving help and assistance</td>
<td>HA</td>
<td>Is there anything else I can do?</td>
</tr>
<tr>
<td></td>
<td>Exchange resources and information</td>
<td>RI</td>
<td>Here are some resources I've used in the past...</td>
</tr>
<tr>
<td></td>
<td>Giving and receiving feedback</td>
<td>FB</td>
<td>Those are great ideas. I especially like the one on bullying and the one on under-representing cultures.</td>
</tr>
</tbody>
</table>
| Mutually Negotiating Knowledge       | Challenging each other’s reasoning                | CH    | A: I suggest a public service announcement directed at bullying and its connection to suicide  
B: I'm not going to bother suggesting a different topic, but rather, demand we do this one  
C: We have to brainstorm 5 problems relevant to curriculum and then choose one that we all agree to.  
I want to suggest two topics to complete the assignments as it was required... |
|                                      | Mutually influencing each other’s reasoning and behavior | MI    | A: Hi guys. I definitely like the idea of “one word says it all.”  
B: Wow guys! This is good stuff.  
C: I love the contrast idea. Let’s run with that since everyone agrees. |
| Mutually Supporting Knowledge        | Advocating increased efforts to achieve          | MS    | A: Okay group, We need to really start making some final decisions.  
It seems that the people who have participated like the idea of bullying and the idea of using windows movie maker. |
| Group Facilitating                  | Engaging in the interpersonal and small group skills needed for effective teamwork | GF    | A: Hey guys, Has anyone started thinking about what type of PSA they would like to do? I was thinking maybe just creating a movie in windows movie maker, or maybe someone has the iPad app to create movies?  
B: That's a great idea. Let's say everyone gives their vote by Saturday morning? |
| Group Processing                     | Processing how effective group members are working together and how the group’s effectiveness can be continually improved | GP    | A: I think we should assign job for each member just like the previous assignment. It would make it easier for us.  
B: Is there any way we can just create discussions like this one when we need to communicate? Just so we don't have to look in so many places. |

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Exploring the text at an interactional level was completed by coding the data according to Maushak and Ou’s (2007) five interactions: Mutually Constructing Knowledge, Mutually Negotiating, Mutually Supporting, Group Facilitating, and Group Processing. The coding method used identifies eight types of collaborative interactions, and five interaction types (Maushak & Ou, 2007).

The interactional level analysis was constructed through analysis of the student discussions, both qualitatively and quantitatively, and it was triangulated with comments from the professor. The quantitative analysis provided descriptive statistics related to the collaborative process, specifically averages of each type collaborative. These averages help to understand what types of interactions students are engaged in most frequently in their collaborative discourses. In addition to exploring the individual cases and both classes together, these collaborative indicators were explored as variables across the cases of race, gender, and ethnicity through descriptive statistics. Evaluation of those differences was completed using testing for statistical significance. The qualitative discussion of interaction helped to triangulate the quantitative findings and identified examples from the text to show how collaborative interactions were empowering, or were not empowering. This analysis helps to understand the text at an interactional level and support further analysis at a contextual level.

**Quantitative Analysis of Collaboration**

An analysis of the collaborative process was complete using the coding process developed by Maushak and Ou (2007). Descriptive statistics for the groups in the across both semester are in Table 4.11.

Between the two semesters, over 50% of discourse coded demonstrated students participating in the mutual construction of knowledge. This means that students were not just
meeting online to split the task. Students did not just work individually on their own part, and then assemble each individual work into a final project.

Table 4.11. Collaborative Interactions Means for all Groups from both Semester

<table>
<thead>
<tr>
<th>Interaction Categories</th>
<th>Collaborative Interactions</th>
<th>Codes</th>
<th>Code Total</th>
<th>Code Percent</th>
<th>Category Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutually Constructing Knowledge</td>
<td>Giving and receiving help and assistance</td>
<td>HA</td>
<td>39</td>
<td>14.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Exchanging Resources and information</td>
<td>RI</td>
<td>85</td>
<td>31.4</td>
<td>60.9</td>
</tr>
<tr>
<td></td>
<td>Giving and receiving feedback on teamwork and teamwork behaviors</td>
<td>FB</td>
<td>41</td>
<td>15.1</td>
<td></td>
</tr>
<tr>
<td>Mutually Negotiating</td>
<td>Challenging each other’s reasoning</td>
<td>CH</td>
<td>1</td>
<td>.004</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>Mutually influencing each other’s reasoning and behavior</td>
<td>MI</td>
<td>28</td>
<td>10.3</td>
<td></td>
</tr>
<tr>
<td>Mutually Supporting</td>
<td>Advocating increased efforts to achieve</td>
<td>MS</td>
<td>6</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Group Facilitating</td>
<td>Engaging in the interpersonal and small group skills needed for effective teamwork</td>
<td>GF</td>
<td>29</td>
<td>10.7</td>
<td>10.7</td>
</tr>
<tr>
<td>Group processing</td>
<td>Processing how effective group members are working together and how the group’s effectiveness can be continuously improved.</td>
<td>GP</td>
<td>42</td>
<td>15.5</td>
<td>15.5</td>
</tr>
</tbody>
</table>

They were exchanging resources, giving helps and assistance, and providing feedback. The latter two are demonstration of collaborative leadership skills. Additionally, students spend over 15% of their time engaging in group processing. This collaborative leadership skill demonstrates students engaging in activities to support the effectiveness of others in their group. This promotive interaction works to empower others’ collaborative leadership skills.

An interesting discrepancy can be seen in students’ preference mutually influencing over challenging when mutually negotiating. This could be explained through a lack of familiarity between participants. As a way to encourage this type of interaction, students could be provided the opportunity to get to know each other at the beginning of the course. Other explanations
might include a lack of understanding on how to negotiate knowledge construction by respectfully challenging others ideas through discourse. This could be an interesting area for future research. The detailed breakdown for both semesters combined is shared in Table 4.12.

<table>
<thead>
<tr>
<th>Type of Interaction</th>
<th>2012 Semester</th>
<th>2013 Semester</th>
<th>Total Both Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mutually Constructing Knowledge</td>
<td>63.1%</td>
<td>57.7%</td>
<td>60.9%</td>
</tr>
<tr>
<td>Group Processing</td>
<td>11.3%</td>
<td>21.6%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Group Facilitating</td>
<td>13.1%</td>
<td>7.2%</td>
<td>15.5%</td>
</tr>
<tr>
<td>Mutually Negotiating</td>
<td>11.9%</td>
<td>9.0%</td>
<td>10.7%</td>
</tr>
<tr>
<td>Mutually Supporting</td>
<td>&lt;1%</td>
<td>7.2%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

It is interesting to note that students spent more time mutually constructing knowledge based on their discussions in the first semester compared to the second semester. Also, in the second semester students exhibited greater amounts of group processing, which involves processing how effectively group members are working together and how the group’s effectiveness can be continuously improved. Potential variances between semesters that may have had an influence include differences in how students were grouped (different group members in each assignment in the first semester versus same groups across the second semester), differences in the technology used, and differences in the assignment.

To explore how these collaborative interactions related to student demographics, descriptive statistics were calculated using gender, ethnicity and race as the independent variables. Table 4.13, provides the means each variable according to gender, race, and ethnicity. In the comparison of means of the men and the women groups, the women, which formed the majority in the current study, had higher means across all categories except challenging. In the comparison of means across racial and ethnic groups, dominant groups varied (highlighted in table). To explore if these differences were significant, a The Mann-Whitney U test was conducted as the data were not normally distributed. The data met the four assumptions for
validity. The test failed to reveal a statistically reliable difference between the means of collaborative practices across ethnicity and race.

**Table 4.13. Collaborative Practices by Student Characteristics**

<table>
<thead>
<tr>
<th></th>
<th>HA</th>
<th>FB</th>
<th>MI</th>
<th>MS</th>
<th>GF</th>
<th>CH</th>
<th>GP</th>
<th>RI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td>Mean</td>
<td>.30</td>
<td>1.00</td>
<td>.50</td>
<td>.00</td>
<td>.30</td>
<td>1.0</td>
<td>.40</td>
</tr>
<tr>
<td>N=10</td>
<td>SD</td>
<td>.483</td>
<td>.667</td>
<td>.527</td>
<td>.00</td>
<td>.675</td>
<td>.316</td>
<td>.699</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td>Mean</td>
<td>1.41</td>
<td>1.36</td>
<td>.86</td>
<td>.27</td>
<td>1.09</td>
<td>.00</td>
<td>1.68</td>
</tr>
<tr>
<td>N=22</td>
<td>SD</td>
<td>1.790</td>
<td>1.891</td>
<td>.889</td>
<td>.631</td>
<td>1.231</td>
<td>.00</td>
<td>3.428</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>Mean</td>
<td>2.00</td>
<td>.00</td>
<td>1.00</td>
<td>.00</td>
<td>2.00</td>
<td>.00</td>
<td>1.00</td>
</tr>
<tr>
<td>N=1</td>
<td>SD</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>Mean</td>
<td>1.13</td>
<td>1.34</td>
<td>.78</td>
<td>.19</td>
<td>.78</td>
<td>.03</td>
<td>1.25</td>
</tr>
<tr>
<td>N=32</td>
<td>SD</td>
<td>1.661</td>
<td>1.619</td>
<td>.832</td>
<td>.535</td>
<td>1.128</td>
<td>.177</td>
<td>2.918</td>
</tr>
<tr>
<td><strong>Latino</strong></td>
<td>Mean</td>
<td>1.00</td>
<td>1.20</td>
<td>1.00</td>
<td>.20</td>
<td>.20</td>
<td>.00</td>
<td>.20</td>
</tr>
<tr>
<td>N=5</td>
<td>SD</td>
<td>1.732</td>
<td>1.304</td>
<td>1.00</td>
<td>.447</td>
<td>.447</td>
<td>.000</td>
<td>.447</td>
</tr>
<tr>
<td><strong>Non-Latino</strong></td>
<td>Mean</td>
<td>1.18</td>
<td>1.32</td>
<td>.75</td>
<td>.18</td>
<td>.93</td>
<td>.04</td>
<td>1.43</td>
</tr>
<tr>
<td>N=28</td>
<td>SD</td>
<td>1.657</td>
<td>1.679</td>
<td>.799</td>
<td>.548</td>
<td>1.184</td>
<td>.189</td>
<td>3.084</td>
</tr>
</tbody>
</table>

Across gender, there was a statistically significant difference was in the variable of group processing, with women having a significantly higher mean than men (p= .025, α=.05). As discussed earlier, the study is limited by the lack of diversity within the sample.

**Developing Collaborative Leadership**

Collaborative learning can be a vehicle of empowerment for students (Seel, 2012). Sharing power with others is at the heart of collaborative leadership. Examples of empowering practices were aligned to the interactions defined in Mashuk and Ou’s (2007) framework of collaborative practices as seen in Table 4.14. These examples show both collaborative leadership and technology leadership skills. Qualitative analysis of the CSCL transcripts reveal how collaborative interactions are key to understanding how students negotiated power in the online environment.
Table 4.14. Collaborative Interactions as a Form of Empowerment

<table>
<thead>
<tr>
<th>Interaction Categories</th>
<th>Collaborative Interactions</th>
<th>Example of Empowering Practices</th>
<th>Examples from the transcripts.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Giving and receiving help and assistance</td>
<td>Giving help with technology, Redirecting someone, Offering to do more</td>
<td>A: I was posting in the wrong place until [student name] let me know.</td>
</tr>
<tr>
<td></td>
<td>Exchanging resources and information</td>
<td>Contributing research, Sharing relevant stories, Sending diverse links, pictures and other digital artifacts</td>
<td>A: Here are some resources I've used in the past... B: I added some pictures for the PSA.</td>
</tr>
<tr>
<td></td>
<td>Giving and receiving feedback on teamwork and teamwork behaviors</td>
<td>Agreeing on how the group should collaborate or offering other ideas</td>
<td>A: Those are great ideas. I especially like the one on bullying and the one on under-representing cultures.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mutually Negotiating</td>
<td>Challenging each other's reasoning</td>
<td>Providing alternate ways to look at something, Challenging hegemonies</td>
<td>A: I suggest a public service announcement directed at bullying and its connection to suicide. B: I'm not going to bother suggesting a different topic, but rather, demand we do this one. C: We have to brainstorm 5 problems relevant to curriculum and then choose one that we all agree to. I want to suggest two topics to complete the assignments as it was required...</td>
</tr>
<tr>
<td></td>
<td>Mutually influencing each other’s reasoning and behavior</td>
<td>Supporting someone’s ideas through agreement</td>
<td>A: I definitely like the idea of “one word says it all.” B: Wow guys! This is good stuff. C: I love the contrast idea. Let’s run with that since everyone agrees.</td>
</tr>
<tr>
<td>Mutually Supporting</td>
<td>Advocating increased efforts to achieve</td>
<td>Reminding group members that there is a deadline and more work is needed to meet it</td>
<td>A: Okay group, We need to really start making some final decisions.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Facilitating</td>
<td>Engaging in the interpersonal and small group skills needed for effective teamwork</td>
<td>Identifying roles, Assessing members strengths, Outlining group tasks, Creating surveys to gather consensus</td>
<td>A: Has anyone started thinking about what type of PSA they would like to do? I was thinking… B: That’s a great idea. Let’s say everyone gives their vote by Saturday morning?</td>
</tr>
<tr>
<td></td>
<td>Processing how effective group members are working together and how the group’s effectiveness can be continuously improved.</td>
<td>Proposing ideas on how to collect data as a group</td>
<td>B: Is there any way we can just create discussions like this one when we need to communicate? Just so we don't have to look in so many places.</td>
</tr>
</tbody>
</table>

These collaborative interactions demonstrate different ways which learners can share power and empower one another in the collaborative process through developing skills,
resources, or diverse perspectives. As groups reflected on their process, their responses reinforced that these collaborative activities were promotive and highlighted empowering practices.

- “We worked very well together in terms of respecting each other’s opinions when it came to determining our topic and our turnaround time response was short as well.”

- “We had come up with several different ideas of problems that we wanted to address, and we were very democratic about it, we set up a survey monkey survey, and voted on the top 5 problems that we wanted to work on… And then from there, we researched all those areas, fund different resources, looked over them, and then we had another vote where we decided that we wanted to go with bullying… we wanted to narrow our focus, and just talk about cyber bullying. And then it was my idea to focus it on the parents, how they could help, because the topic that I researched was the parent involvement. So, we kind of combined those, and hopefully I didn’t silence any voices, but I think that we worked well as a team.”

- “The hardest thing about putting this PSA together was deciding what information was important enough to include… I think that our group did a great job collaborating once we figured out what our roles were going to be. I think the only thing I would change about this project is to do a bit longer PSA.”

To triangulate the data from the qualitative exploration, the professor was asked if she could provide an example of collaboration that impressed her. She remembered a woman that seemed to help organize her group, but she didn’t take the lead on everything.

“She took the lead on organizing and bringing people in on their parts together, and bringing things out of them. I felt like she was encouraging, but she wasn’t dictatorial.
She was like the manager, but it wasn’t like she managed all of the thinking. In a very nice way that I think people were encouraged to participate. In the end… all the contributions that people made were somehow morphed into [it] in the end, and I felt like people really had connected with what they had produced.

Although the qualitative exploration revealed many promotive interactions across the two semesters, there were also examples of power imbalances. The quantitative analysis revealed that mutually supporting was not a frequent interaction type. Mutually supporting is defined as advocating for increased efforts to achieve and, while is considered a promotive interaction, it can create a power dynamic between participants. Each member depends on the efforts of the other. When one member advocates for increased efforts from the group, or a member of the group, he or she may be struggling with the power dynamic, and may be advocating for more equal participation to get the product completed. This may be one reasons students engaged in mutually supporting least frequently in both semesters. In the first semester, there was only one instance of this type of interaction, seen in Table 4.15.

Table 4.15. Example of Mutually Supporting in Transcripts

| KA: I was going to start trying to create the video today or tomorrow since it’s due in three days, but not many of us have done the research. This is what I need before I can start: 1. Everyone was supposed to research bullying and post their facts under research. 2. I'm still not really sure what solution/aim everyone wants to take besides targeting the bystander. I kind of need more specifics. I also like the idea about the crumbled up paper, but I don't know a great way of incorporating that. I need ideas!! It's only a 30 second video. 3. I guess I can just find pictures off google to add into the movie if necessary. Also I need to know what direction y'all want the PSA to go? How it should start out, what should it say, etc? |

When students reflected on their PSA process, this tension was reinforced when one of her group members shared, “KA put it together for us, and it was hard because we all had so
many different ideas, and figuring out what data we wanted to use, and I know that was part of our problem, we all had lots of varying ideas.”

According to the quantitative analysis, the second semester had a slightly higher percent of mutually supporting and group processing. Much of the variance could be explained by a one group of White women that were particularly challenged in the collaborative process. After analysis of the transcripts and discussion with the professor, the challenges this group faced were differences in urgency to get the product complete and differences in communication styles. The challenge was intensified by the lack of willingness to accommodate the other’s preferred styles and timelines. Other barriers to collaboration present in the dialogue are seen in Table 4.16.

