

Sense of Community of Practice in Online Education:
A Case Study of an MBA Program

A Dissertation
Submitted to
the Temple University Graduate Board

in Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
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May 2011

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Abstract

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Situated cognition and engagement in a community of practice in online education has been difficult to attain through the information and communication technologies deployed throughout higher education. Effective real-time collaboration is a key component to the development of a community of practice and what has been missing in online business education. This study examined the integration of web conferencing tools and discussion boards to determine whether a community of practice formed in the Fox Online MBA program at Temple University. The investigation examined 13 students' interactions throughout a compressed five-week online marketing course delivered primarily through WebEx and Blackboard.

Results show that the students were consistently actively engaged in the course throughout the real-time classes as well as the discussion board. Further, students' active participation focused primarily on how the course content related to personal and professional experiences. Evidence suggests that the students developed strong social bonds and a community of practice was present.

Acknowledgements

I would be remiss if I did not acknowledge my advisory committees dedication to me and my work throughout this onerous task. Their support and guidance during the past few years has put me in a position to submit this work of which I am very proud. To Dr. Newton, thank you for helping me channel my passion for online education into a meaningful topic that I hope will contribute to the research community and impact the future of online education. To Dr. Schifter, thank you for helping me structure the data collection and analysis to present my findings in a coherent and meaningful way. I'd also like to thank you for your vast knowledge and experience with online teaching and learning tools. And to Dr. Ketelhut, I can't thank you enough for your leadership through every step of this process. I could not have chosen a better person to chair this committee and help me develop my research skills. Your dedication, support, vision, timely responses, and thoughtfulness have impacted my personal and professional growth more than you know. I owe my deepest gratitude to all of you who have helped make this dissertation possible.

Dedication

I dedicate this dissertation to my loving family. Without their love and support through the years I would not have made it through this arduous task. Particularly, I dedicate this work to my loving, understanding, and supportive wife Jennifer, who has put up with me through these many years of research, and to our precious son Landon, who is the center of our universe. Finally, I dedicate this in loving memory of my brother-in-law Gregory Piekarski, my grandfather Walter Hoffman, and last but not least my grandmother Betty Hoffman.

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Chapter 1: Introduction

Online teaching and learning is making a significant impact on the fabric of higher education. Research shows that the number of students in the US taking at least one online course per year is increasing at a rate exceeding 20% (Allen & Seaman, 2008). This trend appears to be due, in part, to the convenience and flexibility of the delivery of online education, which enable adults with full-time jobs to attend classes without having to leave their current jobs (Stephenson, 2001). Yet, despite the trend toward online education, many students are less than fully satisfied with their online courses (Allen & Seaman, 2008; Young & Norgard, 2006).

A large number of online courses rely primarily on asynchronous, text-based communication media (Corriea, 2008; Hara & Kling, 2000). For example, email and discussion board posts are used most frequently. Therefore, online courses are typically delivered as electronic correspondence courses with little to no real-time interaction among participants. This makes online learning primarily individualistic. That is, students have to work alone with little interaction or support from their classmates. As a result, many believe that online courses degrade the educational experience (Allen & Seaman, 2008).

Situated cognition describes a perspective of human cognition that might explain some of the dissatisfaction with these online experiences. This theory claims learning happens as human beings interact with the living world. It is a context and situation bound theory of cognition – a theory that claims thinking is complex, radical, individual, yet intrinsically bound to, and motivated by, the amiability social

human interaction affords (Greeno, 1998). In an online environment social human interaction may occur as individuals use networked tools to broadcast discussions, conversations and stories to a group of peers within their domain (Guadagno, Cialdini & Evron, 2010).

Researchers further suggest that situated learning involves a process of engagement in a community of practice (Wenger, 2006). A community of practice describes a group of individuals who share a common interest or goal. Through the process of sharing information and experiences with the group, members learn from each other and develop relationships (Lave & Wenger, 1991). Key characteristics of communities of practice include communal understanding, real-time collaboration and strong social bonds. Yet, most online business courses do not provide opportunities for students to collaborate in an environment that fosters communal understanding, synchronous collaboration and social human interaction. It becomes challenging to develop a community of practice in an online business course with no real-time interaction or synchronous forms of communications.

Those instituting a purely asynchronous model believe that community is important, but have struggled to develop a sense of community. For example, the Sloan Consortium (Sloan-C) describes a quality framework for guiding excellence and sharing effective practices for teaching and learning online, and suggests directions for research and development (Moore, 2005). One of the factors addressed is how to adapt technology to improve interaction to strengthen a sense of community. Penn State's World Campus has developed Competencies for Online

Teaching Success (COTS) which includes a section dedicated to building community in an asynchronous model, <http://psuwcfacdev.ning.com/page/building-community-bc>. And MarylandOnline, Inc. developed a Quality Matters Program (QM), <http://www.qmprogram.org/>, which assesses the quality of online/hybrid courses. The QM program has a number of rubrics to assess courses and examines factors that contribute to a sense of community. Thus, those dedicated to the asynchronous model seem to realize that there is a need for a sense of community in online learning. Yet, there has been little research on the effectiveness of their efforts to strengthen a sense of community.

In order to foster social interaction, recent online business courses have incorporated a real-time chat component to their curriculum, or instant messenger (IM), to simulate conversations that would take place in a traditional face-to-face course (Mabrito, 2006). Here faculty and students can communicate in real-time by typing messages back and forth. Mabrito (2006) found that “synchronous text communication, because it occurs in real-time, is more closely akin to a traditional classroom discussion, except learners do not always have the benefit of body language or other social cues”. Yet, online business students can easily get inundated with lengthy text-based communications such as chats, emails messages, and discussion board posts (Maloney-Krichmar, Abras & Preece, 2002). Consequently, students believe they do not learn as much in online business courses as in face-to-face courses (O’Malley & McGraw, 1999; Young & Norgard, 2006).

Web-conferencing is a new technology that is used in some online courses that may be able to simulate the traditional business classroom environment where students are able to interact socially while they share information and experiences with the group (Huang & McConnell, 2010). Web-conferencing can empower online business faculty and students to communicate in real-time by combining desktop and webcam sharing with phone conferencing so everyone sees the same thing while they talk. Through this new technology faculty and students collaborate in real-time to manipulate documents, surf the web, share or prepare presentations, create virtual breakout rooms for small group collaboration, or anything else they could accomplish in a traditional business classroom setting. This type of virtual synchronous classroom, where faculty and students meet online through web-conferencing technology, can allow participants to share experiences with one another and potentially develop relationships as a community of practice suggests. One limitation to web-conferencing is internet connectivity which requires participants to be connected through a DSL or cable broadband internet connection in order to limit technical difficulties. Another limitation to synchronous collaboration is the ability to include global participants because of time zone conflicts. Unfortunately, research is lacking with regard to online business courses that have implemented web-conferencing to simulate the traditional business classroom experience.

The continued rise in online enrollments makes it imperative that the research community begins to examine what factors can contribute to a more positive and fulfilling online learning experience for business students. While situated cognition

suggests that students would learn more by being supported in a community of practice (Lave & Wenger, 1991), traditional communities of practice require extensive time commitments on the part of the participants. Students register for online business courses because they generally cannot travel to campus regularly as a result of their busy work or family responsibilities. Thus, demanding that online business students participate in a 100% real-time curriculum would be exigent. However, even though online students typically enroll in online courses because of their work and life commitments, there is still a demand for collaboration through ongoing interaction with peers and instructors (Northup, 2002).

Therefore, this study investigated how the integration of asynchronous and synchronous communication tools in an online business course helps facilitate a community of practice. The investigation took place in a cutting edge setting using an innovative curricular design and delivery system in an online Master of Business Administration (MBA) program, The Fox Online MBA at Temple University. This program is the only found online MBA to implement regularly scheduled class meetings through web-conferencing technology. This study focused on how students interacted throughout a marketing course, and how they shared their experiences and knowledge with the group as evidence towards their developing the collaboration and social interaction that are characteristics of a community of practice.

Chapter 2: Review of the Literature

The purpose of this study was to discern whether a community of practice was formed in the Fox Online MBA program. In order to answer the research questions a literature review was conducted on communities of practice in online education. I began my search through Academic Search Premier and ERIC with the following search terms: online education, online education and synchronous, online education and asynchronous, online education and business, online education and community of practice. I also searched using distance education instead of online education with the other search terms listed. After searching in Academic Search Premier and ERIC I focused my searches using the same search terms, in the following journals: Quarterly Review of Distance Education, Journal of Computer Assisted Learning, Journal of Technology and Teacher Education, Journal of Distance Education, Distance Education, Distance Education Report, Distance Learning Greenwich, Journal of Online Learning and Teaching, Internet and Higher Education, American Journal of Distance Education, Journal of Asynchronous Learning Networks, and Journal of Education for Business. While the search was exhaustive, the results were limited. There are a number of studies about online education, but few that include real-time text-based communications, and less that relate to student development of a community of practice. The few studies that discuss community of practice in online education describe educators forming a community of practice to discuss online education.

In this chapter I discuss the educational theory of situated cognition, a theory in education that claims knowledge is situated in activity bound to social, cultural and physical contexts (Greeno, 1998). Researchers claim that students involved in real-time communications where they can share information and experiences with the group aid in the development of communal understanding and allow the opportunity for the development of social bonds, all of which are characteristics of a community of practice (Lave & Wenger, 1991). The literature also suggests that teaching and learning has been enhanced by members involved in a community of practice (Jones, 2010). Yet, the literature is lacking with respect to the development of a community of practice in online education, and more specifically online business education. This chapter attempts to show the need for communities of practice in online business education.

Situated Cognition

Emerging from anthropology, sociology, and cognitive science, situated cognition theory represents a major shift in learning theory from traditional psychological views of learning as mechanistic and individualistic, and toward perspectives of learning as emergent and social (Greeno, 1998; Lave & Wenger, 1991; Salomon, 1996). Situated cognition describes a perspective of human cognition that claims learning happens as human beings interact with the living world. Also referred to as the situativity theory of cognition, it is a context and situation-bound theory of cognition that suggests thinking is motivated by social human interaction (Greeno, 1998). Social human interaction need not be people with

people, but could include people with computer software tools or real-time virtual environments (Huang & McConnell, 2010). Situated cognition theory encourages educators to immerse learners in an environment that approximates as closely as possible context in which their new ideas and behaviors will be applied (Schell & Black, 1997).

Regarded as leaders in the situated cognition movement, Lave and Wenger (1991), describe learning as an integral part of generative social practice in the lived-in world. Generative implies that learning is an act of creation or co-creation; social suggests that at least a portion of learning time occurs in collaboration with others; and lived-in world suggests real-world practices and environments that make learning more relevant, useful, and transferable. For example, foreign language acquisition will be more successful if the learners are engrossed in conversational and cultural activities, as opposed to concentrating on discrete-grammar exercises using recitation or paper-and-pencil worksheets.

Brown, et al. (1989) believe that formal education contexts are often unfamiliar and insolvent compared with the real-life experiences of an individual, providing little support for everyday thinking and learning. On the other hand, informal learning contexts allow individuals to solve everyday problems by applying knowledge practically (Brown, et al., 1989). In order for students to develop the skills used by experts, they need to engage in similar cognitive activities, authentic real-world tasks in authentic contexts as informal learning suggests. Authentic real-world tasks are coherent, meaningful, and purposeful activities that represent the ordinary

practices of a culture (Brown, et al., 1989). That is, formal education contexts do not provide instances for learners to engage in authentic real-world learning practices as Lave and Wenger (1991) suggests.

Community of Practice

Researchers further suggest that situated learning would be better supported if students were engaged in a community of practice. Wenger (2006) defines communities of practice below.

Communities of practice are formed by people who engage in a process of collective learning in a shared domain of human endeavor: a tribe learning to survive, a band of artists seeking new forms of expression, a group of engineers working on similar problems, a clique of pupils defining their identity in the school, a network of surgeons exploring novel techniques, a gathering of first-time managers helping each other cope. In a nutshell: Communities of practice are groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly. (Wenger, 2006)

Thus, a cohort of MBA students working towards completing their degree may have the opportunity to form a community of practice. According to Wenger (2006), three elements are crucial in distinguishing a community of practice from other groups or communities:

The domain. Members have a shared area of interest. Association implies a commitment to the domain, and a shared goal that distinguishes members from others outside the domain.

The community. In pursuing their goal, members participate in group activities and discussions, some of which happen in real-time. They help each other by sharing

information and personal experiences that relate to a common goal. They forge relationships and social bonds that allow them to learn from each other.

The practice. Members of a community of practice are working within a common field. They create a shared catalog of resources: course content, experiences, stories, tools, authentic real-world tasks, vocabulary, etc. to develop communal understanding. The practice is the specific focus around which the community shares and maintains its core of knowledge, for example an MBA degree program.

Dynamic communities of practice are seen as a critical element of situated cognition theory's sociological view of learning (Lave & Wenger, 1991). Thus, learning not only involves teacher and student but also assorted others, such as other experts from the school, from the business and local community, and the electronic world community. Further, communities of practice are dynamic in that members assume various roles at different times depending on the needs of the learner. For example, a student may be a learner, instructor, or coach at any given time during a learning episode. Having previously learned how to construct a business plan, a student may teach and coach others through this same process (Lave & Wenger, 1991).