Table 4.16. Examples of Barriers to Collaboration

<table>
<thead>
<tr>
<th>Barriers to Collaboration</th>
<th>Example</th>
</tr>
</thead>
</table>
| Setting a schedule without getting consensus from the group   | MS: 10.6.13- Ok so as I said in email, let's go with bullying. Phase 1 (Planning - due Monday Oct. 7)  
 1. List of 5 initial Problems (Done)  
 2. Choose one of the problems to use and list 5 solutions for it (Bullying topic, MG will take this part today)  
 3. List 5 sources for finding data/research to supplement the solution (LM will do this today)  
 4. Answer this question: (KD will do this today)                                                                                                                                 |
| Being disrespectful                                          | Professor: KD felt like she had been treated like a child by MG. And I felt, after reading what the other student had wrote her, that it was condescending tone. [The woman told her] ‘If you are having some problems, and you can’t get this together, maybe we can help you.’ It didn’t come across as really helpful. |
| Differences in communication preferences - when and how often, and how email versus other | KD- So I just realized that I was looking in the wrong "e-mail".... I have been looking in the "inbox" on Canvas and didn't see the e-mails. But then it dawned on me that you all might have been sending e-mail through [blank] mail. Is there anyway we can just create discussions like this one when we need to communicate?  
  LM: Hi KD, We have been using the [blank] email and the Google docs as the methods of communication  
  MG: KD, We have been communicating towards [blank] email and Google doc, inbox etc. It would be almost impossible to complete an online group project without using emails, etc.  
  KD: I am not saying to not use e-mail. What am a saying is that I am not sure why we have to use 3 different locations to communicate the same information. I am not sure why we have to use [blank] e-mail, the inbox on canvas, and this discussion board. It would make communication much easier if we chose one way to communicate. So we all know where the communication is taking place. |
| Differences in urgency                                        | LM: [KD] MG is working on the written supplement right now, so you two need to start collaborating immediately.  
  KD: I just want to let you all know that I use Saturday and Sundays to do my work for this class so if I don't respond to your e-mails and discussion posts right away it doesn't mean I am purposely ignoring you all or trying to get out of doing my part. I ask that you are patient in waiting for my response as well as patient in waiting for me to do my part of the work  
  MS: Time is clicking. Let's repost the link here and work off that link, fixing KD's comments AND fixing APA per MG today. |
| Having other group members “gang up on another”               | Professor: She got the other people to chime in to go against [KD]”                                                                                                                                         |
The tensions between the group of women was triangulated by comments from the professor.

People should work at their pace, and when they were available, yeah, so that person set the expectation for the groups, and expected everyone in the group to behave in the way she did, and work as she did, etc. So, in that case I really felt like the products, was the thing that was taking priority over the process. So, in the end I didn’t feel like the product was a group product. Its more of a task orientation. Yeah, but there are other demands or expectations that people have… Rather than saying, “ok when is everyone available to work, and when is our deadline?” But some aren’t having those conversations, so more and more I feel like I have say something.”

These barriers demonstrate a lack of collaborative leadership. Collaborative leadership involves negotiating relationships so all can achieve. These types of actions do not support this ideal.

**Summary of Collaborative Analysis**

Collaboration creates a unique experience between individuals that each must depend on one another. This dependence creates a dynamic where each member is in a place to have power over the others. No one person has power unless the other group members give that person power through active or passive agreement. To forego the relationship all together would come at a cost. Either the person would have to complete the assignment on their own, or risk the consequences of not participating and contributing. This power dynamic influences the discourses and negotiations between participants. This becomes most evident when participants struggle with differences participation and urgency.

The interactional level analysis revealed communication and collaboration skills varied between participants. In a study that used scaffolding to promote more effective collaboration,
Goldstein (2009) suggested that often, even with scaffolding, groups experienced power imbalances, with one person often having more decision making power. This result in some student having missed opportunity for engagement and participation, thus further disadvantaging their rhetoric skill development. This was triangulated by comments from the professor, she commented, “I have seen a range [of collaborative abilities].” Some do a great job, while others “just kind of have this self-centered attitude.” She continued, “It’s kind of scary. I am working with educators and people that want to be administrators in schools, and it’s just kind of scary sometimes how they treat one another.”

**Tying it all Together: Context through Identity**

Each of the 33 students involved in this study comes from a unique background, differing in skills, resources, careers, culture, and social norms, just to name a few. An exploration of their differences helps the researcher and reader come to understand their experiences. The literature has suggested that a combination of online learning and using asynchronous discussions is a way to help level the playing field, so to speak. In online environments, race, ethnicity, and even gender sometimes, can be blurred and anonymized because the identity of individuals is limited to what they have shared and the interpretations of their communications by the receiving party. This section will explore student characteristics, and discuss subcases across race, ethnicity and gender. These subcases combine data from the power/powerlessness analysis and the collaborative interactional analysis to explore how students negotiated power in the online environment focused on the characteristics within the subgroup.

**Student Characteristics**

The professor mentioned that many of the students were future educators or administrators, and students referenced their roles in the discussions. As educators, they may be
involved in collaborative efforts at their schools or districts. How those activities are planned and delivered have the potential to influence their collaboration in these online spaces. There were 33 total participants across the two semesters with the following make up: Men n=10, Women n=23, Black n=1, White n=32, Latino n=5, Not Latino n=28.

### Table 4.17. Demographics Comparison

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Students in Class</th>
<th>Total Florida Teachers</th>
<th>Total Florida Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>82%</td>
<td>73%</td>
<td>58%</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>3%</td>
<td>14%</td>
<td>15%</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>15%</td>
<td>12%</td>
<td>23%</td>
</tr>
<tr>
<td>Women</td>
<td>70%</td>
<td>79%</td>
<td>51%</td>
</tr>
<tr>
<td>Men</td>
<td>30%</td>
<td>21%</td>
<td>49%</td>
</tr>
</tbody>
</table>

Participant demographics are similar to those of Florida Teachers as seen in Table 4.17. Variances across groups and potential implications will be discussed in three separate sections below, The Case of One Black Student, The Latino Voice, and Across Genders.

**The Case of One Black Student**

In an analysis of Table 4.12, there was a divide in the number of black participants compared to Florida’s percentage of Black teachers and university enrollment. Black students make up 11% of the enrollment at the university, and average 12% of the make-up of COE students enrolled in graduate degree programs. Black women in Florida with a graduate degree was found to be 7%, which is still greater than the percentages represented in this study (US Census, 2013). Even more critical is the fact that there were no Black men enrolled in the course. According to the US Census, only 40,116 Black men in Florida have graduate degrees, which equates to 4.5%. As educators and leaders navigate online spaces, student race can be easily overlooked. In this sub-case, I will explore how the one Black woman negotiates power during the collaborative experience.
During the online collaborative activity, the Black woman is the first to initiate discussion to brainstorm topics. She seemed to take a collaborative leadership role in the group, which is supported by the types of collaborative activities she engaged in. These included giving and receiving help, mutually influencing others’ reasoning, group facilitating, and group processing. She is empowered evidenced by the amount of words and posts she uses compared to others in her group. She uses a total of 262 words, and posts 5 times. The average for her group is 76.8 words and 2.3 posts. However, when other student post responses, she easily ends up using powerless language “but I’m open to anything…” and does not advocate for her original idea as seen in Table 4.18.

Table 4.18. Transcripts of Black Woman

<table>
<thead>
<tr>
<th>GC (Black Woman)</th>
<th>problem: social media/texting/sexting privacy issues, solution: explain the legalities and consequences, problem: cold/flu season, solution: hygiene, washing hands, not touching face and eyes, getting flu shot, problem: voting rules, absentee ballots, early voting, solution: explain rules, where to get information</th>
</tr>
</thead>
<tbody>
<tr>
<td>GC (Black Woman)</td>
<td>Also [the professor] makes a point of doing something local. Maybe we can choose an issue local to [the university].  How many of us are on or near [the] campus?  I work in the library. CD (White Woman): Ok, I can't meet with anyone... currently I don't even live in the country... I am in Germany, so I have to do everything from a distance. Sorry I can't make it to campus. :(</td>
</tr>
<tr>
<td>CD (White Woman)</td>
<td>I live in [the city], so I can meet on campus if you like. MC (White Man) - I like your idea of sexting. It is happening everywhere! GC, I like your idea of sexting. It is happening everywhere!</td>
</tr>
<tr>
<td>GC (Black Woman)</td>
<td>Oh, I didn't mean that everyone needed to be on campus just that it might help if we have a few if it's a local topic. But I'm open to anything everyone else wants to do.</td>
</tr>
</tbody>
</table>

Once the final product was uploaded, as part of the assignment, members of her group reflected on the product. A White participant reflected that the PSA was not a culturally diverse product, “just using more Caucasians and white people and such.” In contrast, the Black woman’s reflection discussed the product’s appropriateness for the US. She specifically shared,
“I believe our PSA is very American. It would fit with most people raised in the United States. It would probably fit in most Western countries but that's my only frame of reference.” This seems to reflect a lack of inclusion. The student’s background could not be explored further, but the professor suggested she might not be African-American as the area that surrounds the university has a large population of Caribbean descendants. Without revealing the student’s name, the professor shared, “My guess based on her name was that she was from another country in Europe or one its former colonies in the Caribbean/West Indies.”

Education leaders need to address the needs of under-represented populations as they design and support students within these space. Equally important, educators should provide culturally relevant curriculum and make sure that student are equipped with the skills to be successful in these spaces and supported through inclusion.

**The Latino Voice**

Despite the slightly higher percent of Latino students enrolled in the course compared to the local teaching population, Latino representation in the teaching profession is still underrepresented. It has been suggested that increasing the number of well-prepared Hispanic teachers has the potential for reducing the persistent Hispanic-White achievement gap (Villegas, 2007). With a critical lens, it is also important to note the evident difference between the percentage of students (and Florida teachers) that are White, non-Hispanic compared to the state population. There is a disproportionate amount of representation of the population in the course and teaching profession. Within the case study, there were a total of five Latino students. Jun’s power analysis revealed that there were no significant differences between Latino students and their non-Latino peers. Their participation varied across groups however. Additionally, evidence of empowerment in the Latino students can be realized through their discussions in their groups.
For the case of the Latina women, comparison of their verbosity in the context of their groups revealed that most were more verbose than their group members. The case of the Latino man varied widely from the general trend of the women. While there was no indication from the professor that any of the Latino students were not English proficient, research on asynchronous discussions revealed that, for students that struggle with language, or English is their second language, having the time to craft well thought-out responses may help mask limited English proficiencies (Weasenforth et. al., 2002). Overall, the Latino students seemed to bring a more culturally focused perspective to their collaborative groups. Table 4.19 reveals the divide in focus between the Latino students and those that were not Latino.

Table 4.19. Brainstorming Ideas by Demographics (Final PSA Topics Highlighted)

<table>
<thead>
<tr>
<th>Latino</th>
<th>School funding</th>
<th>Dropout rate of minorities</th>
<th>Teacher Quality low income areas</th>
<th>Student engagement/social class</th>
<th>Discipline</th>
<th>Cultural Diversity</th>
<th>Stereotyping</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bullying</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Underrepresented cultures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Literacy (not chosen by his group)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not Latino</td>
<td>Bullying</td>
<td>Literacy</td>
<td>Stress</td>
<td>Out of control teens</td>
<td>Underrepresented Cultures</td>
<td>Privatization of public schools</td>
<td>Unemployment</td>
</tr>
<tr>
<td>Woman</td>
<td>Man</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A power analysis of each Latino student is below.

Case 1: 2013, Latina Woman, words used=191, total posts= 8, (Group average- total words used=130 and 11 average posts). Her collaborative interactions mainly included offering and
contributing information (RI (7), MI, MS) Compared to others in her group, she frequently incorporated powerless language. An example from the text is seen in Table 4.20.

Table 4.20. Case One Transcripts

| AH: hey guys, this is the link to see the slides of pictures. It can’t be edited through this link so any changes, you’ll have to be specific...number the pics. Will need ideas for captions and music. Unless you guys want to do a voiceover or something? Let me know. | Identity-Technological Leader
| AH: Alright, try this link. Hopefully this one works. Otherwise, I don’t know any other way to share it. | Collaboration- HA, GF, RI
| | Power/Powerlessness |

She did exercise power through technology leadership in the post above. Also, as group members identified roles on their Google Doc, she was highlighted as the “techie” as seen in Table 4.21.

It could not be determined if she wrote this or another student.

Table 4.21. Case One Google Doc Transcripts

| AH- techie
| MR- hunt for images, paper
| ML- hunt for images, paper
| JC- APA guru, paper |

Case 2: 2013 Latina woman- Total words=147, posts=3 (Group average- total words=135, post average=3). Her collaborative interaction included RI, FB, GP. She did not use powerlessness language. This case is interesting in the fact that within the discussion she gained power through professor expectations within rubric to correct the White male that demanded a specific topic as seen in Figure 4.22.

She also brought up ideas of culture and diversity within her brainstorming comments, but none of ideas were discussed or commented on. One group member assumed consensus based on the discussion in Table 4.22, and moved forward with the idea of bully. She did not advocate for her ideas further.
Table 4.22. Case Two Transcripts

<table>
<thead>
<tr>
<th>Participant</th>
<th>Message</th>
</tr>
</thead>
<tbody>
<tr>
<td>AL</td>
<td>I'm not going to bother suggesting a different topic, but rather, demand we do his one as a group. Last year, I lost a student in my first period class to suicide linked to bullying. I was so completely devastated that I almost called it quits on teaching altogether. Can we focus specifically on cyber-bullying. There is a very thick layer of students' lives that goes on completely unbeknownst to parents and teachers. I never saw this girl's suicide coming. I want to prevent other teachers from similar blindsides in the future.</td>
</tr>
<tr>
<td>AD</td>
<td>Hello all: I completely agree with the issue of bullying and its connection to suicide. Since we have to brainstorm 5 problems relevant to curriculum and then choose one that we all agree to. I want to suggest two topics to complete the assignments as it was required. The two topics suggested are: (1) Culture diversity and the implications (the audience will be the students) (2) stereotype (the audience will be students). Thank you...</td>
</tr>
<tr>
<td>AL</td>
<td>Since we need a total of five suggestions and I wasn't helpful at all (sorry!), I'd like to put a couple more on the table for us to consider. 1) Title 1 and title 1-equivalent funding inequities 2) The plight of refugee immigrant students (those students who have been forced to flee from war-torn countries, often with no prior notice). My vote is still for the cyber-bullying/suicide topic. My suggestion for a solution is increase awareness and foster a family-type sense of community on school campuses.</td>
</tr>
<tr>
<td>MB</td>
<td>I like the bullying one, my older brother actually goes around the nation speaking to schools and churches about it. To throw in the pot, something on Common Core and educating about it.</td>
</tr>
</tbody>
</table>

Case 3: Latino Male- Total words used=157, total posts=3 (Group averages- Total words used=619, average number of post=9). In a group of White women, the Latino male’s voice seemed to be underrepresented. He used 157 words and posted three times, where the rest of the group posted an average of nine times with an average verbosity of 619. Like Case 3, he also advocated for a more culturally focused PSA as seen in Table 4.23, but did not advocate for his ideas. This can be seen in Table 4.24.
Table 4.23. Case Three Transcript

LA- Hi KA, Those are great ideas. I especially like the one on bullying and the one on under-representing cultures. I was thinking we might want to consider an issue related to literacy, perhaps, and could include solutions that include the classroom as well as parental involvement at home (reading to your kids, visits to book stores/libraries/book fairs, modeling reading behavior, using a reading log, and more). Just a thought.  LA

<table>
<thead>
<tr>
<th>Analysis LA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identity:</td>
</tr>
<tr>
<td>Critically minded</td>
</tr>
<tr>
<td>Collaboration:</td>
</tr>
<tr>
<td>Feedback</td>
</tr>
<tr>
<td>Mutually influencing</td>
</tr>
<tr>
<td>Power/Powerlessness</td>
</tr>
<tr>
<td>Language</td>
</tr>
</tbody>
</table>

Table 4.24 highlights his response. When other ideas were shared, he did not continue to advocate for his ideas, rather he went along with the group.

Table 4.24. Case Three Transcripts Response

LA- OK, I'm on board with bullying. I like SA's suggestion about the standers-by angle - it might be more universal since virtually anyone can be a witness to bullying. There a lot that we could do with body issues for this topic, and there's been some buzz in the news about adults (like that newscaster) who are also bullied, by other adults.  LA

Even when the group asked for consensus, he did not comment as seen in Table 4.25.