The interactions involved, and the ability to undertake complex authentic activities and projects through cooperation, bind people together and help facilitate social bonds. Members are brought together by joining in these complex activities and by 'what they have learned through their mutual engagement in these activities' (Wenger, 1998). In this respect, a community of practice is different from a

community of interest. A community of interest is a community of people who share a common interest, but they care little about each other outside their common interest. Richard Rorty (1989) argues that what creates a communal understanding in a context has to do with the connections that are established through the collaboration of individuals and their ability to come to sufficiently similar interpreted conclusions.

Jones (2010) conducted a qualitative study about impact of a community of practice model to support the development and success of teaching and learning. Her data was collected by interviewing nine learning and teaching fellows at the University of Brighton. Fellowships were awarded to academic staff to carry out research projects in order to advance learning, assessment, teaching, or curriculum development practice, with the objective of improving learning. Fellows became members of a fellowship community which regularly met to provide mutual support, share strategies and reflect. Jones (2010) found that fellowship teams learned to work collaboratively while they shared knowledge and skills with the group. Members were able to contribute individual research strengths and offer support and enthusiasm to the group. In sum, Jones (2010) established that the development and success of learning and teaching has been enhanced by the fellows' membership in a community of practice.

Development of Conceptual Framework of Community of Practice in Online Education

The literature suggests many factors to look for that imply an online community of practice has developed. Greeno (1998) established that thinking is complex and fundamentally bound to the cordiality that social human interaction

affords. Lave and Wenger (1991) found that through the process of sharing information and experiences with the group, members learn from each other and develop social bonds. Researchers suggest that a portion of sharing information and experiences with the group must happen in real-time, while the rest can be mediated through asynchronous communication tools (Corriea, 2008; Lave & Wenger 1991).

Also, researchers advocated that students in a community of practice must show a commitment to the domain (Henri & Pudelko, 2003; Lave & Wenger, 1991; Wenger, 2006). Wenger (2006) suggested that association to the group implies a commitment to the domain. He further suggests that by participating in group or class activities students show devotion to the group. Such activities in education could be thought of as attending class, performing the assigned tasks of an instructor, contributing to class discussions – both synchronous and asynchronous – that refer to program curriculum or work experience that relates to a common goal (Corriea, 2008; Henri & Pudelko, 2003; Lave & Wenger, 1991; Wenger, 2006).

Researchers also suggest that communal understanding is a critical component to the development of a community of practice (Rorty, 1989; Wenger, 2006). While communal understanding is difficult to assess, Wenger (2006) proposed factors that can contribute to communal understanding. He claimed that as students develop a shared catalog of resources through the process of sharing information and experiences with the group, they can increase communal understanding. The resources in online education can be viewed as curriculum or course materials, experiences, stories, tools, or vocabulary (Henri & Pudelko, 2003; Lave & Wenger,

1991). As mentioned earlier, Rorty (1989) argues that what creates a communal understanding has to do with the connections that are established through the collaboration of community members and their ability to come to sufficiently comparable interpreted conclusions. Thus, in online education, the practice of contributing to class discussions – both asynchronous and synchronous – the community shares and maintains its core of knowledge (Corriea, 2008; Henri & Pudelko, 2003; Wenger, 2006). Table 2.1 describes the characteristics that contribute to the development of a community of practice in online education. These characteristics will be operationalized as dependent measures in table 3.2 in the data analysis section of the methods chapter on pages 34 and 35.

Table 2.1: Characteristics that Contribute to the Development of a Community of Practice in Online Education

Characteristic	Definition	Source
Original course content	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. 	Correia (2008) Lave & Wenger (1991) Wenger (2006)
Prior course content	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. 	Correia (2008) Lave & Wenger (1991) Wenger (2006)
Discussion board posts	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. • Fosters communal understanding. 	Correia (2008) Henri & Pudelko (2003) Lave & Wenger (1991) Rorty (1989) Wenger (2006)
Prior conversations	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. • Fosters communal understanding. 	Correia (2008) Greeno (1998) Lave & Wenger (1991) Rorty (1989) Wenger (2006)

Table 2.1: Continued

Characteristic	Definition	Source
Prior team conversations	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. • Fosters communal understanding. 	Correia (2008) Greeno (1998) Lave & Wenger (1991) Rorty (1989) Wenger (2006)
Work or field experience	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share personal experiences that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. 	Greeno (1998) Henri & Pudelko (2003) Lave & Wenger (1991) Rorty (1989) Wenger (2006)

Online Education

Online teaching and learning is continually adapting to market driven demands. The changing demographics of students, new required skill sets, and new educational competitors are driving the adoption of innovative educational delivery systems that bridge the time-place gap that traditional courses have created (O'Malley & McGraw, 1999). As a result, online course offerings are rising (Allen & Seaman, 2008). Yet, researchers found that students do not feel they learn as much in their online learning courses (Allen & Seaman, 2008; Young & Norgard, 2006).

Students seem to enjoy taking online courses, yet they prefer to simulate the real-time interaction that the traditional classroom setting provides. Northrup (2002) described a study which included 52 graduate students in an online master's degree program. The study investigated different types of interactions that students perceived to be important for *e-learning*. Data was collected by administering the Online Learning Interaction Inventory (OLLI) (Northrup, 2001) to the participants in the study. Northrup recognized that students demonstrated a preference for collaboration through ongoing real-time interaction with peers and instructors. Students also reported they liked discussion and feedback from their instructors. Interestingly, students expressed a preference for face-to-face courses but wanted to take more online courses. Apparently, the ability to take more online courses outweighed the concerns about online courses.

Information and communication technologies (ICTs) attempt to complement face-to-face interactions, yet they are asynchronous activities that cannot preserve the

effectiveness and efficiency that real-time collaboration affords (Correia, 2008).

Correia (2008) found that ICTs made communication in online courses more effective with minimal wasted or unnecessary effort, and created more opportunities for more thoughtful reactions with chances for reflection on the content. Although the concept of an ICT-rich environment is broad, Correia (2008) defined it as "any learning environment that makes available to learners networked computers, software, and web-based resources that complement face-to-face interactions, such as email, discussion forums, shared group calendars, list-serves, cell phones and fax" (pg. 20).

Correia (2008) described a case study in a graduate class on instructional design. Her study separated the class into three teams and analyzed how students dealt with conflict management. Correia (2008) collected her data through observation of team meetings, interviews with individual members, and analysis of electronic documents exchanged between team members. She found that ICTs aggravated conflict when team members became blunt and forthright when misinterpretations occurred because of a differing sense of urgency in replying to messages. Correia (2008) suggests implementing richer communication tools, such as web-based videoconference systems, to communicate and collaborate more efficiently.

Cuthell (2005) found that barriers to participation in online networks included lack of access and time. He examined how teachers in online communities interact and the factors that contribute to teacher participation. Among the forums he examined were: MirandaNet, an international Fellowship of educators using ICTs to change their teaching and learning practices (Preston, 2000); the General Teaching

Council (GTC) Discussion Forum, an online discussion forum for educators to debate policies and educational issues; the GTC e-facilitator forums, established to support the voice of the ordinary teacher in the GTC debates. Cuthell (2005) found that educators who shared similar interests in ICTs were not participating in their own professional online text-based communities.

Leading and managing an online community requires time; participating in an online community requires time. Given all of the demands made of educators, participation in online communities should not be seen as another imposition, another task to be completed at the end of an overstretched day. (Cuthell, 2005, p.329)

Thus, Cuthell suggests that participation in an online community would be more successful if a portion of communications occurred in a real-time environment.

The most recent trend in online education has been the implementation of synchronous web-conferencing technology to simulate a traditional classroom experience (Huang & McConnell, 2010). Huang and McConnell described a study that surveyed fifteen pre and in-service teachers that were graduate students enrolled in a 2009 summer course that incorporated synchronous classes using Elluminate Live!, a web-conferencing technology. The purpose of their study was to examine the relationship between synchronous web-conferencing and student satisfaction in an online course and to better understand students' thoughts about participating in synchronous web-conferencing. They constructed an end of course survey comprised of eighteen items using a five-point Likert scale. The questions on the survey were adapted from prior work. Huang and McConnell (2010) also asked students to comment on their participation in Elluminate Live!. The results of their study found

that the students who participated in synchronous web-conferencing were likely to have a higher degree of course satisfaction. The students thought that Elluminate Live! was a very effective way to communicate with others in the online class. One student commented on the open ended question that they felt that the synchronous sessions were likely to develop stronger relationships with peers and helped create a sense of community among participants. While Huang and McConnell (2010) did not study whether a community of practice developed in their course, this student's comment may indicate that some of the factors of a community of practice appear to be present. That is, the students showed a commitment to the domain by participating in synchronous group activities, and seem to have developed social bonds.

Online Business Education

Online MBA programs have seen a rapid rise in student enrollments in recent years, while the student enrollments in traditional in-residence MBA programs are in the decline (Hayward, 2004). Today, most online MBA programs use a course management system to disseminate information with relatively no synchronous collaboration. Blackboard (Bb) and Angel are the two most popular course management systems that universities put into practice (Contreras-Castillo, Favela, Pérez-Fragoso, & Santamaría-del-Angel, 2004). Here professors post documents and recorded video lectures that students can access at their convenience. Faculty and students typically communicate through asynchronous tools such as email and discussion board threads. Students can usually enroll in courses they choose until they meet the minimum requirements for graduation. Thus, the typical online MBA

program does not utilize a cohort model which enables the same set of students to take courses together throughout their entire degree. The absence of a cohort model may make it more complex for students to develop social bonds and communal understanding as a community of practice suggests.

Researchers have found many benefits to teaching and learning online. Most notably, the convenience and flexibility online learning provides. O'Malley and McGraw (1999) found that business students felt that they would benefit more from taking online courses. They surveyed 128 business students taking courses in management, accounting, finance, and information systems, ranging from sophomores to graduate students, at a medium sized state university about their feelings towards distance learning and online education. The survey was created to understand the students' perception of distance and online learning versus the traditional classroom setting. O'Malley and McGraw (1999) found that students did not think they learned as much in courses using distance learning. Students believed that distance learning methods using asynchronous forms of communication were not as valuable as traditional methodologies, mainly because of the inability to effectively participate in real-time class discussions. O'Malley and McGraw (1999) also found that online business students were concerned about how to contribute to class discussions and group work in online courses vs. face-to-face. The results of the survey indicated that students perceived distance learning and online learning as having some benefits although they were not necessarily knowledge related. The students' perceived benefit was a result of their ability to take more classes, coupled

with the convenience and flexibility of online learning. Generally, the students did not perceive that distance learning was as effective as traditional methodologies. Yet, they would enroll in more distance learning courses because of the convenience and flexibility it affords.

Community of Practice in Online Education

A recommended practice for online pedagogy is to support the development of a community of learners (Larramendy-Joerns & Leinhardt, 2006; Salmon, 2005; Lynch, 2002). But, community of practice in online education is a new field of study and the research is lacking. One of the constraints to doing this research has been the limitations due the technology available to collaborate in real-time which more often hinder than support the development of communal understanding, real-time collaboration and strong social bonds. Lao and Gonzales (2005) found that graduate students believed that, for online courses to be effective, those courses need well developed online learning communities, the professors must be available to the student, and students must have the right equipment and technology. Through ongoing interaction of community members, faculty and students, varying degrees of social bonds and interactions help determine the shape of learning communities. As indicated above, situated cognition involves a process of engagement in a community of practice. Commitment to the domain, communal understanding, real-time collaboration and strong social bonds are essential elements to forming a traditional face to face community of practice (Wenger, 2006; Rorty, 1989), however researchers have not yet examined these elements in online business education.

One approach designers originally took to include a synchronous component to their curriculum was to incorporate a real-time chat component, or IM, to simulate conversations that would take place in a traditional face-to-face course in an effort to facilitate communal understanding and forge social bonds. Here faculty and students were able to communicate in real-time by typing messages back and forth. But as stated earlier, online students can easily get beleaguered with lengthy text-based communications which can lead to a lack of participation (Maloney-Krichmar, Abras & Preece, 2002). Therefore, incorporating instant messaging can lead to a lack of participation which hinders communal understanding and the development of strong social bonds.

Authentic activities and group work are often advocated as tools to developing social bonds among learners (Lynch, 2002). Group work in an online environment may be more problematic even though it has the potential to increase the support for individual learners and the development of a community of practice. Thus far, the majority of online courses rely mainly on asynchronous, text-based communication media (Corriea, 2008; Hara & Kling, 2000). While asynchronous activities allow students the opportunity to perform tasks at their convenience and time to reflect on concepts, they make it difficult for students to collaborate on group projects. It appears with the current asynchronous technologies that most online courses put into practice, it is difficult to perform quality group work and develop strong social bonds.

Educators have attempted to form online communities of practice to discuss educational practices. Gray (2004) conducted an interpretive study about the

experiences of coordinators at Alberta Community Adult Learning Councils. The purpose of the study was to understand to what extent participants' experiences in an online environment constituted a community of practice. The participants in the study included 43 coordinators who voluntarily participated in an online community over one year. All volunteers were women, over half of the participants had less than five years of work experience and almost one quarter had been employed less than one year. She collected her data by reviewing online discussion forum postings, live chat transcripts, and emails. Gray also used a survey consisting of 16 multiple choice and seven open-ended questions. Lastly, she performed individual on-site interviews with 11 of the 43 participants. The study was limited to the experiences of the coordinators who chose to participate in the online community and no attempt was made to contact the coordinators who never logged on. Gray analyzed her data using Wenger's (1998, 2001) communities of practice framework as her guide and she examined participation in her data analysis. Gray claims that participants were active and an online community of practice was present. Yet, in her study peripheral lurking, where members read postings but did not actively contribute to online discussions, was considered a legitimate form of participation. While reading a post was considered participatory in this study, community members should be engaged in the practice and contribute to the domain (Lave & Wenger, 1991).

The latest trend in online education has been the use of reliable and user-friendly web-conferencing software such as WebEx, Adobe Breeze (now Adobe Connect), Elluminate Live!, and Microsoft Live Meeting (Angelo, 2006). Web-

conferencing software is on-demand collaboration software for online meetings and desktop sharing that allows instructors to conduct classes online in real-time, or synchronously, similar to traditional face-to-face business courses. Participants in a web-conference can use webcams and VoIP headsets to communicate and collaborate in real-time as they share and manipulate documents, presentations or surf the web. In this virtual synchronous environment students have the opportunity to work on authentic activities and group work more efficiently than they could with asynchronous forms of communication (Correia, 2008; Huang & McConnell, 2010). Web-conferencing can allow faculty to conduct class with their students in a virtual classroom that promotes real-time collaboration, the development of communal understanding, and the ability to forge social bonds similar to a traditional business classroom setting (Huang & McConnel, 2010).

In sum, it appears from the research that online student enrollment and the surge of online course offerings is continuing to rise. Yet, what is discouraging about online business education is the fact that students do not believe they learn as much in online courses (O'Malley & McGraw, 1999; Young & Norgard, 2006). This seems to be due in part to the barriers to effectively communicate and collaborate with their peers and instructors. Researchers suggest that it is essential to use richer means of communication, such as real-time web-based conferencing tools (Correia, 2008; Cuthell, 2005; O'Malley & McGraw, 1999).

Lave and Wenger (1991) have shown that students would learn more by being supported in a community of practice. But, strong social bonds and communal

understanding are difficult to attain solely through asynchronous communication tools (Corriea, 2008; Henri & Pudelko, 2003). Therefore, this exploratory study investigated how the integration of asynchronous and synchronous communication tools in an online business course helps facilitate an online community of practice. The study examined a course using an innovative curricular design that implemented web-conferencing technology. The Fox Online MBA program at Temple University is the only known MBA program to hold regular online real-time virtual classes through web-conferencing. Most online business schools make a point to advertise their programs as having a completely asynchronous model. These schools take pride in the fact that students can access course materials at their convenience, wherever and whenever you have an internet connection. For example, W.P. Carey Online MBA at Arizona State University, <http://wpcarey.asu.edu/mba/online/>; Online MBA at the Kelley School of Business at Indiana University, <http://kd.iu.edu/>; Online MBA at Northeastern University, <http://onlinemba.neu.edu/>. Since the Fox Online MBA is the first known MBA program to implement regular virtual classes through web-conferencing technology, this investigative study focused on the interaction of participants in the program as evidence towards the development of a community of practice. In particular, it examined how students shared their experiences and knowledge with the group. The study attempted to determine if relationships were formed and if students felt that they belong to an online community of practice.

Research Questions

This study attempted to answer the following research questions in an effort to determine if an online community of practice was formed.

- (1) To what extent do students participate in discussions, both in real-time and online posts, related to sharing personal, work and field experiences with the group?
- (2) What is the pattern of students' regular participation, particularly looking at their real-time class discussions, and online discussion board posts?
- (3) How do students feel about their opportunities to share information with the group?
- (4) To what extent do students feel a sense of community within their groups and the cohort?

Chapter 3: Methods

Site

This project used data collected from the inaugural cohort of students participating in the Fox Online MBA program at Temple University. The online program is unique in that it is the only known online program to implement regularly scheduled real-time virtual classes that meet through WebEx, the web-conferencing software utilized throughout the curriculum. The 54-credit program mainly consists of 3-credit online courses delivered over five weeks. The five week modules allow students to concentrate on one course at a time.

Sample

In this study, data was collected from the cohort of 13 students participating in the Fox Online MBA program. All students in the program begin at the same time, take all of their classes together, and graduate together and will therefore be referred to as a cohort. The students started the program in August with a five-day residency held at Temple University. They then took four five-week online courses prior to the course this study examined. All students that chose to participate in this study were given pseudonyms to ensure anonymity. The instructor of this course is one of the world's leading authorities on supply chain management. He has published over 100 articles and has written several monographs in the area of supply chain management and marketing. He has lectured around the globe including Europe, Japan, South America, Australia, Indonesia, England, Singapore, Malaysia, Canada, Poland, Italy, Ireland, Russia, China and Ghana. The instructor has been a tenured faculty member

at the Fox School of Business for nearly thirty years and has had experience using WebEx to teach other graduate students. He used WebEx for two years prior to this study to teach 100% synchronously over a 15-week semester. The five-week course that this study examined was the first time the instructor taught in a compressed format that integrated synchronous and asynchronous communication tools. Table 3.1 shows that there was an unbalanced sample based on gender and age, but a reasonably balanced sample based on years of professional work experience. The age and years of professional work experience ranges are the same ones that are used for scholarship metrics and ranking data for this cohort.

Table 3.1: Demographics Breakdown

Gender	Number of participants
Male	9
Female	4
Age	Number of participants
25 – 34	7
35 – 44	3
45 – 54	2
54+	1
Years of Work Experience	Number of participants
4 – 7.9	4
8 – 11.9	3
12 – 15.9	3
16+	3

Ten of the students reside in the Northeast region of the United States, and one student resides in each of the following regions: Southeast, Midwest, and West. Ten industries are represented from the thirteen students including: military, telecommunications, manufacturing, wholesale trade, transportation and warehousing, information technology, finance, technical services, health care, and recreation. Due to the small sample size of this study and to ensure anonymity of the students, no further demographic information will be disclosed.

The cohort is separated into teams of three to four students for group projects. This study examined a course entitled Marketing Management Strategy. The marketing course was the students' fifth online course in this program which took place in the spring semester of the students' first year of study. At this point in the curriculum students should have been comfortable communicating in WebEx and Blackboard and therefore technological issues should not impact the study. It was also the second of three online courses in the spring semester. The first course in the spring semester was not chosen since the students may have been more motivated to perform after the holiday break. Also, the last course was not chosen as the students may be tired after a long semester. Students are equipped with webcams and VoIP headsets to effectively communicate in real-time through WebEx.

Methodology

Due to the exploratory nature of this research, a case study methodology was used to frame this research. A case study methodology is appropriate for this study in order to satisfy the three tenets of the qualitative method: describing, understanding and explaining (Tellis, 1997). The purpose is to understand the impact of integrating synchronous and asynchronous communication tools in an online business course and determine if they forge an online community of practice. All participants in the study, including the instructor, agreed to sign a consent form which was mailed to the students, see appendix A. This study was approved by Temple University's Office for Human Subjects Protections Institutional Review Board, see appendix B.

Procedures

The five-week online marketing course that this study examined began on February 22nd. The students were required to attend live weekly classes online through WebEx on Thursday evenings beginning at 8:00 p.m. EST. These classes were recorded through WebEx each week and posted in the marketing Bb course. Students were also required by the professor to post comments on weekly discussion board threads in Bb. Student teams were asked to work on projects throughout the course and post their WebEx recorded presentations in Blackboard. Lastly, at the conclusion of the course students were asked to participate in a quality circle meeting held in WebEx. The Fox Online MBA program holds a quality circle each semester to gauge student satisfaction with the program and allows them the opportunity to share constructive feedback to help improve the program. A typical quality includes a subset of the class, usually a representative from each student team. Since this was the first year of the program all students enrolled in the program were asked to participate in the quality circle. The purpose of the quality circle was to better understand the students' perspective about aspects of the course and program.

Data Collection Methods

Data collected in this study came from (a) direct observations of recorded weekly real-time classes; (b) analysis of online discussion board threads in Bb; (c) a quality circle meeting with consenting students participating in the online program. Components (a) and (b) are imbedded mechanisms of the course. Two of the five weekly recordings of the real-time classes were analyzed, weeks two and four. Week

one was not chosen because the professor may have talked more than other weeks as he introduced the course and discussed ground rules. Similarly, week five was not chosen as the professor was wrapping up the course. The weekly real-time classes were recorded through the web-conferencing tool, WebEx. The audio of all participants was recorded, the webcam video of the presenter was recorded, and the presenters' desktop was recorded. The week three discussion board posts were analyzed for this study. Week three was analyzed because the hope was to see a carryover from the week two real-time class discussions and build into the week four real-time class discussions. This study also examined and coded a virtual quality circle meeting after week five. The quality circle meeting spotlighted the students' perspective. The questions attempted to determine what is important to the students learning experience and why, are the students comfortable with their teams and the cohort? The quality circle meeting was held and recorded in WebEx, analogously to the Thursday night classes.

The following questions were asked during the quality circle meeting:

- (1) How do you feel about the format of the program: integrated lock-step curriculum, cohort model, team learning, 5-week courses, Thursday night classes, etc.?
- (2) How has the technology impacted your experience in this program: Blackboard (Bb), WebEx, etc.?
- (3) Do you meet or talk with other cohort members outside of the Thursday night classes? How often do you meet or talk with other cohort members outside of the Thursday night classes? How do you talk – face-to-face or mediated? If mediated, by what technology?

Data Analysis

To determine whether a community of practice formed in this marketing class, this study analyzed the interactions among students and faculty using Yin's case study approach of pattern-matching and repeated observations (Yin, 1994). Yin's pattern-matching technique compares an empirically based pattern with a predicted one. Repeated observations is a special type of time-series analysis that will help establish repetition of the dependent measures across the data collection methods. Instructor and student talk time was quantified by reviewing the recorded classes that have a time-stamp imbedded in the software. Talk time was also coded based on the characteristics that contribute to a community of practice. These characteristics are listed in table 2.1 on pages 14 and 15 and will be operationalized here. For this study, when a student referred to material in the class readings or homework that was counted as one talk time for original course content. If a student referred to content in a completed course, one talk time was registered for prior course content. When a student referred to another student's discussion board post, then one talk time for discussion board posts was recorded. If a student referred to a conversation that occurred with another student, then one talk time for prior conversations was logged. If a student referenced a conversation that occurred during a team meeting, then one talk time was registered for prior team conversations. Lastly, when a student referred to a situation at work, either current or previous employment, that applies to the curriculum, then one talk time was counted for work or field experience. A summary of the operationalized factors are listed in table 3.2.

Table 3.2: Operationalization of Dependent Measures

Variable	Definition for Study	Indications of Community of Practice	Source
Original course content	Student refers to material in the class readings or homework.	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. 	Correia (2008) Lave & Wenger (1991) Wenger (2006)
Prior course content	Student refers to material in a completed course.	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. 	Correia (2008) Lave & Wenger (1991) Wenger (2006)
Discussion board posts	Student refers to another students post during class.	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. • Fosters communal understanding. 	Correia (2008) Henri & Pudelko (2003) Lave & Wenger (1991) Rorty (1989) Wenger (2006)
Prior conversations	Student refers to a conversation that happened with another participant in the cohort.	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. • Fosters communal understanding. 	Correia (2008) Greeno (1998) Lave & Wenger (1991) Rorty (1989) Wenger (2006)

Table 3.2: Continued

Variable	Definition for Study	Indications of Community of Practice	Source
Prior team conversations	Student refers to conversation that happened in a team meeting.	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share information that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. • Fosters communal understanding. 	<p>Correia (2008) Greeno (1998) Lave & Wenger (1991) Rorty (1989) Wenger (2006)</p>
Work or field experience	Student refers to a situation at work that applies to the curriculum.	<ul style="list-style-type: none"> • Shows a commitment to the domain. • Share personal experiences that relates to a common goal. • Creates a shared catalog of resources. • Develops social bonds. • Members learn from one another. 	<p>Greeno (1998) Henri & Pudelko (2003) Lave & Wenger (1991) Rorty (1989) Wenger (2006)</p>

A similar coding scheme was used to analyze discussion board posts during week three. This study also investigated participation differences in gender, age, and years of professional work experience since these are common metrics to determine rankings and scholarships. Many MBA programs rely on their rankings to attract high-quality students.

Inter-rater reliability was used to ensure effectiveness of the coding. Two unknowing raters were asked to code a 20 minute section of each recorded real-time class and the quality circle meeting based on the dependent measures in table 3.2. The raters were also asked to examine twenty percent of the discussion board posts during week three. The results had eighty-three and ninety-two percent agreement and was considered acceptable for this study.

Bias Statement

I would be remiss if I did not declare why I am passionate about this study. I first began teaching online using web-conferencing technology in 2007. I met my Business Calculus class, a rigorous quantitative course, 100% synchronously online through WebEx. I felt it was the only way to deliver the material in an effective manner. This teaching style, online through web-conferencing, began to catch on throughout the Fox School. It was then that my Dean gave me the charge of constructing an online MBA program. I researched aspirant schools, worked with faculty and administrators at Fox and led the construction of the Fox Online MBA program. I am currently the Academic Director of the program and oversee curricular

development to ensure that students are receiving the traditional top-ranked Fox MBA program in an online environment.

I cannot honestly say that I am not biased towards the Fox Online MBA program since I helped create the program from the ground up. With that being said, this study mainly analyzed the interactions of students throughout a marketing course that I did not teach. I hope I presented the data in a clear manner that candidly reflects the students' interactions and perceptions. I presented the students' own words as data so that the reader can judge the validity of my claims.