Table 4.25: Case Three Transcripts Lack of Response

Post: Vote for Bullying as our Problem
KA- It seemed that everyone liked the idea of bullying. In this thread, everyone should say if they agree with focusing on bullying. Also, will everybody write a solution? We need a direction if we choose this topic so that we can get our research done.
LB- I agree with bullying. I think an important solution is education about bullying in school and in the workplace (like the newscaster situation). I know we have a bullying workshop during pre-planning but our students never receive any education about it. I think we could take the approach in the PSA that bullies are everywhere and it's up to us to stop. Have you guys heard about that activity where you have the kids take a plain sheet of paper (the victim) and crumble it up, step on it, basically destroy it (the bullying) and then have them try to smooth it out again. It's impossible. It's to show you can't take away the damage done after you bully someone. I was thinking it might be powerful to insert pictures of that activity between facts for our PSA. I'd be happy to take those pictures if it's something were interested in. Totally just an idea.
Professor- Perhaps you can integrate both literacy as part of the solution to bullying. Can you use the paper activity creatively - to say something about literacy. Just some encouragement to say I like your ideas thus far.
KA- I think that's a great idea! Love the image is presents.
SA- I agree, and definitely vote for bullying, with a literacy solution to be our project. I also really like your paper activity idea.
The professor did intervene by posting in their group discussion, and said that maybe they should consider including literacy (his original ideas), but LA did not contribute to creating consensus, and was no longer present in the rest of the discussion. In the few posts he does provide, collaborative interactions include providing information, feedback, and mutually influencing. He did not offer reflection on the product either once it was complete.

In conversations with the professor, she shared that she thought his ideas were less mainstream than the rest of the groups, and instead encouraged him to share his ideas through his final product. She also nominated him for an award that year in his profession. She was not able to provide clarification of why his participation dropped off towards the end.

Case 4: TE Latina woman: total words=748, total posts=5 (Group averages- Total words=424 and Average Posts=5). Her collaborative interaction included HA, RI, FB, MI, and GF. She was highly involved across the collaborative process. She also demonstrated more critical focus than her group. During the brainstorming session she offered the only idea focused on culture or race during the brainstorming of ideas in her group, “Dropout rate of minorities.” In the passage below she directs a comment to another student about her idea. This is an example of how she provided feedback, elicited feedback from her group, and engaged in collaborative group practices (GF). An example of how she used powerlessness language is highlighted as well seen in Table 4.26

Table 4.26: Case Four Transcripts

<table>
<thead>
<tr>
<th>TE- DE, A massage directed toward parents makes perfect sense. I we wanted to communicate with teachers, this wouldn't be the most ideal way to do it, but it is the perfect way to communicate with the general public (parents). The massage could be for everybody, but parents are the group with the most at stake. Unless there is another suggestion I'll say let's do it this way. TE</th>
</tr>
</thead>
</table>

97
When asked to reflect on the diversity of the PSA after it was complete, her reflection seen in Table 4.27 did not discuss cultural diversity, rather diversity of topic and application across a wide audience. This comment did demonstrate how the assignment helped contribute to her collaborative leadership skills.

Table 4.27. Case Four Reflection

| TE- | I think it is important to realize that out of all the problems we encounter in education we all opted for problems which have to do with emotional issues. It shows that emotional issues are a major concern in contemporary society. I congratulate every group because none of us had any prior experience producing PSA's. Good job! |

Case 5: RG, Latino Man, 2012. In the online dialogue, RG only posted four words in one comment “I can dominate movie!” In the discussion board he uploaded a first draft of the product, and in his reflection of the PSA indicated that he created the PSA. This might indicate that he communicated outside of the discussion board to complete the assignment. While he did not present himself through discussion, he exhibited technology leadership through his contribution of the final PSA. His reflection is noted in Table 4.28.

Table 4.28. Case Five Transcripts

| (The hardest thing about putting this PSA together was deciding what information was important enough to include. When you think about it, 30 seconds is not a lot of time to convey a lot of information. I think that our group did a great job collaborating once we figured out what our roles were going to be. I think the only thing I would change about this project is to do a bit longer PSA.) |

In summary, the Latino students seemed confident in participating and contributing in these spaces. They had a more culturally sensitive voice than their non-Latino peers, and that voice seemed to get silenced often as groups brainstormed ideas. The Latino students participated across various types of collaborative interactions. Some took more leadership roles, while others seemed to support more by providing information.
**Across Genders**

In addition to the lack of racial and ethnic diversity in the course, there was also a greater number of men, and a corresponding lower number of women, compared to the total percent of teachers in Florida. According to the Florida Department of Education, women account for almost 80% of the instructional staff, but only 60% of the administrative staff ([FLDOE, 2009](#)). This difference may account for the higher number of men enrolled in the graduate curriculum course, which is one requirement for the COE’s Educational Leadership program. These type of underrepresentation is well known, and continues to be addressed by researchers and practitioners alike (Dunbar and Kinnersley, 2011, Cobb-Roberts and Agosto 2011 & 2012).

Within the case study, significant differences were seen in the qualitative analyses of power language and collaborative interactions. Women were more verbose and used group processing significantly more than men. In an exploration of groups with homogenous versus more heterogeneous groups, an interesting phenomenon surfaced. The group with no men or only one man had higher rates of group processing and group facilitating than the other groups as described in Table 4.29. In the collaborative analysis of the entire sample, across gender, there was a statistically significant difference was in the variable of group processing, with women having a significantly higher mean than men (p=.025, α=.05). An alternative explanation might be that women use group processing more with other women than with men. Further statistical analysis with a larger sample size might be an interesting follow up study.

<table>
<thead>
<tr>
<th>Table 4.29. Collaborative Leadership Analysis</th>
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<tbody>
<tr>
<td>Group 1 W=2 M=2</td>
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<tr>
<td>Group Processing</td>
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<tr>
<td>Group Facilitating</td>
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</table>
As mentioned before in the case of the Latina woman negotiating a demand by her White male peer, she gained power through the use of the rubric requirements to redirect her group. After she advocated for following the professor’s guidelines, the male student seemed apologetic. The use of an apology is an example of how powerlessness language was used by the man after the Latina student exercised power through her previous comment as seen in Table 4.30.

Table 4.30. Latina Student’s Transcripts

| AD: Since we have to brainstorm 5 problems relevant to curriculum and then choose one that we all agree to. I want to suggest two topics to complete the assignments as it was required. The two topics suggested are: (1) Culture diversity and the implications (the audience will be the students) (2) stereotype (the audience will be students). Thank you... |
| AL: Since we need a total of five suggestions and I wasn't helpful at all (sorry!), I'd like to put a couple more on the table for us to consider. 1) Title 1 and title 1-equivalent funding inequities 2) The plight of refugee immigrant students (those students who have been forced to flee from war-torn countries, often with no prior notice). My vote is still for the cyber-bullying/suicide topic. My suggestion for a solution is increase awareness and foster a family-type sense of community on school campuses. |

In summary, analysis of power language revealed Women, Black and Latino students seemed empowered in these spaces in many ways, but there were instance where voices were silenced through lack of representation and lack of self-advocacy. The presence or lack of representation of these voices influenced how knowledge is shaped and whose knowledge is represented.

When collaborative interactions were explored, students that skillfully navigated the collaborative process, facilitating the group, helping to guide the experience helped to empower others. How students used collaborative interactions could be used to inform one’s leadership identity.
Theme: Professor Philosophy and Policy Shaped Pedagogy

The literature review revealed there are a number of factors that have the potential to influence how meaning is made in the CSCL process. This section explores the role of the professor and how professor philosophy and policy shape pedagogical choices and influence the social construction of knowledge during CSCL.

Teacher Mindset

How an instructor thinks about her role and practices will frame the students’ experiences. Excerpts from the interview with the professor shed light on her perspectives related to concepts of teacher role, collaboration, and her technology experiences and proficiency.

During the interview with the professor, the role of the professor in the online collaborative experiences was explored. Her interpretation is analyzed in Table 4.31.

| I have thought about that a bit, and I think it has changed. I think I realized that before I expected people to be able to collaborate because they were adults, and perhaps they had done it before successfully… but then I think over the last few years, I have come to realize that… a lot of students that don’t have that experience, or don’t have success with it… So, I don’t necessarily assume up front that they don’t have the experience, but its like a little flag… like there might be some people that don’t have that experience… So, I think my role has changed that sometimes I have to give more. | Evidence in the assignment:
- Sets up discussion boards for students to brainstorm ideas.
- Facilitates discussions when students voices are not heard

Influence on knowledge:
- Supports Collaborative Leadership development |

Table 4.31. Professor Reflection on Role and Analysis

When asked how she defines collaboration, the professor shared that what they are doing in schools is not collaboration, and so when she asks student to collaborate in a new way, she asks them to take risks. She maintains a critical focus ensuring inclusion as seen in Table 4.32, which highlights evidence of her beliefs in the assignments.
“People working together on some shared product. So, there’s going to be some shared product or outcome at the end that everyone is invested in, and they make different contributions. I don’t think that everyone’s contribution will be the same in terms of the type of contribution, or the time, or the effort. But, I think that is part of what groups should work on and figure out based on their strengths, expertise and resources. So, I think collaboration involves all of these things. Like negotiations that people have to make… I try to be conscious about where people are getting left out. And it’s just not gender and race… Students who [have] a lot to take on in terms of family and health, and other things, heavy work load, they can be marginalized, or treated disrespectfully.”

During the interview, it became apparent that many of her face to face experiences shape her online teaching. As a person’s experiences shape their perspective, it is important to understand the professor’s experiences to understand how she facilitates the course. When asked about her own experiences, the professor’s reflections are analyzed in Table 4.33.

According to Kim and An (2007) teacher beliefs affect their attitudes and behaviors, which in turn can have an effect on student discourse and perceptions of collaborative learning.

Based on the responses of the professor, her perspective of online courses and collaboration may shape her expectations of students, student experience, and learning. Her comments demonstrate
a thoughtful analysis of the challenges she faces when teaching the online courses, although her fears may be a result of her lack of familiarity and comfort with the technology.

**Policy Foundations**

During the interview with the professor, she mentions the College of Education’s Conceptual Framework several times as a guiding policy (Appendix B). The university’s College of Education (COE) provides a guiding document called the Conceptual Framework and reflects federal, state, and institutional guidelines for education. The COE suggests that “competencies in these ideals will provide candidates in educator preparation programs with the skills, knowledge and dispositions to be successful in the schools of today and tomorrow” (COE Conceptual Framework, 2008). This guiding policy demonstrates a focus on developing future leaders’ skills in collaboration and technology. Also it is critically framed, addressing the needs of non-native speakers, cultural awareness, advocacy in culturally diverse settings, how sociocultural contexts can influence attitudes about technology, and sensitivity to issues of diversity and exceptionality. Support for collaboration, especially in virtual spaces is limited though based on responses from the professor and comments she has heard from her students.

Professor: “A student shared, ‘[The university] really wants us to collaborate because that is in our Conceptual Framework for the College of Education, but they don’t really teach us how to collaborate.’”

Interviewer: “Are there specific policies at [the university] that encourage or inhibit online collaboration?”

Professor: So, I don’t know of anything else that encourages collaboration amongst students, or inhibits it, in online in particular. But physically, there are not really spaces in the College of Ed at least, for people to gather and think and work.
There are very few of them where you can do that. Perhaps at the library, where they have redesigned some spaces where people can group and talk. But, in the College of Ed they don’t have a lot of gathering spaces, or rooms, or whatever it is where people can talk, and meet, and work and talk. I think that inhibits. It inhibits my collaboration.”

Interviewer: “So, is there anything that can be changed about your work as a facilitator of the collaborative process to make it easier…?

Professor: “I am sure there are many things, because I don’t think there’s a lot there to support that. It is in our Conceptual Framework, but I don’t know when I think about the kinds of opportunities that are made available, I don’t hear collaboration necessarily coming through. So, I know they have research one, they have these big events where the students demonstrate their research. I don’t know how much of that is collaborative research. I don’t know how much of that comes through in how they talk about preparing for that… other than with the professor, but I mean student-to-student collaboration. The spaces we have to work in, the physical space as well. So, if a lot of our students are taking the face-to-face courses and the online courses. Like in the physical space, if you allow students to collaborate, they can carry those skills into the online spaces. And then with grading, if it’s important, then they get graded on collaborative projects.”

Facilitating Technology Use

In efforts to provide a more inclusive experience asynchronous collaboration was chosen because it is easier for students to participate depending on work schedules, time zones, and her understanding of why students take online courses. “When I think of online courses, I think the
appeal is that you can go through it when you can. You don’t have to be any particular place at any particular time.” She did share that she understands that some students need synchronous time, and she expressed a willingness to support this technologically as needed.

The professor also models technology to support learner inclusion. In the first semester, the professor had students practice using VoiceThread in the first week of the course to make sure they were able to and respond using the technology. The professor in this case study supported understanding and use of technology by modeling, provided opportunities for practice, provided comments and offered support during the exercise (paste in her comments) provides opportunity to reflect on exercise after posted. The professor’s motive for using VoiceThread was so students could, “think about what they left out,… look at it from a multicultural perspective… and when I asked them to do that… some of them could see the lack of diversity in what they had done.”

Managing the introduction of new technologies and facilitating their use is just as important to support learner interaction (Paulus, 2005; Spector, 2005; Maushak, & Ou, 2007; Beldarrain, 2006). Despite the clear supports for the LMS changeover, this transition may have had an effect on the experience of the students in the second semester. The literature review revealed that technology can be a limiting factor in the success of online collaboration. Flexibility within learning management systems is a key for utilization. Faulty systems and lack of access have been identified to negatively impact the collaborative experiences of learners (Del Litke, 1998; Weiner, 2001; Berg, 2011). Table 4.34 highlights an email from the professor to her students regarding one challenge that arose with the technology. This is just one example of several where the teacher facilitated communication between students, and supported technology use. Despite the fact that the technology error was not her fault, she was apologizing to the
students. According to Jun (2007) apologizing in online discourse is using powerless language.

By using powerless language, she positions students to feel more empowered to enlist the support she offers. Further, she offers strategies to mitigate the technology challenge.

Table 4.34. Email about Technology Challenges to Professor

<table>
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<tr>
<th>Subject: Technology challenges</th>
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<tr>
<td>Hello all,</td>
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<tr>
<td>This morning I realized that the individuals were not activated and people had begun discussions in one group site. With the help of [several students] and IT that has been corrected. You should now have access to your groups’ tools (discussion board, blog, etc). I apologize for any inconvenience this might have caused you. For those of you who typically wait until the weekend to chunk your engagement please do not wait. At least begin the discussion and planning. If any group is interested in arranging a conference call, I can help with this.</td>
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**Communicating Expectations**

The professor’s role includes communicating expectations of the collaborative product and process. Her rubric (see Appendix B) is tied to the Florida Principal Leadership Standards and focuses on diversity, engagement, and inclusion. Tying outcomes to standards helps promote metacognition to students and provides relevance (Bales, 2007). In addition to providing guidelines and assignment rubrics, she communicated expectations for the CSCL assignment in other ways. She explains, “I [tell] them be conscious of the process, not just about the product. So, it’s not just about the end, so explaining to them the importance of working with people, not just trying to get something done.” In the case study, the professor using technology to empower students to participate in the brainstorming activity. She used discussion boards to create a space for students to collaborate.

During the interview she shared, “I create the groups, and I tell them, ‘You have a group space where you can work, so you should look at some of the features there.” She included brainstorming the rubric to avoid people getting “shut out.” She explains,
So, I have to ask them to brainstorm some ideas because I think if people brainstorm they all get the opportunity to contribute... I think that is an assumption that I have that people understand that, that it’s about bringing those ideas in... We get all our ideas out there, and then we can start prioritizing them, or blending them, or getting rid of some. I am sure in a lot of cases that people don’t get the opportunity to share, they are not as assertive, or not as quick at communicating their ideas, so I try to kind of intervene early on. I don’t know if it helps, but at least I hold them accountable because that is part of what they need to show.

Table 4.35 is an example of brainstorming session where one student challenges another

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<thead>
<tr>
<th>Table 4.35. Group 3 2013 Topic Brainstorming Discussion</th>
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<td>LB (White Woman): My brain is not working well right now with this headache, but I suggest a public service announcement directed at bullying and its connection to suicide. This would be directed at parents of children (societal curriculum) and teaching their child how to react if they are bullied or see someone being bullied.</td>
</tr>
<tr>
<td>AL (White Man): I'm not going to bother suggesting a different topic, but rather, demand we do this one as a group. Last year, I lost a student in my first period class to suicide linked to bullying. I was so completely devastated that I almost called it quits on teaching altogether. Can we focus specifically on cyber-bullying. There is a very thick layer of students' lives that goes on completely unbeknownst to parents and teachers. I never saw this girl's suicide coming. I want to prevent other teachers from similar blindsides in the future.</td>
</tr>
<tr>
<td>AD (Latina Woman): I completely agree with the issue of bullying and its connection to suicide. Since we have to brainstorm 5 problems relevant to curriculum and then choose one that we all agree to. I want to suggest two topics to complete the assignments as it was required. The two topics suggested are: (1) Culture diversity and the implications (the audience will be the students) (2) stereotype (the audience will be students). Thank you...</td>
</tr>
<tr>
<td>AL (White Man): Since we need a total of five suggestions and I wasn't helpful at all (sorry!), I'd like to put a couple more on the table for us to consider. 1) Title 1 and title 1-equivalent funding inequities 2) The plight of refugee immigrant students (those students who have been forced to flee from war-torn countries, often with no prior notice). My vote is still for the cyber-bullying/suicide topic. My suggestion for a solution is increase awareness and foster a family-type sense of community on school campuses.</td>
</tr>
<tr>
<td>MB (White Man): I like the bullying one, my older brother actually goes around the nation speaking to schools and churches about it. To throw in the pot, something on Common Core and educating about it.</td>
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</table>
This is an example of student discussion that validates some of the challenges she discusses, and how holding them accountable for this helped give voice to more participants. In the discussion, AD (Latina Woman) referred back to the assignment requirements to support more brainstorming from the group before they came to a consensus. She was empowered by the rubric that the professor provided.

**Grouping**

When asked specifically about how she created her groups, she shared, “it has been a process, and because [its] online, it is a little bit different” than how she did it in her face-to-face classes. In the face-to-face classes she tried different methods. “In the [online] grouping I am conscious, because I don’t always know the students… I don’t know them to know all the dynamics of the groups, but I do try to make sure the groups are diverse based on what I know of them.” As discussed in the Across Genders case, heterogeneous student grouping can have an influence on how groups collaborate.

In the first semester she randomly assigned group members using Blackboard functions. Students in the second semester were part of the same groups throughout the course. The professor rationalized using the same groups based on the thought that after the first exercise, students become familiar with one another and “know what people’s schedules are, … how they communicate… how they work, [and have] established some method of communicating. So, by the time [they] go into a second project it’s easier, rather than changing to new groups.”

**Facilitation and Intervention**

To avoid reproducing the structures of inequality that exist in a wider society, educators musts “intervene to introduce a variety of practices to insure some sort of equity of participation
(Brookfield, 2001, 221-222). Lack of teaching presence has been shown to inhibit students' ability to effectively construct knowledge through asynchronous discourse (Saritas, 2008). Educators’ effective support of technology is essential to the online collaborative process (Hramiak and Irwin, 2010). Even with a well-designed lesson and rubric, conflict between participants occurs. Table 4.36 highlights text from emails between a student and the professor.

Table 4.36. 2013 Group 4 Member MS Emails with Professor

| MS: Can you let me know if this will be the last group project we do? I hope so as our group members are frustrated and two won't even talk to each other. I had to pick up the slack completely for one group member and am risking my job today to finish this up and I hope my grade will be reflective of all the hard work I had to do. I'm sorry if I'm venting but i'm extremely displeased with the way this whole process has gone and am sure LM in our group will be behind my displeasure. |
| Professor: Yes this is the last group project. Please do not risk your job. I do not want a MS and LM project. Send me your write up and I will request that of the others in your group. |
| MS: MG has really helped out as well. We all 3 had problems with KD unfortunately. Here is our Google Docs [link] |
| Professor Hello MS, I just looked at your group section and it does not reveal a "problem". There was a reference to emails, to which I do not have access perhaps those are more revealing. KD was in touch me yesterday and perhaps the day before about aspects of finalizing the project (paper). I see that there is a plan to submit your PSA and paper this evening which is still within the deadline. Since it is on Google Docs you do not have to send it since I am already invited and can view it. At this point, I will expect that others in your group will take the time to finalize the document. It appears to be coming along nicely despite the associated stress. |
| MS: The three of us did the whole project and she posted some questions in the public forum, that is the problem. I'm just glad I was able to call in sick today to get this project done so my grade is not affected. Thanks |
| Professor: Hello MS, I am giving your group another week to use the comment function in Google Docs to strengthen the paper if needed. The comments are mailed to me and when removed or resolved that change is noted as well. You have a deadline of next Monday. |
| MS: Here is the link |
| Professor: Hello Group, Great collaborative work! This is a much stronger document in terms of the connections between the PSA and the course material (Schiro; Cortes; Eisner). Thank you for coming together on this. I see this process as meaningful beyond a grade, beyond the products, and beyond this course. Curriculum leadership is not an isolated process but involves the work of people in collaboration (i.e., committees). Curriculum leadership has significant implications for what students learn - from what we provide as curriculum and as models. A+ |

MS of Group Four discusses her concerns in this example. Despite grouping students together throughout the second semester, one group of students, made up of all White women,
experienced challenges from maintaining the same groups. In efforts to facilitate their problems, the professor shared her way to counter these practices was to not “back down” and “not give into the complaining.” She suggested the students “put it into the work, put it into the process if they are really worried about their grade.” In the end she thought it was a much better product that what they had started with. “I felt like I was redirecting that energy in to the learning. I don’t want to hear that you always get an A, and you have no other options but to do it yourself. I’m like, NO, it’s about the learning. Show me you are learning.” This is how she helped the students learn to negotiate power and supported their collaborative leadership skills.

After intervention from the professor, the same group of women in the second semester was given extra time to collaborate, and directed by the professor to use Goggle Docs. This seemed to support more cohesive collaboration and communication. Figure 4.4 is a screen shot of the Google Doc as an example of their improved collaboration.

The folding in of ideas can be seen in the comments to the right, with layers of additional information being added, on top of the other. Agreements made to changes help to confirm changes. Professor intervention is one way to help students overcome exclusion and barriers to collaboration.

She explained that in facilitating discussions in face-to-face classrooms are easier because you can hear the conversation develop, but in online environments, “there’s not that element of the speech, like in a classroom.” Also, not all groups use the discussion boards, so its harder to see how ideas are getting ignored or left out. The professor noticed in the online courses that “in a very subtle way, some people’s ideas were not coming through, and they were dismissed.” She began to question, “How does that work? How is it that your ideas have vanished, they don’t show up anywhere, they are not commented on, or they just get cut out?... I
was disappointed too that the people I thought it was happening to didn’t advocate for themselves more… they would just let it go.”

part of, what Elliot W. Eisner (2003) describes as, the Null Curriculum or part of the implicit curriculum. He describes the null curriculum as all the things that are (systematically) left out of the curriculum. The implicit curriculum, or hidden curriculum, is curriculum that is unintentionally taught (Eisner, 2003). Unfortunately, as a society, we cannot afford for major a social issue, like bullying to become part of the null curriculum. Although tough, it is not impossible to get the word out to students about social issues. One avenue that educators can take in educating students on social issues is through, what Cortes (1979) describes as in The Societal Curriculum. Cortes’ describes the Societal Curriculum as the “informal curriculum gained by family, peer groups, mass media, and other” (Cortes, 1979). The media is a very powerful tool if used for the right reasons (Cortes, 1979). Spreading the word about social issues like bullying through media, such as a PSA, could help bridge the gap between students and social reconstruction.

Figure 4.4. Screen Shot of Google Doc

Jun (2007) notes that “facilitators of online courses need to pay more attention to the learners who are not in the dominant group in order to ensure that their participation is acknowledged and to reduce their marginality.” The professor admits that sometime people are left out unintentionally, and she doesn’t not intervene in those cases. She emphasized that she will intervene if there’s a pattern of being left out, especially, “when it comes to gender, race or language, [because] no matter who it was, they have a contribution to make, they have something to offer that could inform this project.”

In the case of the Latino man that seemed to participate early on, but then there were no further posts from him, she recalled, “I thought was that he was very critically minded, and I don’t think that was coming through in the group. Or he tried up front, but that didn’t work… I
think his group was more mainstream, and more neutral and maybe didn’t appreciate his perspective.” As a way to intervene and help advocate for his ideas, she posted on the group’s discussion board, “Perhaps you can integrate both literacy as part of the solution to bullying. Can you use the paper activity creatively - to say something about literacy? Just some encouragement to say I like your ideas thus far.” In her justification for intervening, she shared that a lot of times it’s to help them bring ideas in and encourage them to “synthesize” those ideas. Instead of intervening further during the collaborative activity, she encouraged the Latino man to explore some of his ideas and perspectives he shared early on “so he still gets that expression, [and] he still gets credit for it.” That semester the professor nominated him for the Outstanding Latino/Educator Award.

Other ways the professor supported understanding of technology was by modeling, provided opportunities for practice, providing comments and support during the exercise, and providing opportunities to reflect on exercise after posted. She facilitated collaboration by making comments to check for progress and probing for further understanding.

**Professor Evaluation**

When asked, “What defines success in online collaborative learning?” the professor responded,

“I think in the end when they have learned from their process and product and they feel that they have learned from both aspects, they have learned from other people, and they are able to demonstrate that learning, or at least some of it in a product, they feel that it’s a product they have invested in, it’s a product they can talk about, they can analyze it, they can identify their limitations, their shortfalls, what didn’t get in, that, or some way of thinking about it where they can see where it might have been better, or maybe
somebody’s ideas might have been good if they had come in, So, I think they learn, and they are able to reflect on it, they are able to develop the relationships, the network, so once they leave, and they have worked with a group of people, they have developed connections that can go beyond the course.

She closes by emphasizing the connectedness of the larger education network, and how a students’ interactions in these spaces may have an influence on their future. When asked how she evaluated successes in online courses, she responded,

I don’t think about it the technology so much. I think if I can get people thinking along the way, and not just clicking, completing things, I can see some thoughtfulness throughout. So even if they can’t show it through the project…They can show it in their discussions, some people are better at writing, some people are better at speaking, some people need more time, so a project would be good for them. So, if I can have those opportunities and they have been able to express… that they have been thoughtful about the idea, and not taking things for granted that they may have before. Success for me in teaching that course is that it puts curriculum on their radar in a way that they hadn’t thought of before, and more often.

In a study of collaborative writing, Alvarez, Espasa and Guasch (2011) identified three main types of feedback. Epistemic refers to requests for explanations and/or clarifications in a critical way, suggestive feedback includes advice on how to proceed or progress and invites exploration, expansion, or improvement of an idea, and corrective refers to comments about the assignment requirements and the adequacy of the content. In addition to being used throughout the collaborative process, examples of these types of feedback can be seen in her comments. Feedback for the group of all female students is in Table 4.37. It reflects feedback on both the
process and product. This feedback contributes to their socially constructed understanding of collaboration. To help student be more effective learners and collaborators, feedback is essential. It is important because feedback shapes meaning, even after students create their learning product. It helps to correct misconceptions, and reinforce ideas and practices of effective collaboration.

Table 4.37. Project Feedback from Professor

| Group 4: Great collaborative work! This is a much stronger document in terms of the connections between the PSA and the course material (Schiro; Cortes; Eisner). Thank you for coming together on this. I see this process as meaningful beyond a grade, beyond the products, and beyond this course. Curriculum leadership is not an isolated process but involves the work of people in collaboration (i.e., committees). Curriculum leadership has significant implications for what students learn - from what we provide as curriculum and as models. |

The Learning Product

**Theme: Technological Literacy as Power**

In earlier explorations of technology and multimodal discourse analysis, Jewitt (2002) concluded that the type of technology influences how meaning can be designed. She continues, In order to understand the practices of people engaged with new (and old) technologies, we need to understand what it is they are working with. Understanding the semiotic affordances of medium and mode is one way of seeing how technologies shape the learner, and the learning environment, and what it is that is to be learned… and reshape knowledge (p. 194).

The collaborative groups used various types of technology to create their final products, and how they decided on which technology to use was facilitated through collaborative discussion. In some instances, participants discussed which tools they had mastery of, and usually, the most confident person volunteered to complete the technological part of the PSA.
This unofficially placed them in the role of data manager, as they had to then use the information provided by the other participants to create the PSA. Despite the fact that other participants provided information towards the project, the burden of combining that information was placed on one person. The biases, understandings, and preferences of this participant then could have the potential to influence the final product. A student reflects on her PSA and the collaborative process in Table 4.38

Table 4.38. Reflection of PSA Process

| 2012, 2 CD (White woman)- For our presentation, we were trying to make ours more culturally diverse, as well as putting in different genders, male and female and uh, as I am looking back over it, I see we ended cutting out more, and just using just more Caucasians, and White people and such, so, I think there was a few (laugh) minorities in there, but yeah, I guess we cut those out and there’s a lot more girls in there than we had in there before. We tried to have them evenly spread out, but I think in part because we liked these pictures better, because they showed bullying a little better, the effects. So it was kind of challenging in some ways, so this would be more appropriate for the American or European areas. |

Although it says “we” the person that ended up cutting parts out was the person that was creating the PSA. Whether that person collaborated with his/her group members is unclear in these cases.

Groups that successfully used technology to empower all members were those that were open and honest about their abilities, strengths and weakness, and worked to utilize the strengths of their group members. Through the asynchronous discussion boards, groups worked to identify their members’ strengths and weakness, and based on their skills, assigned task.

Examples of these types of interactions can be seen in Table 4.39 and Table 4.40. Group 1 in 2012 discuss the types of technologies they have experience using and how those technologies might support the project. Group 4 in 2012 also discuss their technology proficiencies and work to identify roles based on these skills, or lack of skills.
Table 4.39. 2012 Group 1 Conversations

KA- What type of PSA would you all like to create? I think it will be kind of difficult to make a video since we will probably not be able to all meet together. I have windows media maker that I have used before. If we do something like that, we can just include pictures and maybe a song in the background? I would be happy to put it all together once we do the research if no one else has a better program to use.

SA- Yeah, really the only program that I have on my computer is the Windows Movie Maker for the still images. I agree, I think doing the PSA with the images and then a voice-over would be the way to go.

LA- Worst case scenario we could do a PowerPoint with our own audio and then record the presentation. I think you can do that :/

KA- I have never used that program. I have a Mac, but I'm assuming it's similar to iMovie though. I definitely think we need to add music, it'll give it a nice dramatic effect to the content. :)

Table 4.40. 2012 Group 4 Conversations

Post: What Are Your Skills?

RH- I am very familiar with Camtasia productions made from .mp3 audio files and power point slides turned into images. Here is an example of a production I did for another class: http://www.youtube.com/ I can use Photo Shop and build web pages too.

MG- Your production looks great! I've never used Camtasia but I have used Jing and I have just a little bit of experience with audio files. My experience with Photo Shop and building web pages is pretty beginner, too, I'm afraid! But I'll help out the best I can. I'm going to look it all over again. It's been a crazy week and haven't had much time to see what the requirements are.

RG- I can dominate iMovie.

SG- I'm pretty good with iMovie, not too bad at photoshop, but also would not mind researching info for the PSA and letting the more technologically skilled focus on the production piece.

In 2012 group 3, after their brainstorming sessions, one group member created a survey for members to vote on to narrow their focus. DE wrote, “DE- I combined some of the problems. I will send out the results as soon as everyone finishes. Thanks

http://www.surveymonkey.com/. Having a collaborative mindset focused on consensus and a clear understanding of how to use technological tools empowered groups to facilitate social decision making.

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Navigating various types of technology can also create challenges for groups involved in CSCL. The same group of all women mentioned in the discussion on teacher role, had a particularly challenging time communicating during their CSCL activity as seen in Table 4.41. This may have been enhanced by the change in the LMS that included a new email/inbox formats.

Table 4.41. Transcripts from Group of Women

| KD | So I just realized that I was looking in the wrong "e-mail"..... I have been looking in the "inbox" on Canvas and didn't see the e-mails. But then it dawned on me that you all might have been sending e-mail through Canvas mail. Is there anyway we can just create discussions like this one when we need to communicate? Just so we don't have to look in so many places. I completely missed so much of the discussion between everyone this week because I was looking in the wrong place. So sorry about that.... There are just too many spots to look for everything ugh!
| LM | Hi KD, We have been using the school email and the Google docs as the methods of communication. MG is working on the written supplement right now, so you two need to start collaborating immediately.
| MG | KD, We have been communicating towards school email and Google doc, inbox etc. It would be almost impossible to complete an online group project without using emails, etc. I will post my work on Google doc. as soon as I am done editing, than we can collaboratively complete it. We should finish it by today or early tomorrow, so other members can view it. Thank you. MG
| KD | I am not saying to not use e-mail. What am a saying is that I am not sure why we have to use 3 different locations to communicate the same information. I am not sure why we have to use Canvas e-mail, the inbox on canvas, and this discussion board. It would make communication much easier if we chose one way to communicate. So we all know where the communication is taking place. Google docs is great for working on a specific document together but I'm talking about the actual communication part. It seems to me that it would be easier to communicate through one of those 3 places. Just a thought.

Technology was used to exclude and include. Preference for one type of technology acted like a stoplight to communication. Both women seemed to be steadfast on using technology in their own way. As a result the groups’ social construction of knowledge suffered. This is also an example of a barrier to collaboration.
This wasn’t the norm though. In another group, members simply redirected to assist those that did not understand the technology processes as a way to empower them. For example, DA wrote, “I apologize for my delayed response. I was adding my input to another group's board, thankfully KA called me out on it!” By KA assisting DA, she was able to participate in the group process more quickly and participate in the creation of the final product. In summary, students used technology to both promote and inhibit collaborative learning.