Chapter 4: Results

In a previous section, a conceptual framework for a community of practice was developed. In short, the students must show a commitment to the domain (Henri & Pudelko, 2003; Lave & Wenger, 1991; Wenger, 2006), develop strong social bonds (Lave & Wenger, 1991), and develop communal understanding (Rorty, 1989; Wenger, 2006). As mentioned before, while communal understanding is difficult to assess, there are features that contribute to communal understanding. Wenger (2006) suggests that as students develop a shared catalog of resources through the process of sharing information and experiences with the group, they can increase communal understanding. In online education, the practice of contributing to class discussions – both synchronous and asynchronous – the community shares and maintains its core of knowledge (Corriea, 2008; Henri & Pudelko, 2003; Wenger, 2006).

The data analysis results are described in detail in this chapter. To recapitulate, the data for this study consisted of two recorded classes and discussion board posts collected during a 5-week online marketing course. Additionally, information was collected at the conclusion of the course during a quality circle meeting.

This chapter is divided into four sections, each of which relates to a research question. The first section attempts to answer the first research question by describing the student's participation in class discussions, during both the real-time classes and the discussion board, which relate to personal, work and field experience. The second section tries to answer the second research question by discussing any

patterns of participation, investigating participation differences in gender, age, and years of professional work experience. The third section describes the student's feelings about their opportunities to share information with the group in an effort to answer the third research question. And the fourth section discusses the student's feelings about a sense of community with their cohort to help answer the fourth research question.

Research Question One: Participation in Class Discussions Relating to Personal, Work and Field Experience

This section will summarize the participation data of the operationalized dependent measures that contribute to a community of practice during the two live classes and the discussion board posts and how they relate to personal, work and field experience. The first subsection analyzes the week two synchronous class, the second subsection will discuss the week four synchronous class and the last subsection analyzes the discussion board posts during week three.

Week Two Synchronous Class. During the week two real-time class students were actively engaged in conversations with the group. Table 4.1 shows the data for the operationalized dependent measures that contribute to the development of a community of practice during the week two class. To be consistent with table 3.2 which listed these measures, the dependent measures were kept in the same order. The number of talk times refers to the number of times a student talked during class that relates to a dependent measure. If the student was involved in an exchange as shown in the first example, this was counted as only one instance.

Table 4.1: Operationalized Dependent Measures for Week Two Class

	Total # of Talk Times	Total Talk Time (in seconds)	Percentage of Student Talk Time
Original course content	14	137	7.37%
Original course content relating to real-world exp.	23	411	22.11%
Prior course content	0	0	0%
Discussion Board Posts	2	10	0.54%
Prior conversations relating to course content	2	50	2.69%
Prior team conversations	0	0	0%
Work or field experience	44	1176	63.26%
Jovial comment relating to course content	15	75	4.03%
Totals	100	1859	100%

Table 4.1 indicates that the students participated often during class, speaking or engaging in a conversation 100 times throughout the two hour class. During this synchronous class students did not explicitly refer to prior course content or prior team conversations and spoke little in reference to discussion board posts and prior conversations relating to course content. Students mostly spoke about how their current or past employment related to the course content, accounting for over 63% of the student talk time. The following is an example of a dialogue from class. At this point in the class the students were discussing the difference between a gain share and a buy share approach to creating customer value. In this example the student shared

information about her professional work experience that relates to the curriculum in this course. To protect the anonymity of the students, the names listed in this document are not the actual names of the students.

Tina: *Professor.*

Professor: *Yeah.*

Tina: *This is Tina.*

Professor: *Yeah, go ahead Tina.*

Tina: *In my company we gain share. We absolutely want to hold onto customers for the long-haul. We don't want to just, we don't want a lot of turn, so we are a gain share company.*

In this example the student volunteered her information, understood the concept of gain share, and applied it to her current employment. This was a common theme in the synchronous class discussions. It seems that the students were well prepared for class, so much so that they were able to connect the curricular content that was assigned for the week with personal and professional real-world experiences regularly during class. That is, students talked little about course content directly, they were able to comprehend the curriculum quickly and relate it to their personal and professional experiences. The students often connected the curriculum with real-world experiences that had more of a personal connection than a professional one. As a result, a new variable was assessed, original course content that relates to real-world experiences and an example will be shown in the next subsection. In this next example the class was discussing how to create customer value, satisfaction and

loyalty. This example illustrates how the students continued to share professional experiences with the group.

Professor: *One of the difficulties I have with a particular type of buying situation is government buying. Does anyone here sell to the federal government? Mike, don't you?*

Jen: *I do.*

Professor: *Jen, you do as well?*

Jen: *Yes, I do.*

Jack: *I do too. It's called Medicare. (Laughter)*

Professor: *That's a tough one boy. That's a tough one. (Laughter)*

Jack: *You're telling me. (Laughter)*

Professor: *Mike, what are you selling to the government?*

Mike: *We sell primarily to the armed forces and to demilitarization in terms of a lot of the components that go into instrumentation, ship board components, control panels, some of the mechanical engineering elements that go into the weapons, that sort of thing.*

Professor: *Is that a big part of your business Mike?*

Mike: *Yes, the government, well I should say at least in the U.S., the federal government over the last five years my company has been probably in the top twenty for accounts nationwide as a company.*

Professor: *Wow! Jen, what percentage of your business is federal government business?*

Jen: *Well, I would say probably for what I sell specifically, about fifteen percent.*

Professor: *So it's significant. Who else said they sell to the government?*

Tim: *This is Tim. I sell to local government and municipalities. I don't sell to the federal government.*

Professor: *What percent is local or state government?*

Tim: *It's nominal, maybe five percent.*

Professor: *Well, whatever level that you sell at local, state, or federal government, that kind of industrial selling is very difficult. You have to have patience, put the bid together. Plus, they have certain rules, the Buy America Clause which has been around for a long time, and they still enforce that, especially in the defense industries.*

Tim: *Professor, I'm sorry, I didn't mean to interrupt. I would say it's not unlike selling to the non-profit world. You know, where you're dealing with boards, oversight and maybe a little too much on the oversight side, well from my experience.*

Professor: *That's right!*

During this exchange four students were involved in the discussion and shared how their work experience related to the content. The way students volunteered to share information with the group indicates that the students felt comfortable sharing their personal work-related experiences with the group. Furthermore, in most cases the students offered to share their experiences without being directly called on by the professor. The professor generally asked the class to volunteer their information; he did not directly call on individual students often, most information sharing was done as the professor asked for volunteers to share their experiences with the group. The two dependent measures that occurred most often during the week two synchronous class were how the original course content related to real-world experiences and how the content applies to their work or field experience, accounting for over eighty-five percent of the student talk time.

However, in the data analysis another new variable was discovered that may contribute to the development of a community of practice. Strong social bonds are a

key component to a community of practice (Lave & Wenger, 1991). While analyzing the data of the live classes it seemed that the students had developed relationships prior to the course. Students often joked around with one another which may imply that social bonds had been formed. In an asynchronous text-based communication environment tone can be challenging to ascertain (Correia, 2008). But, during the live synchronous classes where students can see one another through their webcams and hear one another through their VoIP headsets, sarcasm and humor become easier to recognize. As people develop social bonds they feel more comfortable sharing a jovial exchange, an example is listed below. In this example the class discussion was focused around a push-pull marketing scheme. Jack begins by referring to an old job that related to a push-pull marketing scheme.

Jack: *The last couple of years that I did it, that was our big thing, pulling it. We actually started calling on managed care health plans, trying to get on their preferred lists. So in essence the doctors didn't have a choice. We'd say, we're on Aetna's list or Blue Cross's list, so if you're going to write an antibiotic or whatever, their first choice is our drug. We do the work with them, so the physician was kind of funneled into a limited choice and then we try to help them make the last decision.*

Professor: *Exactly, exactly!*

The above example indicates that Jack feels comfortable sharing his professional work experience with the group. The conversation continues below as Jack and Alex engaged in a jovial exchange that had a friendly tone.

Alex: *Jack, did you say physician? You know I am usually referred to as a provider. Thank you. (Laughter)*

Jack: *I did say physician, I'm sorry. (Laughter)*

Alex: *I'm sorry.* (Laughter)

Jack: *I'm old school.* (Laughter)

Alex: *Yeah, me too.* (Laughter) *Sorry, go ahead.* (Laughter)

Professor: *There's something more respectful about being a provider than a physician.* (Laughter)

Alex: *Yeah right.* (Laughter)

The dialogue here appears to be sarcastic. But as I reviewed the recording it appeared that this exchange took place with a cheerful tone. Jack and Alex were laughing back and forth at one another and seemed to enjoy the exchange. The tone is the key component here as it may be more challenging to deliver a sarcastic jovial comment in a text-based form. The ability to share experience with the group in real-time conversations may allow for the opportunity of more jovial exchanges and the development of strong social bonds. Romero and Pescosolido (2008) believe that when humor is used in groups, people experience positive affect which expedites more efficient social processes and are more likely to form social bonds. This new variable, jovial comment relating to course content, accounted for over 4% of the student talk time during the week two synchronous class. Jovial comments were also seen on the discussion board posts and will be revealed in that subsection.

All students were actively engaged in the week two live class discussion. Only two students spoke once, the other eleven students spoke on average nine times during the two-hour class. Sixty-five percent of the talk times were not solicited, that is the students were not directly called on, they volunteered their conversations and

experiences with the group when it seemed relevant to the conversation. Evidence from the data suggest that students have shown a commitment to the domain by speaking or engaging in conversations 100 times throughout the two hour class, the students conveyed strong social bonds as they engaged in jovial exchanges over 4% of the talk time, and most importantly the students frequently shared personal and work/field experiences with the group accounting for over 85% of student talk time.

Week Four Synchronous Class. The data collected during the week four synchronous class was similar to the data from the week two class. The students continued to contribute frequently to the class discussion and their talk times related most often to curricular content that connected to personal and professional experiences. Table 4.2 summarizes the data collected during the week four synchronous class. The numbers in the parentheses are the data for the week two synchronous class and are shown for comparison.

Table 4.2: Operationalized Dependent Measures for Week Four Class

	Total # of talk times	Total Talk Time in seconds	Percentage of Student Talk Time
Original course content	6 (14)	47 (137)	3.63% (7.37%)
Original course content relating to real-world exp.	44 (23)	266 (411)	20.52% (22.11%)
Prior course content	0 (0)	0 (0)	0% (0%)
Discussion Board Posts	1 (2)	2 (10)	0.15% (0.54%)
Prior conversations relating to course content	0 (2)	0 (50)	0% (2.69%)
Prior team conversations	2 (0)	21 (0)	1.62% (0%)
Work or field experience	41 (44)	897 (1176)	69.21% (63.26%)
Jovial comment relating to course content	11 (15)	63 (75)	4.86% (4.03%)
Totals	105 (100)	1296 (1859)	100% (100%)

Note in table 4.2 that the students continued active participation during class, speaking or engaging in a conversation 105 times throughout the two hour class. During the week four synchronous class, students did not explicitly refer to prior course content or prior conversations relating to course content and they spoke little in reference to prior team conversations and discussion board posts during the week four synchronous class. Students did not speak much about direct course content, accounting for only 3.63% of student talk time. Similar to the week two synchronous class, the dominating dependent measures were how students connected the course content to real-world experiences and work or field experiences accounting for nearly 90% of the student talk time. It should also be noted that the students continued to

exchange jovial comments during the week four synchronous class, accounting for nearly 5% of the student talk time.

The following is an example of a dialogue from class, indicating that the students were comfortable sharing personal experiences with the group that related to the curriculum. At this point in the class the students were discussing the different categories of service mix, an extended car warranty is an example.

Professor: *Did anyone in here buy an extended warranty on their cars?*

Sue: *I did.*

Professor: *Is that Sue?*

Sue: *Yeah it's Sue.*

Professor: *Now Sue, why do you buy an extended warranty?*

Sue: *To be honest, my father told me to.*

Class: (Laughter)

Professor: *Nothing wrong with that.*

Adam: *I buy one also.*

Professor: *Adam, you buy one do you?*

Adam: *Yes.*

Professor: *Now why?*

Adam: *I lease my cars usually and I usually go above my mileage, and Sue's father told me to do it also.*

Class: (Laughter)

Adam: *I've actually had pretty good luck with them (extended warranty); they've paid for themselves at the end of my lease.*

Jack: *Adam, do you buy your extended warranty at Sam's Club?*

Class: (Laughter)

Adam: *No, Sue's dad sold it to me.*

Class: (Laughter)

In this example the students were sharing personal experiences about car warranties with the group that related to the course content. There were also a few jovial exchanges. It appears from this example that students were comfortable sharing personal experiences with the group that was associated to the curriculum. While the comments about Sue's motivation for purchasing an extended warranty may be viewed in a text-based form as sarcastic and ambivalent, the tone of the exchange was amiable.

The next example indicates that this student is comfortable sharing work and field experiences with the group. Moreover, the student enlightens the professor and the class about a professional experience that relates to reference pricing, thus helping create communal understanding. In this example from week four, the class was discussing the distinctive characteristics of services. Specifically they were discussing service packages that have several components and how prices can be variable.

Professor: *There's a term we use in pricing that's called reference pricing. That's where you shop or compare based on your past experience. You can't do that in services; well at least it's very hard to do. That's why in the medical field customers often don't understand pricing or don't really care about pricing. Well one thing is that they're not paying for it, the insurance company is paying. They aren't going to give you a lot of argument about well this guy up the street charges this and this guy down the street charges that. You may get some*

customers like that or patients. I don't know, Jack have you ever had a situation like that occur with you?

Jack: *I've had people haggle with me over a five dollar copay. I've had people try to bargain with me over price, credit direct where I do the surgery at a surgery center, you know where it might be safer. A lot of the stuff I talk about used to happen before I was at my current institution. To me that can often be a red flag in terms of discussing services like that and it can be a red flag that this person is more of a headache than they are worth. On the other hand, when you talk about variability and price reference, when I was on my own and I was consulting for some products, often times it didn't matter what they were paying because compared to what I usually did it was so much easier in terms of risk, time, etc. that it was to me kind of always worth doing.*

In this example the student shared his personal work experience with the group and enlightened the professor that some patients do care about pricing. It is plausible to suggest that Jack's dialogue aided in the development of a dynamic community of practice. Recall that communities of practice are dynamic as members assume various roles during a learning episode. Here Jack's experience with patient pricing allowed him to assume the role of instructor.

Once more, all students were actively engaged in the live class discussion during the week four class. Only one student spoke twice, the other twelve students spoke on average nine times during the two-hour class. Similar to the week two synchronous class, the professor and students were engaged in quality conversations throughout the evening. Seventy-three percent of the talk times were not solicited, that is the students were not called on directly, they volunteered their conversations and experiences with the group when it seemed relevant to the conversation. The students continued to show a commitment to the domain, seem to have developed

strong social bonds, and they often shared personal and work/field experiences with the group.

Week Three Discussion Board Posts. The last part of this section will examine the students' participation in the discussion board threads during week three. The following is an excerpt from the course syllabus relating to the discussion board posts. The syllabus is in appendix C with any identifiable information removed.

The discussion board postings on Blackboard are an important aspect of this course. We only have the opportunity to share our thoughts and experiences for two hours each week. During the week, participation will be assessed in the following manner: Attendance is evidenced by making substantial postings to a discussion thread on a minimum of 3 days in the week prior to our Thursday class meetings.

IMPORTANT: Postings need to be made by each student on BOTH the assigned readings and case each week. 2 – 3 “substantial” postings on the readings and 1 – 2 “substantial” posting on the case are required by each student every week. In your posting on the case, try and refer to the group's presentation which will be put up on Blackboard by midnight Tuesday preceding the Thursday night meetings. The weeks postings will be graded on a 0 – 5 scale, with 0 showing that you either did not pay attention or think about the presentation and 5 showing significant thought.

Contribution is evidenced by value of the postings to the learning of the class. I will evaluate your participation based on both of these criteria (attendance and contribution). Note that to earn the highest grade, participation posts must be balanced during the week and not posted primarily in the last day or two before our Thursday meetings.

You may receive a warning if you flood the classroom with responses. As the emphasis in the discussions is on quality rather than quantity, you may be asked to make your responses more focused and to the point.

The discussion board postings counted a total of five percent of a student's overall course grade, one percent for each week of the course. With thirteen students in the cohort, according to the syllabus we should have expected between 39 and 65

discussion board posts from the class during a week. The main topic for discussion on the discussion board during week three related to a Proctor & Gamble case about mouthwash. The case discusses the Canadian mouthwash market and describes economic conditions including market shares and advertising expenditure data. The case also discusses consumer perceptions about brand images. Table 4.3 shows that the students participated regularly on the discussion board throughout week three posting a total of 69 times as a class, which exceeds the requirement stated in the syllabus.

Table 4.3: Operationalized Dependent Measures for Week Three Discussion Board

	Total # of posts	Total Number of Words	Percentage of Words
Original course content	11	793	11.31%
Original course content relating to real-world exp.	45	4691	66.89%
Prior course content	5	658	9.38%
Discussion Board Posts	0	0	0%
Prior conversations relating to course content	2	350	4.99%
Prior team conversations	0	0	0%
Work or field experience	3	407	5.80%
Jovial comment relating to course content	3	114	1.63%
Totals	69	7013	100%

The data suggests that students have continued to show a commitment to the domain, posting 69 times during the week. Compared to the synchronous classes

there were marginal increases in activity on the following dependent measures: original course content, prior course content and prior conversations relating to course content. There was a copious increase in activity for the original course content relating to real-world experiences dependent measure going from slightly over 20% of student talk time during the synchronous classes to nearly 67% of the words on the discussion board. This may have been a result of the case that was examined this week on mouthwash. After reviewing the data from the discussion board, it appears that students were posting more on personal experiences about mouthwash as shown in the example below.

The extra workload associated with being back in school has substantially increased my coffee consumption as well as left me less time to pre-rinse and floss. I guiltily went to my dentist yesterday for a check-up/cleaning, and the hygienist immediately had me pre-rinse with Listerine. I've been going to this office since 1984, and I'm sure that they were initially somewhat suspicious (if not worried about a mental-status change) of my new-found fascination and penetrating questions about Plax, Scope, Listermint, Peridex etc. I then reassured them that I was studying Scope vs. Plax in B-school, and they were going to be my n=1. Plax has been somewhat discredited, Scope is preferable to it but Listerine is felt to hit all the goals of a mouthwash and dental agent. This confirms the findings of the case study that Listerine users had very positive associations for all criteria, more so than regular users of the other products. My own take from the case was that it seemed there was more to fear from #2, Listerine, then Plax. Scope could have repositioned by marketing that "even we (P&G) didn't know how good we were as a pre-rinse".

In this example the student shared a personal and comical story about mouthwash, then related it back to the case discussed on the discussion board for the week. There was also a distinct decline in the work or field experience dependent measure dropping from well over 60% of student talk time during the synchronous classes to only 5.8% of the words on the discussion board. This again was most

likely a result of the case discussed during the week. It is likely that fewer students in this cohort had a work or field experience connection to the Canadian mouthwash case. All students were actively engaged on the discussion board throughout the week. On average, the students posted over five comments that contained one-hundred words each throughout the week.

The following is an example of a post from a student that shows him connecting the curricular content with real-world experiences; here the student is commenting on a case study about mouthwash.

Gwen Hearst has to decide how to go after the emerging market segment in the mouthwash market interested in mouthwash as a plaque fighter rather than simply a breath freshener. She is concerned that Scope will lose market share to Plax, though so far it looks like Plax has taken market share mostly from Listermint and Cepacol (exhibit 4). And she wants to get in on this new segment of consumers who buy mouthwash for dental health. She has 3 options: do nothing, add reassurance to the current product that it also fights plaque, or do a line extension by adding a plaque fighting Scope product that is better tasting than the competition.

The current Scope product is a killer brand, with a big market share and growing revenue in a growing Canadian mouthwash market (exhibit 4 and 7). I would not touch this market leader and would go after the relatively new plaque plagued market segment with a new Scope product that fights plaque and tastes good. The marketing campaign for this new product could leverage the well-known "no medicine breath" and "once in the morning does it" Scope slogans.

<http://www.youtube.com/watch?v=jiedIt65vc4>

<http://www.youtube.com/watch?v=9fci8P9U-LM>

In this example we can see that the student understood the case, market strategy and made real-world connections. He even went so far as to locate YouTube video's that related to the topic. The following example is in the same threaded

discussion on the discussion board. In this example the student begins with a jovial comment and continues on to share his thoughts about the mouthwash market.

Who let the doctors in here anyways? Truthfully, emphasizing the medical benefits seems like it would be a smart way to attack the mouthwash market. I'm wondering if perhaps P&G is finding that most people that use mouthwash are more attached to flavor or price as opposed to the actual health benefits of using the product? If I had to guess, would any of you say that mouthwash has about the same status as floss with regards to dental products? The thing the dentist tells you to use that you either don't use or "forget"?

This student's good-humored comment again strengthens the case that social bonds have been forged within this cohort. His post continues below where he refers to prior conversations in this course, he even refers to content from the students' first course together, global business strategy.

With regards to P&G as a company that keeps popping up in our discussions, it seems they are the front runner in a lot of the things we have discussed in not only marketing, but global business strategy and the world market as a whole. I have to say that I don't find it *that* surprising to see them as a recurring theme based on their size and the continued emphasis on pharmaceuticals the global society has.

In this example, the student refers to a common theme in the class discussions and connects the theme back to the first online course in the program. This type of post was not uncommon and shows that the students are committed to the domain and are able to make connections between courses in the program.

The data in this section help answer the first research question. The analyses of the data suggest that the students exhibited a commitment to the domain by actively participating in the real-time class discussions and the discussion board. The students consistently participated in the class discussions during week two and four

speaking 100 and 105 times respectively. They also exceeded the minimum required posts of 39 as they posted 69 times during week three. Students mostly referred to work or field experience and shared personal real-world experiences that related to the curriculum in their conversations during the synchronous classes and posted most often about real-world experiences and original course content on the discussion board. After reviewing the data it seems that the students developed social bonds at some point in the program and felt comfortable sharing personal and professional experiences with the group. Even though most of the operationalized dependent measures had little activity in this analysis, the dominating dependent measures show that the students were able to comprehend the course content on a higher level as they frequently extended their knowledge of the curriculum to include personal and professional experiences. In sum, the data suggest that the students consistently participated in real-time class discussions related to sharing personal, work and field experiences with the group. Also, the data from the discussion board suggest that the students participated in class discussions related to sharing personal real-world experiences with the group, but shared little about work and field experiences with the group.

Research Question Two: Pattern of Participation

In the previous section it was noted that the students were actively engaged in the real-time class discussions and the discussion board posts. Now I will describe the pattern of participation, with particular attention to patterns related to gender, age, and work experience. As stated earlier, the age ranges and years of professional work

experience were broken down in this section as they were used to calculate scholarship metrics and ranking data for this cohort. The participation was dispersed regularly throughout the real-time classes and the discussion board. Thus, I performed an in-depth analysis of participation with regard to the demographic breakdown of the cohort. First I will display the descriptive statistics for talk times from the week two synchronous class, the week four synchronous class and the number of discussion board posts of the thirteen participants.

Table 4.4: Descriptive Statistics for Participation

	Week Two Talk Times	Week Four Talk Times	Discussion Board Posts
Mean	8.9	8.8	5.0
Median	9.0	8.0	5.0
Standard Deviation	6.0	6.0	1.8
Min	1.0	2.0	2.0
Max	20.0	23.0	8.0

The data in table 4.4 shows a wide range of participation displayed by minimum and maximum number of talk times during the week two and week four synchronous classes. Looking at the week two data, there were two students who engaged in twenty conversations, two students who only engaged in one conversation, while the rest of the students' talk times fell relatively close to the mean. With only thirteen students in this data set and four of the thirteen students at the extremes, two at the minimum and two at the maximum, the resulting standard

deviation was large. The data was similar for the week four synchronous class with one student engaging in conversations twenty-three times, two students only engaged in only two conversations, and the rest of the students speak times were reasonably close to the mean. On the other hand, the discussion board posts data revealed a smaller range with one student posting eight times during the week, one student only posted twice during the week, while the majority of the remaining students posted closer to the mean. The result of the smaller range resulted in a much lower standard deviation. It seems that the synchronous classes enabled various students to converse more frequently. Some students were more talkative than others during the synchronous class, but the discussion board data show less deviation from the mean. The maximum talk times in the synchronous classes are much greater than the maximum discussion board posts. It may be easier to engage in twenty conversations in a two hour class than post twenty times on a discussion board over a one week period.

Recall that table 3.1 on page 29 showed the demographic breakdown of the cohort. Table 4.5 displays the breakdown of the cohort by years of professional work experience, age and gender. The rows represent years of professional work experience, while the columns represent age. An entry of 2F represents two females for that cell, and an entry of 3M represents three males for that cell.

Table 4.5: Demographic Breakdown of Cohort: Years of Professional Work Experience, Age, and Gender

Years of Exp.	Age			
	25 – 34	35 – 44	45 – 54	54+
4 – 7.9	2F 2M			
8 – 11.9	0F 3M			
12 – 15.9		2F 1M		
16+			0F 2M	0F 1M

The data presented in table 4.5 shows that the youngest students in the cohort had between 4 – 11.9 years of experience. That is, age and years of experience do not necessarily separate out well. It is also interesting to note that the women in this cohort are in the two youngest age categories, so gender and age overlap. Also, the data shows that the majority of the students in this cohort are in the two youngest age groups. Consequently, that leaves only three men in the oldest two age groups, all of which had 16+ years of professional work experience.

Next I will examine the participation of males and females in the two real-time classes and the discussion board posts. Full lists of the descriptive statistics are found in appendices C and D. The numbers in the parentheses represent the minimum and maximum number of talk times or discussion board posts for each category.

Table 4.6: Pattern of Participation for Gender

Gender	Number of Participants	Week Two Mean Number of Talk Times (Min – Max)	Week Four Mean Number of Talk Times (Min – Max)	Mean Number of Discussion Board Posts (Min – Max)
Male	9	9.8 (1 – 20)	8.7 (4 – 14)	5.7 (3 – 8)
Female	4	6.0 (1 – 11)	9.0 (2 – 23)	3.5 (2 – 5)

The data presented in table 4.6 suggests that the males in the cohort were more active during the week two synchronous class and on the discussion board during week three. Yet, during the week four synchronous class the women were moderately more active than the men. Interestingly, the men had a larger range in talk times during the week two class with a maximum of twenty talk times, while the women had a larger range in talk times during the week four class with a maximum of twenty-three talk times. As a result, the group with the largest range and maximum number of talk times had the largest mean. This is most likely a result of the small sample size. With more participants in a study, one may have balanced talk times in relation to gender. Also recall that all of the women came from the two youngest age groups.