**Theme: Influences of Technology Based Curriculum-Media**

Most students’ learning products were in the form of a Public Service Announcement. They included resources and photos from the internet. Participants use from the internet were selected through, not only their own lens, but the lens of those that post the resources they are using. Their own biases may have played into their selection of photos. But it must be acknowledged that these selections were filtered through the media outlets and sites that they gathered these resources from. Table 4.42 highlights one participant’s reflection supporting this idea.

Table 4.42. Student Reflection about Media

| SC (White woman) | Because we used images located online that we wanted to represent bullying in the most powerful way, we did not do a great job of including students of different races and genders. If we were to do this project again, we could have taken our own photos to include to make sure we capture a more representative population. |

In addition to images used to create their PSAs, the ideas for their PSAs may have also been influenced by the larger online community. “Vygotsky (1978) notes that learning does not always occur in vacuum, but in a social setting. In other words, learning is influenced by the context in which it takes place: the process of gaining expertise is assisted by other people, and expertise occurs in socio-culturally significant contexts” (Oura & Hatano, 2001). Media can have a powerful influence on the perceptions and discourses of online students.
During the time of the courses (2012-2013), several cases of bullying sparked nationwide controversy about bullying, with a focus on cyber bullying. Two of the larger bullying cases included the Rutgers student that killed himself and the Florida girl that that jumped to her death. Coverage and public response to these cases created social awareness of bullying. In addition, schools seemed to focus on improving practices related to this area.

In an analysis of the transcripts, the theme of bullying appeared in six out of eight groups as the focus for their PSA. The two other PSA topics were teen stress and literacy. The focus on bullying seemed to act as a hegemonic and counter-hegemonic force that informed the discursive practices of the participants. While the focus of the PSAs are counter-hegemonic, what ideas were left out was a critical concern of the professor. She explains,

“Yeah… that was such a hot issue in the last few years, it was like that was all they could think about… After a few semesters of that’s all they are talking about, its scary for me. I am thinking, ‘What else is happening? If we are all focusing on the same think, then what else is being ignored?’ So, it’s great when things get attention, but sometimes it’s like people just can’t think of anything else because the discourse is so great on bullying, like that’s our crisis right now… It was just scary because what other ideas are being marginalized? It was great when other groups came up with other ideas.”

The internet, news and social media framed the discourses of online students. Cultural focus on bullying may have influenced the choice of participants as the focus for their PSAs.

**Theme: Influences of Technology Based Curriculum-Diversity**

In the first semester, in addition to the asynchronous collaborative discussions, the group’s collaborative products were reviewed. The professor posted the final projects on Voicethread. After the groups provided comments on their own PSAs and the PSA of other
groups, the professor asked them to reflect on the diversity of their process and product. When explaining whether their learning product was diverse, different students had varying interpretations of what it means to be diverse. Some discussed diversity as being applicable to other countries and continents, while others looked at race, culture, socio-economic status and gender. A general theme among participants was that while their topic was applicable to a diverse audience, although their information and supporting media did not reflect this. Initially, groups seemed to think their product was diverse, but after going back and reviewing it, many discovered they lacked diverse images of gender and culture and race. In addition, there was a theme of being suited for an “American” audience. Table 4.43 provides examples of reflections that discuss diversity and identify themes.

Table 4.43. PSA Reflections and Themes

<table>
<thead>
<tr>
<th>Comment</th>
<th>Topics Related to Diversity</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012, Group 2 CD (White woman)- For our presentation, we were trying to make ours more culturally diverse, as well as putting in different genders, male and female, and as I am looking back over it, I see we ended cutting out more, and just using just more Caucasians and White people and such. So, I think there was a few (laugh) minorities in there, but yeah, I guess we cut those out and there’s a lot more girls in there than we had in there before. We tried to have them evenly spread out, but I think in part because we liked these pictures better, because they showed bullying a little better, the effects. So, it was kind of challenging in some ways, so this would be more appropriate for the American or European areas.</td>
<td>Gender American</td>
<td>- Laughter as an indication of discomfort. - Suitable for American and European areas even though it’s not diverse.</td>
</tr>
<tr>
<td>2012, Group 2 GC (Black woman)- I believe our PSA is very American. It would fit with most people raised in the United States. It would probably fit in most Western countries but that’s my only frame of reference.</td>
<td>American United States International</td>
<td>- Suitable for American and Western areas even though it’s not diverse.</td>
</tr>
<tr>
<td>2012, 2 MC (White woman)- So, at first I thought that our PSA for bullying was extremely culturally diverse. I feel that the topic is diverse, it does touch all different kinds of people, but then when reviewing our PSA itself, I noticed that the images were mostly females, Caucasian females, and it almost looked as if Caucasians were the only people who were bullied, which is not the case as we know. So, I think, if we were going to go back and do this PSA again, I feel it would definitely be a good idea to find more diverse pictures. Since thinking about schools in Florida and how diverse the population really is. I didn’t feel like it lost meaning because it wasn’t culturally diverse, but it could perhaps for others, they don’t think it affects them, and they might not take it so seriously.</td>
<td>Race Gender Culture</td>
<td>- The phrase “we know” seems to subtly suggest inclusion in the Caucasian race. - She refers diversity as the “other” and “they”</td>
</tr>
<tr>
<td>2012, 3 SC (White woman)- Because we used images located online that we wanted to represent bullying in the most powerful way, we did not do a great job of including students of different races and genders. If we were to do this project again, we could have taken our own photos to include to make sure we capture a more representative population.</td>
<td>Race Gender</td>
<td>- Contributes the lack of diversity in online images; as if bullying is not represented in images of people in diverse backgrounds</td>
</tr>
<tr>
<td>2012, 3 DE S (White woman)- I believe our PSA was truly diverse in the process. Just looking at some of the material that we used such as the article about cyber kindness that was from British Columbia. There was another article that was from Ireland that talked about children there. The final product I think can also be applicable to all children that have computers and that have internet access, or cell phone access, or things like that, that it could be applicable to all of them.</td>
<td>International Process Technology Access Countries or Provinces with majority populations that are White BC; Ireland = “truly diverse”.</td>
<td></td>
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reveal a hegemonic discourse of what it is considered to be American. Even though they
explained their PSA was not diverse, they still though it was appropriate for an American audience. This seems to suggest that their interpretation of what it means to be American is either not diverse, or that relevance to the diverse populations is not a priority.

**Themes Discussed**

**Theme:** Manifestations of power through discourse

**Findings:** Students used language to construct knowledge, skills, and identity

**Theme:** Professor philosophy and policy shaped pedagogy

**Finding:** The consistencies and inconsistencies between policy and the philosophy of the professor shaped the pedagogical aspects of the activity.

**Theme:** Technological literacy as power

**Finding:** Students used this power to (promote or inhibit collaborative learning).

**Theme:** Influence of technology-based curriculum

**Finding:** Events and images amassed and produced influenced the learning process and products.
CHAPTER FIVE

Discussion, Conclusion, and Recommendations

Chapter Four provided a three-tiered discourse analysis through a critical lens. It investigated power language at a textual level, collaboration at an interactional level, and explored subcases of race, ethnicity and gender at a contextual level. Building on the contextual level, the role of the professor and a technology-based curriculum was explored. The findings highlighted 1) How participants negotiated power through text and interactions 2) How students used technology skills as power to (promote or inhibit collaborative learning). 3) How the consistencies and inconsistencies between policy and the philosophy of the professor shaped the pedagogical aspects of the activity and 4) Events and images amassed and produced influenced the learning process and products. The CDA framework was ideal for presenting these findings because it framed the text and interactions in a rich context and helped to understand how interrelated these factors are in the CSCL experience.

The guiding questions for the study were helpful to frame my exploration. What factors shape how students engage in the social construction of knowledge during asynchronous computer supported collaborative learning (CSCL)?

This question was supported by the sub-questions 1) How do students negotiate power during CSCL? 2) What factors influence CSCL? I will discuss the themes in relation to the literature and explore how these findings may advance an agenda for change or reform in education practice and policy. In addition to student discourse and collaborative practices, the role of the facilitator will be considered.
Discussion of Findings

This transformative mixed methods case study provides an initial understanding of the role of power in CSCL. This chapter uses a three-tiered discussion to allow the reader to see how power is seated at in the intersectional relationships that exist between teacher pedagogy, technology, student discourse, and the social production of knowledge during CSCL. According to Fairclough (2010), analysis of social events as a social practice may refer to different levels of organization— the context of the situation, the institutional context, and the wider societal context or ‘context of culture” (p. 95). This paper concludes with recommendations for educators, administrators, and policy makers in these spaces.

Micro-level Discussion: Manifestations of Power through Discourse

Fairclough (2010) suggests that researching hegemony is a matter of textual analysis, seeking to identify what distinctive discourses and narratives are associated with particular strategies, as well as analyzing texts with a focus on contradictions and struggles between competing discourses and strategies. Student background and discursive practices have the potential to shape how meaning is created. Chapter Four revealed that students used dialogue to construct identity in the online spaces and negotiate power. The assignment supported development of collaborative leadership skills. Women, Black and Latino students seemed empowered in these spaces in many ways, but there were instance where the Latino voice was silenced, and through lack of representation, the Black voice was also subdued.

In the textual analysis of power language, while no significant differences were found within the case for race and ethnicity, instances where students were not empowered were uncovered through contextual analysis. There was a significant difference in verbosity, with women being more verbose than men. Weiner (2001) purports that race and ethnicity are less
obvious online, which allows more open communication and less room for prejudice and
discrimination to spread as freely. In a study of online learners, students felt that because of the
anonymity, they were judged less with regards to their gender, ethnic background, and
appearance.

The interactional level analysis explored the types of collaborative interactions as
expressed in the dialogue according to Maushak and Ou’s (2007) five interactions: Mutually
Constructing Knowledge, Mutually Negotiating, Mutually Supporting, Group Facilitating, and
Group Processing. Through the quantitative analysis, there were no statistical differences across
ethnicity and races, but women exhibited more group processing at a statistically significant
level. Between the two semesters, over 50% of discourse coded demonstrated students
participating in the mutual construction of knowledge. Participation in a well-designed,
supportive collaborative activity can act to empower all participants (Seel, 2012) and can
enhance learning (Kim & An, 2007). When facilitated and executed in its most perfect form,
collaboration creates a scenario that empowers all learners to provide insight and work together
equally to solve a problem, come to shared understanding, or complete a task.

According to Kerschner and Erkens (2013) CSCL can have multiple outcomes. The level
of learning can explored as cognitive, as skill, or as motivational or affective learning goals. The
analysis was evidence that students involved in the CSCL process social constructed knowledge
through creation of a shared product, but they also were able to learn to negotiate power through
their collaborative interactions. This experience helped them to develop collaborative leadership
skills such as sharing power, managing relationships, and enabling others. Additionally, through
reflection, students were able to construct knowledge of self through exploring their process and
their learning product from the perspective of diversity.
Despite the professor’s best efforts to support an ideal collaborative activity, there were interactional barriers to collaboration that were revealed. These included setting a schedule without getting consensus from the group, being disrespectful, having differences in communication preferences (when and how often, and how email versus other strategies), differences in urgency, and having other group members “gang up on another.” Through these types of interactions students also contributed to establishing their identity within their group.

In the contextual level analysis, three subcases were explored by pulling the power language analysis and the collaborative analysis together in the context of identity. These subcases explore how students socially constructed their identities through power/language exchange and collaborative practices through discourse and interaction. Social construction of reality refers to the theory that the way we present ourselves to other people is shaped partly by our interactions with others, as well as by our life experiences.

For The Case of One Black Student, although she was empowered based on her discourse and collaborative interactions, she still was the only Black student. Being the only Black face in a White class can be distressing on the spirit and mind of the student (Jones, Torres, & Armenio, 2014). Lack of a more heterogeneous population in education leadership courses, creates a scenario that may reinforce oppression. Her reflection of the learning product indicated a lack of inclusion.

Once the final product was uploaded, as part of the assignment, members of her group reflected on the product. A White participant reflected that the PSA was not a culturally diverse product, “just using more Caucasians and White people and such.” In contrast, the Black woman’s reflection specifically shared, “I believe our PSA is very American. It would fit with most people raised in the United States. It would probably fit in most Western countries but
that's my only frame of reference.” This seems to reflect a lack of inclusion. The student’s background could not be explored further, it was suggested that she might not be African-American, rather of Caribbean decent.

The theme of being American was ubiquitous in the students’ reflections. American culture is built upon the British-based Anglo-culture. As a result, America’s fundamental beliefs and values are the same as Anglicized/White beliefs and values (Young, 2004). Purporting the suitability of the PSA is for the American culture reinforces oppression of the “Other” through cultural imperialism.

According to Freire (1993) oppressed people can become so powerless that they do not even talk about their oppression. Through marginalization and indoctrination, the Black woman’s perception of “American” may not identify with being Black. Additionally, she mentioned “but that’s my only frame of reference.” These words reflect a critical thoughtfulness of perspective when reflecting on diversity as part of her socially constructed identity.

In this case study, after reflecting on their products, many White students realized that their PSAs were not culturally diverse as seen in Table 5.1.

<table>
<thead>
<tr>
<th>Table 5.1. Student Reflection of PSA</th>
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<tr>
<td>I noticed that the images were mostly females, Caucasian females, and it almost looked as if Caucasians were the only people who were bullied, which is not the case as we know... I didn’t feel like it lost meaning because it wasn’t culturally diverse, but it could perhaps for others, they don’t think it affects them, and they might not take it so seriously.</td>
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One White woman’s reflection included the words “we,” “others” and “they.” This also reflects a type of oppression called cultural imperialism. This type of language reinforces oppression through stereotypes, making the oppressed feel invisible and defining what they can and cannot be (Young, 2004). Through language, the woman constructed her identity as being White. This
type of language shows evidence that structures of oppression through exclusion can be replicated during CSCL.

For the case of The Latino Voice, while no significant differences were found in between the Latino and not Latino students related to power language or collaborative interactions, the Latino students did bring a culturally diverse perspective to their groups. Through language the students that suggested more culturally sensitive ideas constructed and more critically aware identity, but through a lack of voice, their idea were looked over, and they did not advocate for themselves. “Washing one's hands of the conflict between the powerful and the powerless means to side with the powerful, not to be neutral” (Paulo Freire, 1993). In an analysis of White administrators, Samuels (2013) found that when White people talk about race, it can create tension. For participants in this case study, those in the power evasion stage may avoid uncomfortable discussions regarding culture, race and power. Despite the critical focus of the course, this may be one reason groups chose to focus on other topics for their social constructed learning products.

According to Apple (2000) knowledge is never neutral, it is a power that culture works to reproduce. Discursive circulation of knowledge is part of the social distribution of power. Within the collaborative process, participants of varying cultures negotiated the question of “whose knowledge is of most worth.” Even with a critically framed experience, voices were silenced.

For the case of Across Genders, significant differences were found between women and men in power language, with women being more verbose. Differences were also seen in collaborative interactions, with women having a greater frequency of group processing. Through the use of power language women constructed a more empowered identity in the online spaces.
Women exhibited more collaborative leadership in their groups based on their frequency of group facilitating and group processing. Examples of collaborative leadership can be seen in examples from the text in Table 5.2.

Table 5.2. Examples of Collaborative Leadership

| KA- Hey guys, Has anyone started thinking about what type of PSA they would like to do? I'm not very technologically advanced, but I was thinking maybe just creating a movie in windows movie maker, or maybe someone has the iPad app to create movies? Also we need to start brainstorming what issues we want to address in the PSA. | Group Facilitating Group Processing Offering Help |
| KA- This looks great! If everyone agrees, lets focus on bullying for our PSA. We can tie in literacy like LA suggested and the bystander. | Feedback |
| KA- I LOVE the sequence! Thanks so much! And the pictures are great. Now I can start working on the video today. It will be uploaded by tomorrow night at the latest. Thanks for the ideas. I didn't want to start the project without seeing the direction everybody wanted to go. | Feedback |

In the qualitative analysis this finding revealed that groups that had one or no men, there were more instances of group processing and group facilitating as collaborative interactions. Based on the research analysis, it could not be determined whether it was a results of more women being in the group, or if the presence of the man decreased the amount of group processing and facilitating exhibited by the women. This might be an area of future research.

The findings from the analysis suggests that power is an integral part of the collaborative process. The use of language has the potential to influence the social production of knowledge as groups collaborate. When looking at the textual analysis, participants gain power through the words they use and how much they demand power through their verbosity and number of comments. Those students that contributed more, their voice was more represented in the final product, and in the final shared understanding. Participants also gave up power through powerlessness language. The more times they commented, the more powerlessness language
they used. This is based on the correlation found between comments and self-diminishment
\( r = .700 \).

Through these activities, students were actively developing skills to support collaborative leadership. While it was not explored, future research might investigate the relationship between powerlessness and collaborative practices, and/or collaborative knowledge construction. In other words, can powerlessness language be a way that students negotiate and share power/an empowering practice? As educators and leaders are being shaped through these interactions, professors need to make sure they are providing an inclusive and culturally relative experience at outlined in the outcome domains of the COE’s Frameworks.