We will next examine the age variable to try to determine if any age groups were more active in this course. In table 4.7 under the age column I displayed the mean years of professional work experience in parentheses and under the number of participants I identified the number of males and females in parentheses. That data shows that the least active students during the real-time class discussions were

between the ages of 25 – 34, while the most active were between the ages of 45 – 54. And the least active group on the discussion board was between the ages of 35 – 44, while the most active were between the ages of 45 – 54. In general, it seems that the least active group was the youngest age range of 25 – 34, and the most active group of students was between the ages of 45 – 54.

Table 4.7: Pattern of Participation for Age

Age (Mean Years Work of Exp.)	Number of Participants (Gender)	Week Two Mean Number of Talk Times (Min – Max)	Week Four Mean Number of Talk Times (Min – Max)	Mean Number of Discussion Board Posts (Min – Max)
25 – 34 (6.9)	7 (2F 5M)	6.7 (1 – 20)	6.0 (2 – 11)	4.7 (3 – 6)
35 – 44 (13.3)	3 (2F 1M)	9.3 (8 – 11)	15.0 (7 – 23)	3.3 (2 – 4)
45 – 54 (24.0)	2 (0F 2M)	16.0 (12 – 20)	13.0 (12 – 14)	7.5 (7 – 8)
54+ (30.0)	1 (0F 1M)	9.0	7.0	7.0

The data in table 4.7 suggests that the most active students on the discussion board came from the two oldest groups of students and the most active students during the synchronous classes came from the two middle age ranges. It seems that the older students were generally more active than the younger students. The minimum talk times of the younger students are less than the other age ranges. Yet, one of the most active students during the week two synchronous class was in the 25 – 34 age group as they engaged in twenty conversations, a clear outlier. What’s interesting is that the data presented in table 4.6 showed that the men were more active than the women during week two. But table 4.7 shows that half of the women

were in the 35 – 44 age group which had a mean number of talk times slightly above the mean number of talk times for the entire cohort during week two which was 8.9. This indicates that two of the four women spoke on average with the rest of the cohort during week two. It’s also important to note that as age increases, the mean years of professional work experiences increases.

Next we will observe the students participation in regard to years of professional work experience. In table 4.8 I displayed the mean age of the participants in parentheses under the year of work experience column and the gender of the participants in parentheses under the number of participants column. It appears from the data that the most active students in the synchronous class discussions had the most experience in this cohort. Moreover, the least active students in the synchronous class had the least amount of professional work experience.

Table 4.8: Pattern of Participation for Years of Professional Work Experience

Years of Work Experience (Mean Age)	Number of Participants (Gender)	Week Two Mean Number of Talk Times (Min – Max)	Week Four Mean Number of Talk Times (Min – Max)	Mean Number of Discussion Board Posts (Min – Max)
4 – 7.9 (26.5)	4 (2F 2M)	5.3 (1 – 9)	6.0 (2 – 11)	4.0 (3 – 5)
8 – 11.9 (33.0)	3 (0F 3M)	8.0 (1 – 20)	6.0 (4 – 10)	5.7 (5 – 6)
12 – 15.9 (38.7)	3 (2F 1M)	9.3 (8 – 11)	15.0 (7 – 23)	3.3 (2 – 4)
16+ (51.3)	3 (0F 3M)	13.7 (9 – 20)	11.0 (7 – 14)	7.3 (7 – 8)

The data in table 4.8 suggests that the students with the more years of professional work experience spoke the more often during class than the students with less experience. It is interesting to note that the minimum number of talk times in the

synchronous classes is lower for the students with less years of professional work experience and higher for the students with more years of professional work experience. This may be a result of the volume of experiences that these students had gained through their years of professional work experience. Notice the large range in talk times during week two for the 8 – 11.9 years of experience, but a mean number of talk times relatively close to the mean talk times for the cohort during week two, which was 8.9. There was one student that engaged in twenty talk times during week two in this cell, and interestingly he came from the youngest age group. Oddly, the students with between 12 – 15.9 years of experience posted the least.

Marjanovic (1999) suggested that graduate business students who are active in synchronous discussions tend to be less active in asynchronous discussions and vice-versa. Thus, I will inspect the students that were highly active in the real-time class discussions in comparison to the discussion board, as well as the students that were least active in the real-time class discussions relative to their activity on the discussion board. Table 4.9 shows that the highly active students in the real-time class discussions were also active on the discussion board as they talked and posted above the mean for each of the synchronous classes and on the discussion board, with the exception of Sue.

Table 4.9: Pattern of Participation of Active Students in Real-time Class Discussion vs. Discussion Board

Student	Week Two Number of Talk Times (Mean = 8.9)	Week Four Number of Talk Times (Mean = 8.8)	Number of Discussion Board Posts (Mean = 5.0)
Jack	20	14	7
Sue	11	23	2
Alex	20	10	6
Adam	12	12	8

The activity in this cohort is contrary to Marjanovic's (1999) findings. It seems that the active students in this cohort, with the exception of Sue, were engaged in both the synchronous and asynchronous activities regularly. Surprisingly, Jack was in the 25 – 34 age group which, on average, was the least active age group during the synchronous classes. Surprisingly, each of these students fell in different age groups, but all of them had at least 8 years of professional work experience. Next I will exam the least active students in the real-time classes.

Table 4.10: Pattern of Participation of Quiet Students in Real-time Class Discussion vs. Discussion Board

Student	Week Two Number of Talk Times (Mean = 8.9)	Week Four Number of Talk Times (Mean = 8.8)	Number of Discussion Board Posts (Mean = 5.0)
Sally	1	2	3
Abe	1	4	5
Doug	3	4	6

Table 4.10 shows that the students that were least active in the real-time class discussions were slightly more active on the discussion board, yet Sally and Abe posted at or below the mean number of discussion board posts and Doug just above the mean. This may imply that the students did not feel comfortable sharing personal information in the real-time discussions or it could imply that the students needed more time to reflect on concepts. All students in table 4.10 reside in the 25 – 34 age group and had less than 12 years of professional work experience. One might suspect that younger students in the cohort may not have as many experiences to share with the group.

The data in this section help answer the second research question. The analyses of the data suggest that the younger students in the cohort were generally less active in the synchronous class discussions and on the discussion board, with the exception of Jack. The results also show that gender did not have a big influence on the level of participation in the synchronous class discussions. And interestingly the results of this section contradict Marjanovic (1999) since the data advocate that most of students that were highly active in the synchronous class discussions were also active on the discussion board.

Research Question Three: Students Feelings About Opportunities to Share Information With the Group

To answer the last two research questions I will examine the information shared during the quality circle meeting. The voluntary quality circle meeting was held two weeks after the marketing course had concluded. Questions asked during the meeting were based on the entire program and not specifically about the

marketing course. Nine of the thirteen students participated in the quality circle and all participants were active during the 90-minute session. The students that did not participate in the quality circle were dispersed across the demographics that this study analyzed. The data in the last two sections is limited as a result of the length of the quality circle, which was only one hour.

A common theme through the quality circle referenced how often the cohort met as a class. Some students mentioned that they would enjoy more real-time class discussions with the group, but do not know how they'd be able to fit the time into their already busy schedules.

Alex: I can see why I wouldn't mind having more class time during the week. I think in my own personal case, in terms of running a clinical practice and the extended hours of what I do, I think it would be a practical impossibility. I think I've been lucky enough that I have been able to attend every Thursday night with the exception of maybe two or three because of previous obligations. Speaking in general, I love the class, I love interacting with my classmates. I wish I could do more of it, but practically speaking I don't think I will be able to.

Students also mentioned that they would not mind the availability of an additional optional night to meet with the cohort. The quality circle participants agreed that a weekly virtual office hour could be beneficial. This would provide students that need the extra real-time collaboration an opportunity for more support throughout the program. In Tom's quote below, Jack, Sue and Adam were all discussing how they would like an opportunity to converse more with faculty in reference to how their duties at their current positions applies to the curriculum or how current events tie into the curriculum.

Tom: Speaking to Jack, and Sue, and Adam's earlier point maybe we can have some kind of office hours that are WebEx sessions.

In addition, students commented that the professors used the discussion board in a productive manner. Most professors utilized the discussion board as a carry-over from the real-time class discussions. That is, if a topic was not completed during the real-time collaboration then the students were asked to continue the conversation on the discussion board.

The data in this section help answer the third research question. It seems that the students enjoy the opportunity to interact with the cohort during the synchronous classes. Plus, if a conversation needs to continue after the real-time class concludes, the students felt comfortable continuing the conversation through the discussion board. In sum, the data suggests that the students generally feel that they had ample opportunities to share information with the group, both in the real-time class discussions and on the discussion board. Yet, they felt that they would be better supported to succeed in the program if virtual office hours were implemented.

Research Question Four: Students Feelings About a Sense of Community With the Group

After reviewing the data it appears that the students in this cohort have developed relationships. The students not only regularly attended the weekly real-time classes where they engaged in several conversations, some of which were jovial, but they frequently met outside of class with their student groups or other members of the cohort. Most of the time WebEx was used for synchronous collaboration to work

on projects and socialize, but the students also talked socially on their cell phones, through Facebook, and occasionally met their peers for lunch.

The students felt that the Thursday night classes were a critical component in the development of their relationships with their peers. The following quote is from a student talking about the Thursday night classes.

Tina: It's nice to interact with other people. It's not just via WebEx. We chat using other forms of communication too. It's just nice to check in with everyone and talk that way. It is a definitive time of the week that I am going to see and talk to everyone. When I am struggling, reaching out to people in the class, they're able to give me the perspective I need. I do enjoy that.

Tina's comment indicates that there was a sense of community within this cohort. It appears that she depended on her classmates to help boost her morale when she was struggling with the program. Other students mentioned that they also enjoyed collaborating with their peers in real-time during the Thursday evening classes. Jack said, "Alex and I were speaking before and we agree it's our favorite night of the week". We also saw Alex say earlier, "Speaking in general, I love the class, I love interacting with my classmates."

The data in this section help us answer the fourth research question. It appears that the students have a strong sense of community within the cohort. Relationships have forged and it seems that the students depend on these relationships to make it through this rigorous program.

Chapter 5: Discussion

Online education continues to influence the evolution of higher education. The increased enrollments in online courses (Allen & Seaman, 2008), coupled with the perceived notion that students do not learn as much in online business courses (O'Malley & McGraw, 1999; Young & Norgard, 2006), makes it imperative that academic institutions strive to construct educationally rewarding experiences for business students. Recall that situated cognition theory encourages faculty to engage students in an environment that approximates the contexts in which their education will be applied (Schell & Black, 1997). Researchers further suggest that students would learn more while being supported in a community of practice (Lave & Wenger, 1991). Jones (2010) found that membership in a community of practice can enhance the success of teaching and learning. But, the demands of a traditional community of practice are difficult to achieve in an online environment. The purpose of this study was to determine whether a community of practice was formed in the Fox Online MBA program.

Discussion

The literature suggests that asynchronous text-based communication tools allow for a convenient and flexible online learning experience and affords ample time for reflection (Cuthell, 2005). Unfortunately, the research also shows that students easily get inundated with lengthy text-based communication which can lead to a lack of participation (Corriea, 2008) and as a result students do not feel as though they learn as much with this method of instruction (O'Malley & McGraw, 1999; Young &

Norgard, 2006). Researchers (Corriea, 2008; Cuthell, 2005) suggested that incorporating rich communication tools, such as the web-conferencing tools used in this study, would enable faculty and students to communicate and collaborate more efficiently thus making participation more successful. The collaborative curricular design implemented in the Fox Online MBA program, holding regular weekly class meetings through WebEx, gave faculty and students the opportunity to recurrently communicate and collaborate in real-time.

Researchers further suggest that online students would be better supported if they were engaged in a community of learners (Larramendy-Joerns & Leinhardt, 2006; Lynch, 2002; Salmon, 2005; Wenger, 2006). The key elements to a traditional community of practice include: commitment to the domain, communal understanding, real-time collaboration and strong social bonds (Wenger, 2006; Rorty, 1989). While this has been a suggested practice, the research is lacking in reference to students forming an online community of practice. This study attempted to discern whether the key elements to a traditional community of practice were represented in the data collected during this online business course.

An important finding of this study was how the students' were actively engaged during the real-time classes, thus showing a commitment to the domain as researchers suggest (Henri & Pudelko, 2003; Lave & Wenger, 1991; Wenger, 2006). The students engaged in 205 conversations during the two live synchronous classes and mainly spoke about how the curriculum related to the personal and professional lives. As a result, the students in this study became involved in a generative learning

experience as they became involved in the creation or co-creation of the learning process by means of sharing their experiences with the group. Moreover, the majority of student talk time related the course content to real-world experiences and work or field experience which made for a more relevant learning environment and supporting the development of communal understanding. This active learning enabled the cohort to develop a shared catalogue of resources as Lave and Wenger (1991) suggested.

Even though the students did not speak much about original course content or prior course content, the students showed that they understood the curriculum and connected it to their personal and professional experiences when they were active during the synchronous class discussions. The students also did not explicitly speak often in reference to discussion board posts, prior conversations, and prior team conversations during the real-time classes. This may have been a result of the nature of the discussions that did not offer many opportunities to speak in reference to these dependent measures. The online courses in this program had approximately 26% as much real-time interaction as the traditional face-to-face MBA courses which does not allow for many opportunities to comment on previous content or discussions. It seems that the real-time classes that were analyzed in this study focused more on the current content and how it impacted the business field. Students shared personal and professional real-world experiences that may have enabled the cohort to gain a richer understanding of the curriculum and support communal understanding. On the other hand, the characteristics that had the most activity in this study may have been a

result of the content of this course. Most business professionals have some level of understanding about their companies marketing strategies or campaigns, thus making it easier to connect the topics of this course with their professional experiences. It is also not difficult to transfer the content to our personal lives as we experience corporate marketing strategies in our everyday activities. Whether it is reading a newspaper, surfing the web, traveling to and from work, etc., we experience marketing campaigns on a daily basis. If this study examined an accounting course it is plausible to infer that there would be increased activity in the factor on original course content, as students may ask questions directly related to accounting strategies in an effort to solve assigned problems, and less activity in the factor on how the content relates to real-world experiences.

It is also important to note that the students were actively engaged on the discussion board during week three, which again shows a commitment to the domain (Henri & Pudelko, 2003; Lave & Wenger, 1991; Wenger, 2006) and the development of communal understanding (Rorty, 1989). A large majority, over 65%, of the discussion board posts related the course content to real-world experiences; a theme that carried over from the real-time class discussions. Recall that Corriea (2008) found that ICTs, in this study the discussion board, aggravated conflict when team members became blunt and forthright because of a differing sense of urgency when replying to messages. Also, Cuthell (2005) found that barriers to participation in online networks included lack of time. Because this cohort was able to interact each week in real-time, the asynchronous activities were considerably reduced as

compared to a 100% asynchronous model. Therefore, there was less of a time commitment to the discussion board and less of a chance of students becoming aggravated since the asynchronous activities were limited and condensed. The cohort's active participation in both the synchronous and asynchronous activities suggests that the students were devoted to the group as researchers described (Henri & Pudelko, 2003; Lave & Wenger, 1991; Wenger, 2006) and supported the growth of communal understanding.

The results of this study showed that the males were slightly more active than the women during the week two synchronous class and on the discussion board, but the women were more active than men during week four. Two of the four females were from the youngest age group and the category with the least amount of professional work experience, which turned out to be the least active group. Further analysis revealed that the older students and the students with more professional work experience generally participated more in the synchronous activities than the younger students. This was most likely a result of the experiences they acquired through their professional careers, students with more years of professional work experiences would have more stories to share with the group. After analyzing all of the variables this study examined, it is not clear whether gender had a big impact on participation. It is also not clear if there were significant differences in participation levels of participants in the top three age categories and top three categories for years of professional work experience during the synchronous classes. The results of the asynchronous activities generally showed consistent activity across the different age

and years of work experience categories with the exception of the 35 – 44 year old and the 12 – 15.9 years of experience categories who posted the least. In sum, while there appears to be some interesting relationships among the variables this study examined, the breakdown of gender, age and years of professional work experience overlap in ways that make it difficult to make conclusions about one variable without recognizing that it may be a spurious correlation with another.

Another key finding of this study was the cohort's development of strong social bonds. As evidence from the students sharing information and personal experiences with the group, engaging in jovial exchanges during both the synchronous and asynchronous activities, as well as the anecdotal evidence given during the quality circle meeting, indicates that strong social bonds have been forged. This parallels researcher's suggestion that learning is emergent and social (Greeno, 1998; Lave & Wenger, 1991; Salomon, 1996). But, the development of strong social bonds is a challenge in an online environment. The analysis of the data suggests that it is possible to develop strong social bonds in online business education. When the social bonds formed is not clear. The students may have developed social bonds during the residency experience or because of the cohort model. Dinsmore and Wenger (2006) believed that a residency experience in a cohort model is a powerful tool for building relationships. It is also possible that the students developed social bonds in one of their earlier online classes, or even as a result of the group projects implemented throughout the curriculum. But the fact that they were present during

this study is inspiring. If social bonds formed earlier in the program, they may disperse with a bad team or class experience.

The students' anecdotal comments shared during the quality circle, even though the data was limited, speak volumes about the relationships that formed in this cohort and their impact on learning. It appears that the community thoroughly enjoyed interacting with their classmates during the WebEx classes. During the students' interactions throughout the synchronous classes they were able to share numerous personal and professional experiences and become involved in a generative learning process. Through the generative learning process it appears that the students forged strong social bonds. While strong social bonds are a key element to a community of practice, becoming involved in a generative learning process may have an impact on the student's education.

While there are a number of well-established asynchronous online models that deliver a quality learning platform for students that require greater flexibility, there is still a demand for interaction and real-time collaboration (Northup, 2002).

Researchers suggest using web-based video conferencing for greater synchronous communication and collaboration (Corriea, 2008; Huang & McConnell, 2010) in online education. The results of this exploratory study show that there was a community of practice present during the marketing course this study examined based on the literature and the characteristics described in table 3.2 on pages 34 and 35. Now that we know it is possible to develop a community of practice in online education, next steps would be to deploy methodologies that would allow casual

inferences about the germane factors that contributed to the development of the community. Recall in chapter two that online business students do not believe they learn as much in online courses (O'Malley & McGraw, 1999; Young & Norgard, 2006). This seemed to be a product of barriers to effectively communicate and collaborate in real-time with peers and instructors. Therefore, another future study should examine how the students feel the community of practice impacts their education; do students feel that they learn better by being supported in a community of practice? Strong social bonds are a critical element to the development of a community of practice (Lave & Wenger, 1991). Since it was not clear from this study when the students bonded, another study, possibly a longitudinal study, should examine when the students bonded and how does the level of the community of practice fluctuate throughout the program? There is limited research on communities of practice within business education in general. Thus, a comparative analysis should be conducted to examine the characteristics described in table 3.2 and how they match a traditional program, those using an asynchronous model, or an online program that is not cohorted. Jovial comments seemed to play a role in the community. One may also analyze student's perceptions about the jovial comments; did the students take the comment as it was intended or feel offended? Another study may analyze the how the instructors talk time related to the characteristics in table 3.2 and how they compare to the students results; did the students mimic the style of the instructor? My hope is that this work has revealed numerous opportunities for future work.

Limitations

This study only examined one course in an online MBA program and is not generalizable to all online programs, especially programs without a cohort model. The students were aware that I am the Academic Director for the Fox Online MBA program and that a study was being conducted in this class and a researcher effect may have been present. But the students were not aware of the nature or topic of this study. This cohort of students had taken four, five-week online courses of the same structure leading up to their marketing course. This study only examined one 3-credit course in a 54-credit program. Due to the length of this study it is possible that I have made flawed conclusions about the formation of a community of practice. I also cannot make inferences on what happened prior to or after this course in regards to the evolution of a community of practice. As stated earlier, the students were introduced to their cohort during a five-day residency experience, then took four online courses before this study was conducted. The residency was designed to cultivate valuable interactions with faculty, business leaders and peers. Students were involved in team building exercises designed to develop leadership skills. It is possible that the community forged during the residency or through one of their earlier online courses. It is also plausible that the community molded as a result of the cohort program and curricular design. Students were generally required to work together through WebEx on team projects and presentations. In three of the four online courses taken before this course, the students were required to submit at least one recorded team presentation through WebEx. While working closely with one

another on these team projects through WebEx the students may have developed relationships in which they felt comfortable sharing personal information and experiences with the rest of the group. Future research may examine the development of a community of practice earlier in the program, and see if it is maintained throughout the program.

Due to the exploratory nature of this study, the dependent measures that were examined may not have been reasonable to determine if a community of practice was present. In the current study, students spoke little about dependent measures such as prior course content, discussion board posts, prior conversations, and prior team conversations. Yet, most of the students' conversations related to personal experiences and work/field experience. This may have been a result of the maturity of the students in this cohort. It seemed that the students were well prepared for class and were able to connect the curriculum with real-world experiences. Connecting the content to personal and professional experiences may be more challenging if the cohort did not have a mean of thirteen years of professional work experience. This may also have been a result of the professors teaching style and how questions were asked during class and the requirements of the discussion board posts.

The comments collected during the quality circle meeting are anecdotal and not necessarily a general consensus of the cohort. The questions that were prepared for the quality circle intended to lead students into conversations about the development of a community of practice. Since the program holds regular quality circles and the students have participated in three prior to the quality circle this study

examined, it is possible that the students were less garrulous with their responses. That is, the students may have been less active as they have had other opportunities to share information about the program. Also, the quality circle questions prepared for this study were a subset of the questions asked during the entire quality circle. The students were not aware of which questions asked during the quality circle related to this study. While this study was able to answer the research questions, the students' input during the quality circle focused more around programmatic adjustments. For example, the students suggested that the winter break was too long and they would like to start the spring semester earlier. While this type of information may not directly relate to the development of a community of practice, it may suggest a commitment to the domain. The students realized that their input may not affect their cohort, but were interested in helping the program mature. In retrospect, the questions asked during the quality circle should have been more direct. The questions designed for the quality circle meeting were intended to lead students into answering the last two research questions. In the future, students should be asked directly or a survey should be conducted to collect the data. Also, the quality circle questions were designed before the data was collected and analyzed. Future research should analyze the data collected during the synchronous and asynchronous activities before constructing the quality circle questions in an effort to triangulate the data. This study may have also benefited from a brief follow-up survey after all data was collected and analyzed.

Conclusion

Community of practice in online education is a new phenomenon in the literature. Traditional online business teaching strategies utilizing asynchronous text-based forms of communication make it challenging for students to develop social bonds and share relevant personal and professional experiences with the group. Yet, with the integration of cutting-edge real-time collaboration technologies such as web-conferencing, it affords faculty and students the opportunity to collaborate more efficiently as researchers suggest (Corriea, 2008; Cuthell 2005). Students are able to engage in real-time conversations and meet as a group to participate in collective learning.

The results of this study show that a community of practice developed in the Fox Online MBA program. The students were extremely active in the real-time class discussions as well as on the discussion board. The data collected during this study suggest that students were committed to the domain, developed strong social bonds, and consistently shared personal and professional experiences with the group.

Online education is in its infancy and will hopefully mature into a more robust and rewarding learning platform for students. Since this is the first known online MBA program to incorporate regularly scheduled synchronous class meetings through web-conferencing tools, the opportunities for research have been lacking. It is my hope that current and future online business programs attempt to integrate regular class meetings through a web-conferencing tool that is reliable and user-friendly and study their effect. As educational leaders realize the need for social

human interaction in online MBA programs, the integration of collaborative curricular design and technology will bring in a new era of online business education.

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Appendix A Consent Form



**Curriculum, Instruction and
Technology in Education - CITE**
1301 Cecil B. Moore Avenue
Ritter Hall 3rd Floor (003-00)
Philadelphia, PA 19122

*phone 215-204-2117/8377
fax 215-204-1414*

Title of Research: Community of Practice in Online Education

Investigators: Diane Jass Ketelhut, Assistant Professor of Education, 215.204.6132
Darin Kapanjie, Academic Director, Fox Online MBA, 215.204.8156

We are soliciting your participation in a study of online education programs. Your participation will help us understand how to better design these programs. Before agreeing to participate in this research study, it is important that you read the following explanation of this study. This statement describes the purpose, procedures, benefits, risks, discomforts, and precautions of the program. Also described is your right to withdraw from the study at any time.

Explanation of Procedures

If you agree to participate, we will be using your course products, listed below, to help us understand the impact of the technological tools on the development of community in your cohort.

We will be analyzing your comments and postings in the recorded Thursday night classes in WebEx, discussion board threads in Blackboard, and exploratory quality circles. How you interact with your instructor and cohort will be specifically examined. The quality circle is a small group of people who meet together and provide answers plus opinions to some questions asked by a group leader. You will be asked some questions about how you interact with your cohort, give your opinion about the Thursday night classes and the discussion board posts.

Your quality circle will meet online through WebEx after you complete your marketing course. The quality circle will be recorded through WebEx just as your Thursday night classes are recorded. The meeting will last approximately 1-1 ½ hours.

Risks and Discomforts

You will not be at physical or psychological risk and should experience no discomfort resulting from the research procedures.

**Appendix A
Consent Form**

Title of Research: Community of Practice in Online Education

Investigators: Diane Jass Ketelhut, Assistant Professor of Education, 215.204.6132
Darin Kapanjie, Academic Director, Fox Online MBA, 215.204.8156

Benefits

If you choose to participate in this study, your name will be entered into a drawing for a \$100 gift certificate to be drawn during the quality circle meeting. There are no other direct benefits by participating in this quality circle. However, this research is expected to yield knowledge about the Fox Online MBA and will be used to make adjustments to the program.

Confidentiality

All information gathered from the study will remain confidential. Your identity as a participant will not be disclosed to your professor or any unauthorized persons; only the researchers and Temple University IRB will have access to the research materials. Any references to your identity that would compromise your anonymity will be removed or disguised prior to the preparation of the research reports and publications.

Withdrawal Without Prejudice

Participation in this study is voluntary; refusal to participate will involve no penalty. Each participant is free to withdraw consent and discontinue participation in this project at any time without prejudice from this institution.

Questions

Any questions concerning the research project or your participation in the project, participants can call Diane Jass Ketelhut at 215.204.6132 or Darin Kapanjie at 215.204.8156.

Questions about your rights as a research subject may be directed to Mr. Richard Throm, Office of the Vice President for Research, Institutional Review Board, Temple University, 3400 N. Broad Street, Philadelphia, PA, 19140, (215) 707-8757.

Agreement

Singing your name below indicates that you have read and understand the contents of this Consent Form and that you agree to take part in this study.