**Meso-level Discussion of Teacher Pedagogy and Technology**

Both the educator and the technology use have the potential to affect the online collaborative process (Hramiak and Irwin, 2010). The meso-level discussion will explore how both teacher and technology shape how meaning is made in CSCL.

**Theme: Professor Philosophy and Policy Shaped Pedagogy**

According to Vygotsky (1962) the Zone of Proximal development is the point at which a learner can complete a task with guidance. According to the professor, “what’s happening in the schools is not collaboration.” To support and guide learners in developing their collaborative leadership skills, she provides experiences for them in her masters level curriculum course, preparing students to meet the demands of future leadership roles and for higher levels of academic study. Analysis of the course design revealed a highly-organized, critically framed course designed to support students’ curriculum leadership knowledge, but also supports development of technology and collaborative leadership skills.
Expectations and guiding frameworks were clearly explained at the beginning of the course. Using a PowerPoint presentation, the professor situated the course in the college’s expectations, including her expectations for higher thinking. Some parts of the syllabus were addressed and it was posted before the course began. Paloff and Pratt (2006) explore the impact of preparedness as an influence on success and suggest that if students are clear about the nature of the activity and how to complete it, they are more likely to be successful.

Exploration of the guiding documents indicated a focus on learning outcomes. The rubric helped clearly define expectations and are aligned to Florida Principal Leadership Standards. Student discussions referenced the rubric as a way to help guide their social construction of knowledge during brainstorming. This may have helped give voice to students that may have otherwise been silenced. Using rubrics to support learning is well supported by current literature (Bales, 2007).

How collaborative groups are designed can also influence the learner experience. When identifying the format for online collaboration, factors that may influence choice based on the literature include learner characteristics, group size, task, roles, and intended outcomes. In accordance with suggestions from the literature, the professor created groups of no more than five. Small groups provide an inclusive experience for all learners and allows for more accountability within the group and greater chance for collaborative dialogue (Paulas, 2005; Thompson, & Heng-Yu, 2006; Maushak & Ou, 2007; Spector, 2005).

Some studies also suggest that group design should involve defined roles with revolving group leadership (Slaghter van Tryon & Bishop, 2009), while others support ill-defined problems and group initiated guidance (Sims, 2008). The professor leaned more towards group initiated guidance, and only intervened when the groups seemed to be experiencing challenges, or were at
a decision that needed more direction. Students were empowered to practice their collaborative skills and given opportunity to negotiate power in these new spaces. According to Freire (1993), problem based learning allows a shift from banking-styles of education towards more student centered experiences, where the role of the problem-posing educator is to co-construct knowledge with the students towards emergence of consciousness and a critical unveiling of a new reality.

Professor facilitation helped to support more positive interdependence and furthered their reflection on the collaborative process, learning outcomes, and critical consciousness. Guidance, feedback, and teacher presence helps groups have been found to improve collaborative planning and participation (Dewiyanti et al. 2005; Bliss and Lawrence, 2009).

The professor critically framed CSCL experience by establishing expectations in the rubric and having students reflect on the diversity of the product. The students discussions highlighted examples of where students reflected on their critical growth and understanding of diversity. The discussions also revealed where students’ critical episteme fell short. Voice and pedagogy within online environments must support the bringing together of both silenced and dominant voices to promote social justice in a diverse society. From a socio-cultural perspective, by the teacher introducing the idea of diversity, students were stimulated to become aware of an alternative way of thinking. Even through reflection, students’ understanding was strengthened. Based on the works of Vygotsky, Kozulin (2003) posits

This approach demands skillful teaching and discussion techniques of teachers, because they have to deal with students’ emerging questions and answers. The teacher’s role becomes more explicit in guiding the students’ thinking processes. This prominent role for the teacher is in accordance with the sociocultural view on teaching and learning. It
could be said that this view integrates a student-centered approach with a form of deliberate teaching. (249)

Students may have benefited from more relationship building activities. This type of activity allows learners to get to know one another and provides the teacher with the opportunity to model expected styles of interaction (Beldarrain, 2006, Maushak, & Ou, 2007; Wang, Dannenhoffer, Davidson, & Spector, 2005; Slagter van Tryon & Bishop, 2009). Additionally, the professor expressed hesitation related to the efficacy of online courses. Her comments demonstrate a thoughtful analysis of the challenges she faces when teaching the online courses, although her fears may be a result of her lack of familiarity and comfort with the technology. Often, “fear” of what will be lost causes hesitation on the part of the instructor who might otherwise incorporate the use of distance technology (Sherman & Beaty, 2007). According to Judson (2006) the more willing a teacher is to integrate technology, the more likely they are to support a constructivist teaching style. In summary, teacher beliefs, attitudes and behaviors have an impact on the student discourse and perceptions of collaboration (Kim & An, 2007). Education Leadership programs should support a critically framed mindset and provide professional development to support empowering collaborative experience.

**Theme: Technological Literacy Can Be Used as Power**

Technological literacy can be used as power to promote or inhibit collaborative learning. As students negotiated power in these spaces, their technology skills had an influence on how they were able to contribute to the shared construction of knowledge. While some students struggled with the technology, and how to communicate with it, many students made use of technology skills to enable collaboration between group members. Students used things like surveys and Google Docs to come to consensus. In addition, the use of asynchronous
discussion allowed users to craft their message before posting. This helps give think time, and more time to those that may be less proficient in English (Weasenforth et al., 2002).

Groups that successfully used technology to empower all members were those that were open and honest about their abilities, strengths and weakness, and worked to utilize the strengths of their group members. Through the asynchronous discussion boards, groups worked to identify their members’ strengths and weakness, and based on their skills, assigned task.

In exploration of how students negotiated power through technology, students with more technological literacy seem to take on the role of the product manager, meaning they volunteer to create the learning product. This put them in a position of power. This role involved putting together the pieces provided by other groups members, which required communicate with other group members for resources, clarification, and asking people to contribute. By assuming this leadership role in the context of this case study, they were able to develop their technology leadership skills. With that said, providing a variety of students the ability to assume this role could better prepare future leaders with the skills to be successful as technology leaders.

Integrating online components into educational leadership programs has the potential to develop more competent technology leaders as well as reforming preparation and reaching a more inclusive population of future leaders (Sherman & Beaty, 2007). As educators are recreating learning experiences in these emerging spaces, they need to be conscious of the differences between students’ technological abilities and intervene to make sure that all students are given a voice. Additionally, as leadership preparation programs support collaboration in virtual spaces, they need to ensure they are using the culturally sensitive technology and curriculum resources.
**Theme: Influence of Technology Based Curriculum**

Events and images amassed and produced influenced the learning process and products. The final product for the CSCL activity was a public service announcement (PSA). In the first semester, the PSA was uploaded to VoiceThread. The professor asked students to reflect on the diversity of their product. Student recorded or typed their reflections in the collaborative feedback system. Transcripts of these reflections revealed that students had varying interpretations of what diversity meant. The use of collaborative reflection can provide students the opportunity extend learning and provide educators the ability to clarify misconceptions. One way to encourage school leaders to deepen their ways of understanding is through audio/video technology like what was used with the PSA. These tools can help leaders construct meaning-making through their senses through critical reflection (Bogotch & Shields, 2013).

As leaders working on a shared product, they need to be aware of how the resources they use to shape their products. Additional ways that cultural imperialism was seen in the discourse was through the theme of the learning product. The majority of groups’ products focused on bullying. While it was understood that in that regional and time context, there were several cases of bullying that were being widely covered in the media, more culturally relevant topics came up in the brainstorming discussions. Why those topics were not reflected in the final product could be interpreted as oppression of the culturally sensitive voice.

Educational leadership programs need to provide opportunities for future educators and leaders to develop skills to be critical consumers of technology and media. Awareness of how technology can influence power relations is needed to make sure not to replicate existing structures of oppression.
Macro-level Discussion: Policy

There are a variety of policies that govern post-secondary institutions online offerings so that they meet what is considered acceptable educational standards. These guidelines have the potential to shape the learning experiences and shape the future technologies and educators that will serve under them. These policies form the foundation of how collaborative leadership and technology leadership are formed within the university’s College of Education.

As seen in the course documents and comments from the professor, education policy was closely tied to learning outcomes and had a strong influence on teacher pedagogy. The two guiding policies were the Florida Principal Leadership Standards which she referenced in the rubric and the COE Frameworks that she mentioned during the interview (Appendix B). The COE suggests that “competencies in these ideals will provide candidates in educator preparation programs with the skills, knowledge and dispositions to be successful in the schools of today and tomorrow” (COE Conceptual Framework, 2008). This guiding policy demonstrates a focus on developing future leaders’ skills in collaboration and technology.

Collaboration is recognized within the COE as an important skill that educators and leaders should be proficient in. Unfortunately, the direct instruction on how to collaborate is not coming from the instructional level, especially in the online environment as mentioned by the professor. If educational leaders are expected to be skilled in collaboration, a more clear frameworks could be provided. Additionally, more pedagogically focused professional development for professors could help.

Similarly, the COE Framework supports leadership in the domain of technology, but when the professor was asked about her own experiences, she shared that she has never taken an online course, and the course she did receive from the university was more on how to use the
LMS’s functionalities and was less focused on how to use the technology to support pedagogy. The literature indicates that users of technology expressed the need for institutions to address faculty development as well (Caruthers & Friend, 2014).

The course pedagogy seems to reflect the critical focus on the COE Framework. It provided opportunities for students to reflect on diversity and build their understanding of how to address the needs of non-native speakers, cultural awareness, advocacy in culturally diverse settings, how sociocultural contexts can influence attitudes about technology, and sensitivity to issues of diversity and exceptionality, as outlined in the frameworks.

As leaders interpret the guiding policies it is essential that they advocate for a more empowering interpretation, and evolve with changing technologies. As institutional, state, and federal policy makers direct and mandate requirements towards these environments, they must do so with an informed perspective of the educators’ and students’ experiences.

As education leaders design courses and support students, they need to be mindful to address the needs of under-represented populations within these space. Equally important, educators should provide culturally relevant curriculum and make sure that student are equipped with the skills to be successful in these spaces and supported through inclusion.

**Recommendations**

As educators and leaders are facilitating collaboration in online spaces, it is recommended that they are provided training for both the tools and pedagogical know-how to best serve their students. Just because a practice is successful in a face-to-face, does not be that it will be equally as effective in an online course. Likewise, just telling students to use the technology that theoretically is effective does not mean that they will use it in the right way without proper support and modeling. Professional development for emerging leaders should be
provided to support a critical perspective and technology skills. As leaders and developers design these emerging spaces, empowerment should be at the foundation of those decisions.

Additional recommendations for education leadership programs include providing opportunity to develop relationships with their online peers. According to Sherman, Crum and Beaty, (2010), online leadership program students often feel less engaged, less comfortable discussing controversial topics online, and more likely to lack an understanding of their peers’ educational philosophies. By providing opportunities for students to develop relationships and trust, it may help to improve the authenticity and communication in the online experience.

When designing CSCL activities that maintain the same group during the semester, providing set roles that rotated between assignments may help to alleviate the tension between some groups. Just because one person is really good at facilitating the group, or being the technology project manager, does not mean they should assume these roles each time they collaborate. Setting a safe place to take risks and develop a more diverse skill set could produce more well-rounded leaders. Additionally, having students explore how they can transfer that knowledge and skill set to others should be encouraged as a part of technology and collaborative leadership.

Also, the lack of heterogeneous groupings suggests that leadership preparation programs should explore how to recruit more cross-racial participation, and become more prepared to support a diverse range of people pursuing leadership roles in schools. Programs must ask the question, “How are these leaders, teachers, and students being shaped through collaboration when more diverse perspectives are not being represented in the collaboration?”

This study contributes to critically framed literature on collaborative leadership and educational technology leadership. Namely how these domains are related in the context of
educational leadership where courses involve the social construction of knowledge in virtual environments.

**Implications for Future Research**

The potential of collaboration in distance education is yet to be determined. With advances in technologies erupting daily, the opportunity for evolution is limitless. While collaboration leads to constructing new knowledge, the ultimate goal of education is to meet the needs of the learner. Design for learning should provide options and accommodate the ever-shifting needs of globally diverse learners. Supporting collaboration within education is the platform for global collaboration among all nations and peoples towards a shared perspective and understanding.

While many factors were identified within the study to influence the collaborative process, more attention could help identify those specific factors that may empower students in CSCL specific skills that may increase the likelihood of success in the collaborative learning process. Additionally, as addressed by Jun (2007) there has been a lack of research that specifically examines the nature of power relations among adult learners in online discussions. In addition to the contribution made by this study, this should be one area of future research.

Additional studies that explore how emerging educators and leaders recreate these online collaborative experiences in their new roles after having collaborative in an online course may help to inform how their experiences shape their own pedagogy and leadership practices.

Further, to critically frame that exploration, the researcher should take into account, as studies are designed, that there are other influential factors within DE environments that were not discussed. The learner also interacts with the institution (Scarino, Crichton, & Woods, 2007). Interaction and collaboration also occurs when creating distance education courses including
cross-faculty interactions, faculty-designer interactions and designer-medium interactions. There is no mention of student to designer interaction, but this could be an area of future research (Wang, Dannenhoffer, Davidson, & Spector, 2005). One method to consider these factors is to frame the research in the larger social, historical, and cultural context in which the interactions are emerging. According to the CDA frameworks described by Rogers et al. (2005), with the wide range of international studies it becomes essential to follow the guidance of CDA and frame all of the studies within the social and cultural context that they were conducted.

A critical analysis of virtual collaborative environments reveals a complex, personal, and subjective view of collaboration. Although there is an increase in the number of studies that are exploring collaboration from a critical lens, future studies could explore the subordinate and dominate cultures within the social context of the online group participants, settings, and outcomes as functions of larger institutional and policy influences. Additional research could also Tuckman’s interactional phases through a critical lens to understanding how groups change over time through a critical lens.

Another area of future research might be to further investigate a process of member checking between students, to ensure that consensus on the final product is made and ensure that each students has a voice in the final product. Exploring the growing literature on computer guided CSCL, more attention should be given to critically evaluate and frame those systems and frameworks that support collaboration. Future research could warrant the creation of a new computerized system that takes into account learner characteristics to help guide learners to understand the differences between themselves and others and facilitate more positive communication.
REFERENCES


APPENDIX A: INTERVIEW QUESTIONS

Interview Questions for the Instructor

(The following paragraph will be read to the participants before the interview.)

My name is Heather Jones. I am a doctoral student at the College of Education of the [Large University in Florida]. Thank you for your willingness to participate in this interview regarding your teaching experience [course]. The information I collect will not be released to other people. In addition, your real name will not be reflected in the study so the information you provided will be kept confidential.

First of all, let me tell you how this interview will proceed. I will ask you some questions about your teaching experience [course]. Your experience is very important to me so please feel free to share as much information as possible. However, if you feel uncomfortable with answering any questions during the interview, please let me know so we can move to next question or stop the interview. The interview lasts about 15 to 20 minutes. For data analysis purposes, I will take notes, and with your permission, I will record our conversation.

Do you have questions about the interview procedures?

Do you agree me to record our conversation?

(If the participant agrees to have the conversation recorded, do a recording test before interview.)

Interview Questions:

1. Can define what collaboration is to you and tell me your experience in teaching students with this approach?
2. What are the intended outcomes of having students participate in virtual collaborative exercises?

3. Describe how you will facilitate the collaborative learning experience. What is your role?

4. Why did you choose to use asynchronous collaboration instead of synchronous? What factors influenced your choice?

5. How did you design your groups for this online activity? Random? Like students? Did students have roles in their groups?

6. Were students provided training prior to their use of the technology that enabled synchronous dialogue? If so, how? Practice? Modeling? Scaffolding?

7. What is the teacher’s role during asynchronous collaborative exercises in the online environment?

8. How did you prepare students with expectations for the asynchronous collaborative assignment?

9. How did you evaluate their success in the collaborative experience?

10. What impressed you the most regarding student dialogue in [course] during the collaborative exercise? Can you give me an example of an experience you remember? [Probes: good experiences or experiences that you remember; work with individual students, student groups, grading load, technical issues.]

Follow-up questions:
A. Can you tell me why you feel that way?
B. Can you describe other impressions you had regarding student dialogue?
11. Could you describe how the students engaged in the collaborative process in the assignment?

Follow-up questions:

[Probes: If the interviewee describes differences in student collaborative engagement, then ask this question below.]

In your opinion, what are the reasons for the differences in student collaboration?

[Probes: if the interviewee does not mention differences in student learning engagement, then ask this question below.]

Why do you think student collaboration showed no difference?

12. Can you tell me the strengths and weaknesses of how the asynchronous tool was implemented for the assignment?

13. Can you define what collaboration is to you and tell me your experience in teaching students with this approach?

Follow-up questions:

A. What challenges or obstacles did you have in assisting students in their collaborative learning processes?

B. What successes or good experiences did you find in the course when teaching students in their collaborative learning processes?

C. If the collaborative learning approach continues to be implemented in [school] what needs to be changed to make your work as an instructor easier?