Participant's Signature

Date

Appendix B
IRB Approval Form

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Office for Human Subjects Protections
Institutional Review Board
Medical Intervention Committees A1 & A2
Social and Behavioral Committee B

3400 North Broad Street
Philadelphia, Pennsylvania 19140
Phone: 215.707.3390 Fax: 215.707.8387
e-mail: richard.throm@temple.edu

Research Review Committee B

Certification of Approval for a Project Involving Human Subjects

Protocol Number: 12974
PI: KETELHUT, DIANE
Approved On: 16-Feb-2010
Review Date: 16-Feb-2010
Committee: B BEHAVIORAL AND SOCIAL SCIENCES
Department: CUR, INSTR, & TECH (1902)
Project Title: Community of Practice in Online Education

In accordance with the policy of the Department of Health and Human Services on protection of human subjects in research, it is hereby certified that protocol number 12974, having received preliminary review and approval by the department of CUR, INSTR, & TECH (1902) was subsequently reviewed by the Institutional Review Board in its present form and approved on 16-Feb-2010 with respect to the rights and welfare of the subjects involved; appropriateness and adequacy of the methods used to obtain informed consent; and risks to the individual and potential benefits of the project.

In conforming with the criteria set forth in the DHHS regulations for the protection of human research subjects, and in exercise of the power granted to the Committee, and subject to execution of the consent form(s), if required, and such other requirements as the Committee may have ordered, such orders, if any, being stated hereon or appended hereto.

It is understood that it is the investigator's responsibility to notify the Committee immediately of any untoward results of this study to permit review of the matter. In such case, the investigator should call Richard Throm at 707-8757.

A handwritten signature in black ink, appearing to read 'Zebulon Kendrick'.

ZEBULON KENDRICK, Ph.D.
CHAIRMAN, IRB

Appendix C
Syllabus
Marketing 5001
Fox Online MBA Program
Spring 2010
Feb 22nd – April 2nd, 2010

Textbook: P. Kotler & Keller *Marketing Management*, Prentice Hall, Recent Edition (half.com or amazon.com)

Course Description: This course is designed to provide students with an understanding of how firms develop marketing strategies to create and manage meaningful product/service offerings value by consumers for the purpose of developing and maintaining customer relationships. Initially, we will explore how firms develop strategies to create customer value through product management, pricing, supply chain management, customer relationship management, and communications directed to consumers. The course will also present strategies on how buyers acquire, consume and dispose of these goods and services.

Course Objectives:

1. To introduce the student to the strategies used by firms to market and advertise products.
2. To demonstrate the effectiveness of marketing research in the overall marketing strategy of firms.
3. To introduce the student to the process of new product development and its importance in marketing. Management.
4. To introduce the student to the concept of supply chain management and the role it plays in the distribution of products.
5. To show the importance of distribution channels and are a part of a firm's overall marketing strategy
6. To acquaint students with the role marketing plays in international marketing.
7. To acquaint students with the importance of market planning and how market plans are implemented in firms.
8. To introduce students to the concept of pricing.
9. To introduce students to the promotion process and the role it plays in marketing management.
10. To introduce the student to the role of the sales force in marketing.
11. To introduce the students to the concept of branding.
12. To introduce the students to the concept of marketing control and how it affects market planning.

Course Requirements and Grade Distribution:

Case Analysis 1 Write-Up	15%
Case Analysis 2 Write-Up	15%
Case Analysis 3 Write-Up	15%
Case Analysis 4 Write-Up	15%
Case Analysis Presentation	10%

Appendix C
Syllabus

Discussion Board Posts.....	5% (1 % each week)
Final Exam	25%
Total	100%

Online Classes

The online classes will last approximately 120 minutes and meet on Thursday evenings from 8 – 10 PM. The sessions will consist of a discussion of the week’s assigned readings, course notes and cases. Students are encouraged to ask questions at any time during the sessions. The material covered in the sessions will be used as part of the material for the final exam. The sessions will be archived for later review by the students and for later study for the final exam. There will also be recorded lectures for viewing at predetermined times during the semester for each class. Attendance is very important. All classes will meet online in WebEx. The classes will be interactive so all students are expected to participate in class discussion of cases and other materials presented. All course notes are posted on Blackboard for each class lecture.

Cases Analysis Write-Up’s

Four written cases are required. The dates are indicated on the course outline. The first case should be 8 pages in length doubled spaced. The balance of the written case assignments should be 10-12 pages in length doubled spaced. Three students as a team can work on the individual case assignments. The outline to be used for all of the case assignments is in the Course Documents section of Blackboard. All written cases will be discussed in class on the assigned dates on the syllabus. All cases must be prepared in WORD FORMAT and sent to XXX@temple.edu.

Cases Analysis Presentation

Each team will be required to present one case during the semester, see course schedule. The presentation should be recorded in WebEx with your team members. Presentations must be made available to the class by 11:59 p.m. on the Tuesday before class. The presentations should be no longer than 15-20 minutes. You should use PowerPoint in your presentation. You might want to read ahead to prepare for your topic. Each person who is not presenting should post a response to that week’s presentation on Blackboard’s Discussion Board no later than 11:59 p.m. on the Sunday after class.

Discussion Board Posts

The discussion board postings on Blackboard are an important aspect of this course. We only have the opportunity to share our thoughts and experiences for two hours each week. During the week, participation will be assessed in the following manner: Attendance is evidenced by making substantial postings to a discussion thread on a minimum of 3 days in the week prior to our Thursday class meetings.

IMPORTANT: Postings need to be made by each student on BOTH the assigned readings and case each week. 2 – 3 “substantial” postings on the readings and 1 – 2 “substantial” posting on the case are required by each student every week. In your posting on the case, try and refer to the group’s presentation which will be put up on Blackboard by midnight Tuesday preceding the Thursday night meetings. The weeks postings will be graded on a 0 – 5 scale, with 0 showing

Appendix C
Syllabus

that you either did not pay attention or think about the presentation and 5 showing significant thought.

Contribution is evidenced by value of the postings to the learning of the class. I will evaluate your participation based on both of these criteria (attendance and contribution). Note that to earn the highest grade, participation posts must be balanced during the week and not posted primarily in the last day or two before our Thursday meetings.

You may receive a warning if you flood the classroom with responses. As the emphasis in the discussions is on quality rather than quantity, you may be asked to make your responses more focused and to the point.

Discussion Board Summary:

<u>Type of Posting</u>	<u>Quantity Each Week</u>	<u>Due</u>
Readings	2 – 3	12:00 p.m. Thursday
Cases	1 – 2	12:00 p.m. Thursday
Case Presentations (if you didn't present)	1	11:59 p.m. Sunday after class

Final Examination

The examination will be in essay format. A list of sample questions taken from past exams is shown in the course documents section of Blackboard for the student's review. In studying for the exam, the student should review the assigned chapter readings, the course notes, the assigned readings, the discussion board posts and the online classes.

COURSE SCHEDULE

Date	Topic	Assignment
Feb 25th	Introduction to Marketing Management	Kotler & Keller Chap 1
	Marketing Strategies & Plans Online session	Kotler-Keller Chap 2
	Gathering Market Information and And Market Research	Kotler-Keller Chap 3-4

1. Assignment for Feb 25th class: Read, analyze, and write-up Jet Blue Case (Due March 4th Class)
2. Read Assigned Readings for Class and notes in Course Document section of Blackboard
3. Review Recorded Lecture for Class: *Course Welcome & Introduction to Marketing Management* (Available Feb 21st posted in Class Capture section of Blackboard)

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4. Discussion Board Postings for Thursday, Feb 25th class due noon on the 25th.

March 4th	Creating Customer Value	Kotler-Keller Chap 5
	Analyzing Consumer & Business Markets	Kotler-Keller Chap 6-7
	Market Segmentation, Targets Brand Equity	Kotler-Keller Chap 8-9

1. Team 5 Presentation on Jet Blue Case. (Due March 2nd)
2. Assignment for March 4th class: Read, analyze, and write-up. Seagrams or Rose Hotels Case. Teams have a choice for either case for analysis. (Due March 18th – Because of Semester Break no class on March 11th)
3. Read Assigned Readings in text for class and the course notes in Course Document section of Blackboard
4. Review Recorded Lecture for Class: *Customer Value, Analyzing Markets, Segmentation & Marketing* (Available by February 28th posted in the Class Capture section of Blackboard)
5. Discussion Board Postings for Thursday, March 4th class due noon on the 4th, for case presentations 11:59 p.m. on Sunday, 7th.
6. Discuss JET BLUE case presentations. (Written cases due)

March 8th – 14th	Semester Break	
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March 18th	Competitive Strategy & Positioning On line session 5:30-7:00 pm	Kotler-Keller Chap 10-11
	Developing Product Strategy	Kotler-Keller Chap 12-13

1. Team 1 Presentation on Seagrams or Rose Hotels Case. Teams have a choice of either case for analysis. (Due March 16th)
2. Assignment for March 18th class: Read, analyze, and write-up Proctor & Gamble Case. (Due March 25th)

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3. Read Assigned Readings in text and the class notes for class in Course Documentation of Blackboard.
4. Review Recorded Lecture for Class: *Competitive Strategy and Product Strategy* (Available by March 14th posted in Class Capture section of Blackboard).
5. Discussion Board Postings for Thursday, March 18th class due noon on the 18th, for case presentations 11:59 p.m. on Sunday, 21st.
6. Discuss Seagrams or Rose Hotel case presentations. (Written cases due)

March 25th	Developing Pricing Strategies	Kotler-Keller Chap 14
	Value Networks & Channels On line session 5:30-7:00 pm	Kotler-Keller Chap 15-16
	Sales and Sales Management	Kotler-Keller Chap 17

1. Team 3 Presentation on Proctor & Gamble Case. (Due March 23rd)
2. Assignment for March 25th class: Read, analyze, and write-up Swisher or Fashion Channel Case. Teams have a choice of either case for analysis (Due April 1st)
3. Read Assigned Readings in text & review course notes for class in Course Documentation of Blackboard.
4. Review Recorded Lecture for Class: *Pricing, Value Networks, and Integrated Communications* (Available by March 21st posted in Class Capture section of Blackboard).
5. Discussion Board Postings for Thursday, March 25th class due noon on the 25th, for case presentations 11:59 p.m. on Sunday, 28th.
6. Discuss case presentations Proctor & Gamble (Written cases due).

April 1st	Integrated Communications	Kotler-Keller Chap 18-20
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1. Team 2 Presentation on Swisher or Fashion Channel Case. Teams have a choice of either case for presentation. (Due March 30th, you may want to get this done early as it is a BUSY week)

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Syllabus

2. Read Assigned Readings in text & review course notes for class in Course Documentation of Blackboard.
3. Review Recorded Lecture for Class: *Integrated Communications, Direct Marketing & Personal Selling* (Available by March 28th posted in Class Capture Section of Blackboard).
4. Discuss case presentations of Swisher or Fashion Channel Case. Written cases due.
5. Discussion Board Postings for Thursday, April 1st class due noon on the 1st, for case presentations 11:59 p.m. on Friday, 2nd (note the different date due to the end of the semester).
6. Instructions for completing the take home Final Examination (Due back by April 2nd). Final exam will be posted on Blackboard on March 29th. Sample exam questions located in the Course Documents section of Blackboard.

Appendix D
Descriptive Statistics Tables for Gender

Descriptive Statistics for Talk Times in Week 2 Class

Gender	Male	Female
Number of Participants	9	4
Mean	9.8	6.0
Median	9.0	6.0
Standard Deviation	6.7	4.1
Min	1.0	1.0
Max	20.0	11.0

Descriptive Statistics for Talk Times in Week 4 Class

Gender	Male	Female
Number of Participants	9	4
Mean	8.7	9.0
Median	9.0	5.5
Standard Deviation	3.5	9.9
Min	4.0	2.0
Max	14.0	23.0

Descriptive Statistics for Discussion Board Posts

Gender	Male	Female
Number of Participants	9	4
Mean	5.7	3.5
Median	6.0	3.5
Standard Deviation	1.6	1.3
Min	3.0	2.0
Max	8.0	5.0

Appendix E
Descriptive Statistics Tables for Years of Professional Work Experience

Descriptive Statistics for Talk Times in Week 2 Class

Years of Professional Work Experience	4 – 7.9	8 – 11.9	12 – 15.9	16+
Number of Participants	4	3	3	3
Mean	5.3	8.0	9.3	13.7
Median	5.5	3.0	9.0	12.0
Standard Deviation	3.3	10.4	1.5	5.7
Min	1.0	1.0	8.0	9.0
Max	9.0	20.0	11.0	20.0

Descriptive Statistics for Talk Times in Week 4 Class

Years of Professional Work Experience	4 – 7.9	8 – 11.9	12 – 15.9	16+
Number of Participants	4	3	3	3
Mean	6.0	6.0	15.0	11.0
Median	5.5	4.0	15.0	12.0
Standard Deviation	4.7	3.5	8.0	3.6
Min	2.0	4.0	7.0	7.0
Max	11.0	10.0	23.0	14.0

Descriptive Statistics for Discussion Board Posts

Years of Professional Work Experience	4 – 7.9	8 – 11.9	12 – 15.9	16+
Number of Participants	4	3	3	3
Mean	4.0	5.67	3.3	7.3
Median	4.0	6.0	4.0	7.0
Standard Deviation	1.2	0.6	1.2	0.6
Min	3.0	5.0	2.0	7.0
Max	5.0	6.0	4.0	8.0