D. Can you tell me why those things you just mentioned need to be changed?

E. Is there anything else you would like to share about your teaching experiences in [course] so far in this semester?
APPENDIX B: COURSE DOCUMENTS

2012 Syllabus

COLLEGE OF EDUCATION DEPARTMENTAL COURSE SYLLABUS -

EDUCATIONAL LEADERSHIP AND POLICY STUDIES

Course Title: Foundations of Curriculum
Course Prefix and Number: EDG 6627
Course Time and Location: Online 10 weeks or Saturdays 8-5
Dates: Online Aug/Sept or Sat. (n=5)

Instructor: Office Location: Office Phone:
Email: Office Hours: By appointment; Wednesdays 2-5

"The cause of freedom is not the cause of a race or a sect, a party or a class – it is the cause of humankind, the very birthright of humanity." Anna Julia Cooper

Course Description: This course is open to all graduate students. There are no prerequisites. This is an introductory graduate course in curriculum (and instruction) and is basic to all specialized courses in the field of curriculum studies. Its emphasis is on the foundations (i.e., historical, social, psychological, economic, cultural) concepts, theories, influential figures, and trends in curriculum.

Course Objectives: This course aims to introduce students to the foundations of the field of curriculum studies and prepare them for studying curriculum at a higher level. The objectives complement the theoretical frame of the College of Education (see below) in consideration of the standards of NCATE/ELCC and FLDOE (Appendix).

1. Introduce students to the major concepts, issues, and leaders (past, present) influencing curriculum.
2. Present the philosophical, historical, psychological, social, and ideological underpinnings of the field.
3. Enable students to read, write, discuss, and reflect upon key issues and trends concerning curriculum.
4. Enable students to construct a bibliography of library and electronic sources related to curriculum issues.
5. Enable students to demonstrate research, analytical and writing skills related to curriculum in the areas of diversity and ethics.
6. Enable students to demonstrate technological skills for inquiry and communication: word processing, email and data retrieval through the Internet, library resources and other electronic media.

The College of Education CAREs
The College of Education is dedicated to the ideals of Collaboration, Academic Excellence, Research, and Ethical Practice and Diversity. These are key tenets in the Conceptual Framework of the College of Education. Competence in these ideals will provide candidates in educator preparation programs with skills, knowledge, and dispositions to be successful in the schools of today and tomorrow. For more information on the Conceptual Framework, visit:

Elaboration on Ethics/Diversity: The required courses in the Educational Leadership Program focus on preparing leaders who ethically promote democratic principles, social justice, equity and diversity. Through readings, discussions, case studies, problem-based learning, written assignments, field experiences, etc. students will have opportunities to develop their understanding and skills toward becoming effective leaders within diverse learning organizations.

Elaboration on Technology: Education leaders can use technology and information systems to monitor, manage, and enrich the learning environment while increasing productivity and the quality of assessment systems. The Educational Leadership program incorporates opportunities for students to use technology as a tool in the facilitation of course content and the completion of course requirements. Applications may include the use of Blackboard Learning System; Elluminate, Skype, word-processing; electronic-based media presentations; and electronic library access to government and education related resources over the Internet.

Classroom as Research Site
As we work together to build an understanding of the foundations of curriculum/instruction, I (as an instructor and researcher) may collect data that informs my own work. I may use data generated during this course in future research and will take care to ensure the anonymity of all class members. If you do not want me to use your contributions as data, please inform me in writing within 24 hours after the final class concludes.

Overview of Assessment of Student Outcomes: Elements assessed relate to curriculum philosophies, ideologies, ethics, diversity, technology, and critical and higher order thinking.

Grading Policy: Final grades are reported as either A+, A, A-, B+, B, B-, C+, C, C-, D+, D, D-, or F (note that final grades below “C” are NOT accepted toward a graduate degree. Assignments will be assigned a letter grade or marked S (satisfactory) or U (unsatisfactory). Instructor/professor will not give incompletes (I’s) in this course. If for any reason, you leave the course and do not withdraw, you will receive the grade you earned at the time of your departure after deducting for missing class activities, assignments, and participation.

Student Evaluation: Class Attendance and Activities 25%, Group Facilitation or Project 25%, Educational Psychology Report 25%, Final Project 25%.
Attendance (Face to Face), Make Up and Late Submission of Assignments: If you miss a full day (8 hour Saturday) or the equivalent of 3 (or more) evening classes (weeknights lasting 3-4 hours each), the instructor/professor will reduce your final class attendance and participation grade by a letter grade (or more for absences beyond those described here). Instructor may design a make-up for missed assignment and/or participation on a case-by-case basis using a pass/fail system. However, there is no option to “make-up” absence to the first and final class sessions or sessions where you have a scheduled contribution (group/individual presentation or facilitation). Assignments turned in after the due dates may be penalized a half grade, for instance from A to A-, at the discretion of the instructor/professor in consideration of circumstances.

Attendance (online*), Make Up, and Late Submission of Assignments: No make-ups for missing scheduled class meeting or assignments will be provided. Assignments submitted after the deadline will be penalized by one letter grade reduction: refer to schedule for due dates. Completion of first assignment is evidence of enrollment in the online setting.*

Methods of Instruction: Small and large group discussions, lecture, media, case studies, problem analysis, student facilitation, dramatization, directed activities (acquisition, application), guests. Note that small group or individual conferences or lectures may be called and scheduled during the course.

Canvas: The use of the Canvas and/or Elluminate is important to the delivery of course content. To access Canvas through XXX each student must have a XXX account. For more information on XXXX refer to XXXXX. To access online services on XXX refer to XXXXX.

Class Requirements and Expectations: Attendance (inform the instructor of pending absence), active engagement/participation in class, small and large group discussion (in class on online), timely completion of readings, class activities and assignments for individuals, partners, or groups (i.e., discussion board replies, written critical reflections, journaling, group facilitation, critical tasks).


References


**GRADED ASSIGNMENTS**
1. Participation in activities (i.e., discussions, journals, conferences) and attendance.
2. Group Project and/or Facilitation
3. Educational Psychology Report
4. Final Project (SELECT 1 from below)

**Curriculum Leadership Platform [5-7 pages]**
Describe a curriculum issue on which you can are willing to take an informed stance. Provide and analysis of your development (beliefs, attitudes, ideologies) and personal and/or professional stance in relationship to ethics, diversity, and assessment and instruction. Convey your development toward curriculum leadership (i.e., knowledge, skills, and dispositions) relative to a specific leadership indicator. Rely heavily on course material.
- Leadership and Learning via Data: Creatively integrate resources to describe issue and support stance.
- Values: Discuss the origins and major influences contributing to your values and beliefs about curriculum.
- Diversity and Ethics: Provide examples of curriculum leadership related to diversity and ethics.
- Visionary Leadership: Describe a vision that inspires you toward curriculum leadership.
- Standards: Identify an indicator and assess how well you are prepared to enact curriculum leadership to meet it.
- Communication: Use APA style (6th edition). [If digital, the quality of media will be evaluated].

**Life History of Curriculum Leadership [5-7 pages and digital component – max 5 minutes]**
Write a paper in which you highlight a curriculum issue/problem and its context that you draw from a life history account of an educator/administrator (other than you). Generate data about their experience with curriculum past or present, their perspectives on what is/not taught (curriculum), analyze their (partial) life history account, research the issue, address any concerns with regard to diversity and/or ethics, and provide recommendations. Rely heavily on course material, including information life history methods.
- Context/Learning Environment: Explain a curriculum issue in context and relative to diversity and/or equity.
- Indicator: Identify a/n indicator(s) of curriculum leadership toward which you are developing (see Appendix).
- Decision-Making (leadership development): Provide a recommendation to yourself and others.
- Data: Use multiple sources of data to get/tell the story: course material, (i.e., life history methods), research, scholarship, and participant materials (i.e., social networking info, photos, videos, audio, professional artifacts)
- Communication: Produce a life history of high technical & conceptual quality (media and/or written). Or . . .

**Research Paper [8-10 pages]**
Write a research paper on a curriculum issue informed by recent research and course material.
- Curriculum Issue: Describe how issue is defined and explored by scholars and researchers using course material, data, and research (years 2002-2013).
- Ethics and Diversity: Explain how this issue relates to diversity and ethics or an ethical dilemma.
-Recommendations Reflective of Indicator: Identify an indicator relevant to addressing the curriculum issue.
-Theory and Practice: Provide recommendations are based on research and/or theory.
-Communication: Use APA style.

SEE RUBRICS FOR ALL

XXXXX Policies

Disabilities Statement:
Students in need of academic accommodations for a disability may consult with the office of Students with Disabilities Services to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation. Contact SDS At XXXXX

XXXX Policy on Religious Observances:
Students who anticipate the necessity of being absent from class due to the observation of a major religious observance must provide notice of the date(s) to the instructor, in writing, by the second class meeting.

Web Portal Information:
XXXX

Detection of Plagiarism:
The XXXXX has an account with an automated plagiarism detection service which allows instructors to submit student assignments to be checked for plagiarism. I reserve the right to 1) request that assignments be submitted to me as electronic files and 2) electronically submit assignments to Turnitin.com or SafeAssign. Assignments are compared automatically with a huge database of journal articles, web articles, and previously submitted papers. The instructor receives a report showing exactly how a student's paper was plagiarized. For more information, go to XXXX PLEASE REMOVE YOUR NAME FROM THE BODY OF YOUR PAPER AND REPLACE IT WITH YOUR XX ID#. ALSO REMOVE YOUR NAME FROM THE FILE NAME AND REPLACE IT WITH YOUR XX ID# (e.g., “U12345678 Essay 1.docx”) BEFORE SUBMITTING IT TO SafeAssign. Pursuant to the provisions of the Family Educational Rights and Privacy Act (FERPA), students are requested to maintain confidentiality as a way to keep their personal contact information (i.e. name, address, telephone) from being disclosed to vendors or other outside agencies. By your submission, you are also agreeing to release your original work for review for academic purposes to SafeAssign. Thank you!

Academic Dishonesty:
Information can be found in the on-line Graduate Catalog:
http://XXXXXedu/catalogs/0304/adadap.htm#plagiarism Punishment for academic dishonesty will depend on the seriousness of the offense and may include receipt of an “F” with a numerical value of zero on the item submitted, and the “F” shall be used to determine the final course grade. It is the option of the instructor to assign the student a grade of F or FF (the latter indicating dishonesty) in the course.

Academic Continuity:
In the event of an emergency, it may be necessary for XXX to suspend normal operations. During this time, XXX may opt to continue delivery of instruction through methods that include but are not limited to: Blackboard, Elluminate, Skype, and email messaging and/or an alternate schedule. It’s the responsibility of the student to monitor the main XXX website, emails and MoBull messages for important information. More detailed information will be provided when available.

Appendix A

Florida Principal Leadership Standards - SBE Rule 6A-5.080
Revised November 15, 2011

There are ten Standards grouped into categories, which can be considered domains of effective leadership. Each Standard has a title and includes, as necessary, descriptors (indicators) that further clarify or define the Standard. The first 5 standards in domains 1 and 2 are most relevant to this course.

The Florida Principal Leadership Standards (FLPS)

Domain 1: Student Achievement

Standard 1: Student Learning Results.
Effective school leaders achieve results on the school’s student learning goals.
Indicators
a. The school’s learning goals are based on the state’s adopted student academic standards and the district’s adopted curricula; and
b. Student learning results are evidenced by the student performance and growth on statewide assessments; district-determined assessments that are implemented by the district under Section 1008.22, F.S.; international assessments; and other indicators of student success adopted by the district and state.

Standard 2: Student Learning as a Priority.
Effective school leaders demonstrate that student learning is their top priority through leadership actions that build and support a learning organization focused on student success. The leader:
Indicators
a. Enables faculty and staff to work as a system focused on student learning;
b. Maintains a school climate that supports student engagement in learning;
c. Generates high expectations for learning growth by all students; and
d. Engages faculty and staff in efforts to close learning performance gaps among student subgroups within the school.

Domain 2: Instructional Leadership

Standard 3: Instructional Plan Implementation.
Effective school leaders work collaboratively to develop and implement an instructional framework that aligns curriculum with state standards, effective instructional practices, student learning needs and assessments.
Indicators
The leader:
a. Implements the Florida Educator Accomplished Practices as described in Rule 6A-5.065, F.A.C. through a common language of instruction;
b. Engages in data analysis for instructional planning and improvement;
c. Communicates the relationships among academic standards, effective instruction, and student performance;
d. Implements the district’s adopted curricula and state’s adopted academic standards in a manner that is rigorous and culturally relevant to the students and school; and

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e. Ensures the appropriate use of high quality formative and interim assessments aligned with the adopted standards and curricula.

**Standard 4: Faculty Development.**
Effective school leaders recruit, retain and develop an effective and diverse faculty and staff.

**Indicators**

**The leader:**
a. Generates a focus on student and professional learning in the school that is clearly linked to the system-wide strategic objectives and the school improvement plan;
b. Evaluates, monitors, and provides timely feedback to faculty on the effectiveness of instruction;
c. Employs a faculty with the instructional proficiencies needed for the school population served;
d. Identifies faculty instructional proficiency needs, including standards-based content, research-based pedagogy, data analysis for instructional planning and improvement, and the use of instructional technology;
e. Implements professional learning that enables faculty to deliver culturally relevant and differentiated instruction; and
f. Provides resources and time and engages faculty in effective individual and collaborative professional learning throughout the school year.

**Standard 5: Learning Environment.**
Effective school leaders structure and monitor a school learning environment that improves learning for all of Florida’s diverse student population.

**Indicators**

**The leader:**
a. Maintains a safe, respectful and inclusive student-centered learning environment that is focused on equitable opportunities for learning and building a foundation for a fulfilling life in a democratic society and global economy;
b. Recognizes and uses diversity as an asset in the development and implementation of procedures and practices that motivate all students and improve student learning;
c. Promotes school and classroom practices that validate and value similarities and differences among students;
d. Provides recurring monitoring and feedback on the quality of the learning environment;
e. Initiates and supports continuous improvement processes focused on the students’ opportunities for success and well-being; and
f. Engages faculty in recognizing and understanding cultural and developmental issues related to student learning by identifying and addressing strategies to minimize and/or eliminate achievement gaps.

**Domain 3: Organizational Leadership**

**Standard 6: Decision Making.**
Effective school leaders employ and monitor a decision-making process that is based on vision, mission and improvement priorities using facts and data. The leader:

a. Gives priority attention to decisions that impact the quality of student learning and teacher proficiency;
b. Uses critical thinking and problem solving techniques to define problems and identify solutions;
c. Evaluates decisions for effectiveness, equity, intended and actual outcome; implements follow-up actions; and revises as needed;
d. Empowers others and distributes leadership when appropriate; and
e. Uses effective technology integration to enhance decision making and efficiency throughout the school.
Standard 7: Leadership Development.
Effective school leaders actively cultivate, support, and develop other leaders within the organization. The leader:
   a. Identifies and cultivates potential and emerging leaders;
   b. Provides evidence of delegation and trust in subordinate leaders;
   c. Plans for succession management in key positions;
   d. Promotes teacher–leadership functions focused on instructional proficiency and student learning; and
   e. Develops sustainable and supportive relationships between school leaders, parents, community, higher education and business leaders.

Standard 8: School Management.
Effective school leaders manage the organization, operations, and facilities in ways that maximize the use of resources to promote a safe, efficient, legal, and effective learning environment. The leader:
   a. Organizes time, tasks and projects effectively with clear objectives and coherent plans;
   b. Establishes appropriate deadlines for him/herself and the entire organization;
   c. Manages schedules, delegates, and allocates resources to promote collegial efforts in school improvement and faculty development; and
   d. Is fiscally responsible and maximizes the impact of fiscal resources on instructional priorities.

Standard 9: Communication.
Effective school leaders practice two-way communications and use appropriate oral, written, and electronic communication and collaboration skills to accomplish school and system goals by building and maintaining relationships with students, faculty, parents, and community. The leader:
   a. Actively listens to and learns from students, staff, parents, and community stakeholders;
   b. Recognizes individuals for effective performance;
   c. Communicates student expectations and performance information to students, parents, and community;
   d. Maintains high visibility at school and in the community and regularly engages stakeholders in the work of the school;
   e. Creates opportunities within the school to engage students, faculty, parents, and community stakeholders in constructive conversations about important school issues.
   f. Utilizes appropriate technologies for communication and collaboration; and
   g. Ensures faculty receives timely information about student learning requirements, academic standards, and all other local state and federal administrative requirements and decisions.

Domain 4: Professional and Ethical Behavior:

Standard 10: Professional and Ethical Behaviors.
Effective school leaders demonstrate personal and professional behaviors consistent with quality practices in education and as a community leader. The leader:
   a. Adheres to the Code of Ethics and the Principles of Professional Conduct for the Education Profession in Florida, pursuant to Rules 6B-1.001 and 6B-1.006, F.A.C.
b. Demonstrates resiliency by staying focused on the school vision and reacting constructively to the barriers to success that include disagreement and dissent with leadership;  
c. Demonstrates a commitment to the success of all students, identifying barriers and their impact on the well-being of the school, families, and local community;  
d. Engages in professional learning that improves professional practice in alignment with the needs of the school system; and  
e. Demonstrates willingness to admit error and learn from it;  
f. Demonstrates explicit improvement in specific performance areas based on previous evaluations and formative feedback. SBE Rule 6A-5.080 Revised November 15, 2011
Public Service Announcement: Societal Curriculum to Support the Learning Environment
Florida Principal Leadership Standard (5): Structure and monitor a school learning environment that is safe, inclusive, respectful, and improves learning for all of Florida’s diverse student populations.

Teacher Name: [Participant's Name]
Students' Names: __________________________

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1 or 0</th>
<th>Reflection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brainstorming - Problems (Identify 3: Deliberate to Select)</td>
<td>Students identify more than 3 reasonable, insightful barriers/problems that need to change.</td>
<td>Students identify at least 2 reasonable, insightful barriers/problems that need to change.</td>
<td>Students identify at least 1 reasonable, insightful barrier/problem that needs to change.</td>
<td>Students identify an unreasonable or insignificant barrier/problem that needs to change.</td>
<td></td>
</tr>
<tr>
<td>Brainstorming - Solutions (Identify 3: Deliberate to Select 1 at minimum)</td>
<td>Students identify more than 3 reasonable solutions/strategies to encourage change related to one problem.</td>
<td>Students identify at least 2 reasonable solutions/strategies to encourage change.</td>
<td>Students identify at least 1 solution/strategy to encourage change.</td>
<td>Students identify an unreasonable and/or insignificant solution/strategy to encourage change.</td>
<td></td>
</tr>
<tr>
<td>Research/Statistical Data</td>
<td>Students include 3 or more high-quality examples or pieces of data.</td>
<td>Students include at least 3 high-quality examples or pieces of data.</td>
<td>Students include at least 1 high-quality examples or pieces of data.</td>
<td>Students do not include high-quality (i.e., low quality) examples or pieces of data.</td>
<td></td>
</tr>
<tr>
<td>Product: PSA Reflective of Florida’s Leadership Principal Standard #5: Support Learning Environment:</td>
<td>Students create an original, accurate, and interesting product that adequately addresses the issue in a way that supports the learning environment.</td>
<td>Students create an accurate product that adequately addresses the issue in a way that supports the learning environment.</td>
<td>Students create an accurate product but it does not adequately address the issue in a way that supports the learning environment.</td>
<td>The product is not accurate or does not support the learning environment.</td>
<td></td>
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</tbody>
</table>

16-14: A
12-10: B
09-07: C
06-04: D
03-00: F
### Rubric 2013

Public Service Announcement (PSA): Societal Curriculum to Support the Learning Environment

Addresses the Florida Principal Leadership Standards:

- 5a: Structure and monitor a school learning environment that is safe, inclusive, respectful, and improves learning for all of Florida’s diverse student populations
- 2b: Maintains a school climate that supports student engagement in learning
- 3d: Implements the district’s adopted curriculum in a manner that is culturally relevant

<table>
<thead>
<tr>
<th>Professor’s Name: [Participant’s Name]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ Names: ____________________</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>5</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Brainstorming - Problems (Identify 3: Deliberate to Select 1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Group collectively brainstormed to identify 3 reasonable, insightful barriers/problems affecting students, schools and communities.</td>
<td>Group collectively at least 2 reasonable, insightful barriers/problems affecting students, schools, and communities.</td>
<td>Group identified at least 1 reasonable, insightful barrier/problem affecting students, schools, and communities.</td>
<td>Group identified an unreasonable or insignificant barrier/problem affecting students, schools, and communities.</td>
<td>No barrier/problem is identified.</td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
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</tr>
</tbody>
</table>

| Group Brainstorming - Solutions (Identify 3 Solutions to 1 Problem) | | | | | |
| 1. | Group identified 3 reasonable solutions/strategies to encourage change related to one problem. | Group identified at least 2 reasonable solutions/strategies to encourage change. | Group identified at least 1 solution/strategy to encourage change. | Group identified an unreasonable and/or insignificant solution/strategy to encourage change. | No solution/strategy is identified |
| 2. | | | | | |
| 3. | | | | | |

| FPLS 2a: Research on Student Learning (to frame problem or base solution) | | | | | |
| 1. | The content of the PSA is informed by research findings on student learning from 3 studies (i.e., to frame the problem or base the solution). | The content of the PSA is informed by research findings on student learning from 2 studies (i.e., to frame the problem or base the solution). | The content of the PSA is informed by research findings on student learning from 1 study (i.e., to frame the problem or base the solution). | The content of the PSA is informed by research findings about topic other than student learning. | No evidence that research was consulted. |
| 2. | | | | | |
| 3. | | | | | |

| Create an Original PSA FPLS #5a: Support Learning; Environment (Modified): PSA promotes a safe, respectful, inclusive student-centered learning environment; focus on equitable opportunities for learning; foundation for life in a democratic society; participation in the global economy. | | | | | |
| | The PSA’s aim (to promote a safe, respectful and inclusive student-centered learning environment, a focus on equitable opportunities for learning, or a foundation for life in a democratic society or the global economy) is clearly emphasized throughout. | The PSA’s aim (to promote a safe, respectful and inclusive student-centered learning environment, a focus on equitable opportunities for learning, or a foundation for life in a democratic society or the global economy) is clearly emphasized. | The PSA’s aim (to promote a safe, respectful and inclusive student-centered learning environment, a focus on equitable opportunities for learning, or a foundation for life in a democratic society or the global economy) is vague. | The PSA’s aim is problematic. It decreases safety, respect, inclusivity, student-centered environment, equitable learning opportunities, democratic society, or the global economy. | |
| | | | | | |

| FPLS #3d: Modified Culturally Relevant Content | | | | | |
| | Content is culturally relevant to the students and community. | Content is culturally relevant to the students and/or community. | Content is not culturally relevant to the students nor the school. | Content is culturally stereotypical of the students and/or the community. | No evidence that culture was considered. |

| 21-25: | A |
| 16-20: | B |
| 11-15: | C |
| 11-14: | D |
| 00-10: | F |

**Total and Grade:**

**Comments:**
1. Collaboration

Professionals are members of several communities simultaneously (districts, schools, agencies, departments, professional societies, caregivers, and policymakers). This shared membership informs practices and policies to insure the education and care of each individual. At the advanced preparation level, other school professionals must become skilled at problem-solving and conflict resolution within and among the various constituencies they serve.

Graduates will:

Collaborate and work in partnership with schools, families, other professionals and agencies.

2. Content and Professional Knowledge

Professionals demonstrate an understanding of their respective content areas by providing quality instruction and services. Content knowledge is not synonymous with knowledge of how to teach that content. Teachers must integrate content knowledge with pedagogical content knowledge as well as the knowledge base that is fundamental to all education professionals that includes, at a minimum, that which incorporates (a) the behavior and process of learning and the theoretical bases of human development; (b) the historical and social context of schools, families and communities; (c) cultural impacts on learning; (d) the impact of language on learning for non-native English speaking persons; and (e) inclusion and equity concepts in schools and community. Education professionals in other service roles as well must integrate the knowledge base fundamental to the education and human services professions, with the knowledge base specific to their professional domain. Content and professional knowledge and expertise also assumes currency of that knowledge and expertise.

Graduates will:

- Have expertise in a common professional knowledge base and the content-specific bases of their fields and the ability to integrate content and professional knowledge into teaching and service.
3. Technology

Professionals are skilled in utilizing a variety of technologies in instruction, assessment, and service and assist learners and clients in becoming competent with technology. To do so, education professionals must be both technologically proficient and literate. They have basic technical skills to utilize hardware and software, and are familiar with the range of available information technologies and on-line information sources relevant to their field of practice. They are able to choose appropriately among available technologies and information sources to enhance instruction and service. In addition, professionals must be aware of equity issues surrounding the use of technology and access to information, and understand how socio-cultural contexts can influence attitudes about technology. Professionals utilize information technologies in their own research and professional development.

Graduates will:

- Be technologically proficient and literate professionals.

4. Reflection, Analysis and Inquiry

Professionals make sound decisions about complex events by considering alternative theories and research perspectives, as well as their personal beliefs. Professionals continuously inquire about theory and practice. They are active consumers of scholarship, and maintain an open mind toward new theories and perspectives while analyzing the research relevant to their professional field. Teachers and other education professionals engage in productive inquiry appropriate to their field and degree. Active engagement in inquiry fosters habits of reflection and analysis and commitment to life long learning. Educational professionals assess their own practices and monitor the progress of learners and clients in ways that inform decision-making and enhance subsequent practices.

Graduates will:

- Integrate reflection, analysis, and systematic inquiry into their professional practice.

5. Ethics and Diversity

Education professionals function in schools and agencies as advocates in culturally diverse settings. This requires self-awareness, inclusive values, and skills in critiquing cultural practices. Educators must be skilled in addressing a wide range of diverse characteristics, including exceptionalities, in their recipient populations. Ethical practice requires not only adhering to professional codes of conduct, it requires as well enabling a positive egalitarian social environment.

Graduates will:

- Engage in ethical practice and effectively integrate awareness of and sensitivity to issues of diversity and exceptionality among the populations they serve.
5. Ethics and Diversity

Education professionals function in schools and agencies as advocates in culturally diverse settings. This requires self-awareness, inclusive values, and skills in critiquing cultural practices. Educators must be skilled in addressing a wide range of diverse characteristics, including exceptionality, in their recipient populations. Ethical practice requires not only adhering to professional codes of conduct, it requires as well enabling a positive egalitarian social environment.

graduates will:

- engage in ethical practice and effectively integrate awareness of and sensitivity to issues of diversity and exceptionality among the populations they serve.

6. Student Learning and Development

Teachers and other school professionals create, enrich and maintain environments that provide opportunities for positive outcomes for all learners and clients. They focus on the academic, emotional, and social growth and well being of those being served and engage in the most effective professional practices as identified by current research. Teachers strive to enhance the critical, creative and reflective thinking capabilities of all learners. Achieving outcome goals requires professionals to maintain flexibility in their approaches to teaching and service. They must be able to modify and adapt instruction, service or interventions, based upon continuous assessment and monitoring of learner and client progress, to achieve positive outcomes among a diversity of populations.

graduates will:

- Provide instruction, services and/or programs that contribute to positive learning and developmental outcomes.
APPENDIX C: IRB DOCUMENTS

USF
UNIVERSITY OF SOUTH FLORIDA

2/28/2014

THIS LETTER SUPERSEDES THE LETTER DATED 2/17/2014

Heather Jones, M.Ed.
Educational Leadership
4202 E. Fowler Ave., EDU 105
Tampa, FL 33620

RE: Full Board Approval for Amendment
IRB#: Ame1_Pro00011280
Title: A Critical Analysis of Asynchronous Collaboration in an Online Graduate Curriculum Course

Dear Ms. Jones:

On 2/14/2014, the Institutional Review Board (IRB) reviewed and APPROVED your Amendment. The submitted request has been approved for the following:

- Revised study methods and procedures to include only one (1) teacher participant.
- Waiver of documentation of informed consent no longer requested.

Approved Item(s):
Protocol Document(s):
Proposal final ver 2 1.8.14

Consent Document(s)*:
teacher_informed_consent_USF_IRB_ver1_1.8.14.docx.pdf

*Please use only the official IRB stamped informed consent/assent document(s) found under the 'Attachments’ tab on the main study’s workspace. Please note, these consent/assent document(s) are only valid during the approval period indicated at the top of the form(s) and replace previously approved versions.

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We appreciate your dedication to the ethical conduct of human subject research at the University of South Florida and your continued commitment to human research protections. If you have any questions regarding this matter, please call 813-974-5638.

Sincerely,

[Signature]

John Schanke, Ph.D., Chairperson
USF Institutional Review Board
Informed Consent to Participate in Research
Information to Consider Before Taking Part in this Research Study

IRB Study #Pro11280

You are being asked to take part in a research study based on the interest to participate you indicated. Research studies include only people who choose to take part. This document is called an informed consent form. Please read this information carefully and take your time making your decision. Ask the researcher to discuss this consent form with you; please ask her to explain any words or information you do not clearly understand. We encourage you to talk with your family and friends before you decide to take part in this research study. The nature of the study, risks, inconveniences, discomforts, and other important information about the study are listed below.

Please tell the researcher if you are taking part in another research study.

We are asking you to take part in a research study called:

A Critical Analysis of Asynchronous Collaboration in an Online Graduate Curriculum Course

The person who is in charge of this research study is Heather Sadler Jones. This person is called the Principal Investigator. She is being guided in this research by Dr. Leonard Burrello, her research committee chair.

The research will be conducted at the University of South Florida.

Purpose of the Study

- The purpose of this study is to explore the intersection of student-student talk, teacher-student talk, and teacher practices during online collaboration. You are being asked to participate in this study because you have indicated that your teaching practices include the use of asynchronous collaborative activities within your class.
- This study is being completed by a doctoral student to collect data for a dissertation research study.

Study Procedures

If you take part in this study, you will be asked to:

- Complete an initial one hour interview to understand your views on collaboration and how you frame these experiences. This interview will be audio recorded if you give permission and I will transcribe the interview. These recordings will be used for research purposes only and the
only individuals who will have access to the recordings and transcripts are the researcher and the researcher’s dissertation committee. These recordings and transcripts will be kept on a password-protected home computer. All recordings will be destroyed 5 years after the data are collected.

- Provide a copy of all student communications from emails and discussion boards with names deleted from the records to protect the privacy of the students.

**Total Number of Participants**
One teacher will participate.

**Alternatives**
You do not have to participate in this research study.

**Benefits**
We are unsure if you will receive any benefits by taking part in this research study. The potential benefits of participating in this research study include a better understanding of the collaborative process in the virtual setting.

**Risks or Discomfort**
This research is considered to be minimal risk. That means that the risks associated with this study are the same as what you face every day. There are no known additional risks to those who take part in this study.

**Compensation**
The teachers that are selected for the study will receive a total compensation of $50. after the collaborative session

**Cost**
There will be no additional costs to you as a result of being in this study.

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**Privacy and Confidentiality**
We will keep your study records private and confidential. Certain people may need to see your study records. By law, anyone who looks at your records must keep them completely confidential. The only people who will be allowed to see these records are:

- The Principal investigator and her research committee.
Certain government and university people who need to know more about the study. For example, individuals who provide oversight on this study may need to look at your records. This is done to make sure that we are doing the study in the right way. They also need to make sure that we are protecting your rights and your safety.

Any agency of the federal, state, or local government that regulates this research. This includes the Office for Human Research Protection (OHRP).

The USF Institutional Review Board (IRB) and its related staff who have oversight responsibilities for this study, staff in the USF Office of Research and Innovation, USF Division of Research Integrity and Compliance, and other USF offices who oversee this research.

We may publish what we learn from this study. If we do, we will not include your name. We will not publish anything that would let people know who you are.

Voluntary Participation / Withdrawal

You should only take part in this study if you want to volunteer. You should not feel that there is any pressure to take part in the study. You are free to participate in this research or withdraw at any time. There will be no penalty or loss of benefits you are entitled to receive if you stop taking part in this study. Decision to participate or not to participate will not affect your job status. To withdraw from this study please email Heather Sadler Jones.

New information about the study

During the course of this study, we may find more information that could be important to you. This includes information that, once learned, might cause you to change your mind about being in the study. We will notify you as soon as possible if such information becomes available.

You can get the answers to your questions, concerns, or complaints

If you have any questions, concerns or complaints about this study, or experience an adverse event or unanticipated problem, call Heather Jones at 974-5838.

If you have questions about your rights as a participant in this study, general questions, or have complaints, concerns or issues you want to discuss with someone outside the research, call the USF IRB at (813) 974-5638.

Consent to Take Part in this Research Study

It is up to you to decide whether you want to take part in this study. If you want to take part, please sign the form, if the following statements are true.

I freely give my consent to take part in this study. I understand that by signing this form I am agreeing to take part in research. I have received a copy of this form to take with me.

Signature of Person Taking Part in Study

Date

Printed Name of Person Taking Part in Study
Statement of Person Obtaining Informed Consent

I have carefully explained to the person taking part in the study what he or she can expect from their participation. I hereby certify that when this person signs this form, to the best of my knowledge, he/she understands:

- What the study is about;
- What procedures will be used;
- What the potential benefits might be; and
- What the known risks might be.

I can confirm that this research subject speaks the language that was used to explain this research and is receiving an informed consent form in the appropriate language. Additionally, this subject reads well enough to understand this document or, if not, this person is able to hear and understand when the form is read to him or her. This subject does not have a medical/psychological problem that would compromise comprehension and therefore makes it hard to understand what is being explained and can, therefore, give legally effective informed consent. This subject is not under any type of anesthesia or analgesic that may cloud their judgment or make it hard to understand what is being explained and, therefore, can be considered competent to give informed consent.

Signature of Person Obtaining Informed Consent / Research Authorization  Date

Printed Name of Person Obtaining Informed Consent / Research Authorization