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# COLLEGE STUDENT INVOLVEMENT IN AN ON-LINE CLASS

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### LILIANA MINA

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Higher, Adult, and Lifelong Education

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# COLLEGE STUDENT INVOLVEMENT IN AN ON-LINE CLASS

By

Liliana Mina

# A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

# DOCTOR OF PHILOSOPHY

Higher, Adult, and Lifelong Education Department of Educational Administration

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### ABSTRACT

## COLLEGE STUDENT INVOLVEMENT IN AN ON-LINE CLASS

By

## Liliana Mina

This study examined the nature of traditional-aged college student involvement in four on-line classes. The research revealed that traditional-aged college student on-line involvement was multidimensional in form and process. Involvement in the on-line learning setting depended in considerable part on the following connection: 1) the connection between students' academic preparation relevant to the subject, 2) the students' sense of the significance of the class, and 3) the students' degree of self-efficacy.

The extent to which students participated in on-line class activities was also influenced by the value they attributed to their on-line class. For instance, students who managed to succeed regardless of their weak academic preparation seized learning opportunities. Though they entered their large on-line classes with the knowledge that their aptitudes and skills were not adequate, these students understood that the methods used to evaluate competence were attainable by applying extra effort. These students were highly involved and committed to learning. Therefore, because they were aware of their weak academic preparation for the subject, but also involved in the class, they were ardently influenced to overcome their shortcomings.

A major finding of this study was that proactive learners felt it critical to connect with faculty and fellow classmates in making the on-line learning experience meaningful.

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In so doing, the study suggested that traditional-aged college students are able to actively engage themselves in the learning process within an on-line course in the following ways: 1) they actively initiated and engaged in discussion regarding course content; 2) many with the proclivity to interact with classmates responded to requests for assistance and served as unpaid tutors; 3) those who valued the opinions of their classmates openly shared and information while benefiting from the collective knowledge of the group.

Another major finding of this study and one not initially sought was the reported widespread condoning of academic dishonesty. Participants reported having observed, engaged in or known of cases of cheating (i.e., the purchase of completed essays, sharing answers via text messaging with fellow classmates during a test, and /or use of the student-only Web site for tests items and answers and other aids). Moreover, this behavior is reportedly both excused and supported by traditional-aged college students who view cheating as a way of *surviving in college*.

These findings constitute the major discoveries of this research and offer implications for institutional policies and instructional practices.

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Liliana Mina

This dissertation is dedicated to my husband and best friend. LaVerne Mason, who always gives me encouragement, support, and unconditional love.

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#### ACKNOWLEDGEMENTS

I want to thank my doctoral committee—Drs. Ann E. Austin (Chair), Marilyn Amey, Patrick Dickson, and John Dirkx—for their guidance and contributions.

I also want to thank my dear friends and loved-ones: Anna M. Ortiz, Robert A. Rhoads, Reitu Mabokela, Pam Eddy, Andrea Beach, Kim VanDerLinden, Anne Hornak, Patricia Farrell, Julie Brockman, Judd Hark, Cathy Wilhm, Sharon A. Peek, Jevelyn Bonner, Lauren C. Mason, Mignonne Radja, E. Reneé Sanders-Lawson, Marc P. Johnston and my relentless cheerleader, Regina O. Smith. My love always to my sister Adriana Mina-Otto and to the memory of my baby brother Mauricio Ulysses Mina. Special thanks to my favorite canines Gopher and Honey Pot. Lastly, I want to thank my father, Adriano Mina Diaz, for always being there to guide my efforts and my mother, Francia Nubia Mina, because she is the smartest and most capable beautiful woman in my life. Mami, muchisimas gracias.

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### **CHAPTER I**

# THE PROBLEM STATEMENT

### Introduction

My experience in teaching Student Leadership Training (EAD 315) face-to-face followed by seven weeks of online instruction fueled my interest in online education research. I found that the undergraduate students had a difficult time expressing their thoughts in writing, completing their assignments, participating in small group projects and adjusting to a different classroom setting. Many of the students' statements from the course evaluations noted that they received more individual attention from the instructors, and appreciated the convenience of learning online, but needed face-to-face classroom meetings to feel a sense of *being in class* with their classmates and instructors.

Additionally, several students reported that they often felt isolated and unmotivated to engage in the online discussions. Yet, these same students expressed keen interest in taking a course totally online. The course evaluations produced varied and often contradictory results. Accordingly, several questions developed regarding the nature of online interaction and involvement between traditional-aged college students, their peers and instructors, which ultimately guided this study.

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#### **Problem Statement**

A review of the literature revealed that institutions that serve the traditional-aged college student population are increasingly offering online courses to remain competitive (Carr, 2000; Clarke, 1999), breathe new life into classroom-based academic programs (NEA, 1999), and meet the demands for education brought forth by globalization and the convergence of computer-mediated communication (Duderstadt, 1997; Gladieux & Swail, 1999; Hanna, 1998; Keegan, 1994). Evidence indicates that approximately 80 percent of 4-year public and private institutions offered asynchronous and synchronous courses in 1997-1998 (NCES, 1999). Furthermore, these online courses were targeted and primarily designed for undergraduate students (Lewis, Alexander & Farris, 1998).

Nevertheless, most of the online education research focuses on adults over the age of 25 (Schwitzer, Ancis & Brown, 2001; Berge, 1997; Matthews, 1999; Phipps & Merisotis, 1999). This lack of attention to the 18-22 year old student population, leaves a bewildering research gap concerning the circumstances of traditional-aged college students enrolled in online classes, specifically their involvement and interaction with their peers and their instructors.

Student-student and student-faculty contact and discussion are central elements of traditional education, and fundamental to a successful college experience (Astin, 1984, 1993; Chickering & Reisser, 1993; Love & Goodsell-Love, 1995; Pascarella & Terenzini, 1991). Alexander Astin's (1984) theory of student involvement establishes that students learn and develop by becoming involved. Involvement requires investing both physical

and psychological energy. The more students study and the more time they interact with faculty and peers, the more likely they are to persist and excel academically.

Astin maintains that involvement leads to excellence. Encompassing both cognitive and affective dimensions, excellence means how effectively students were educated which can be measured by the development of critical thinking skills, knowledge acquisition, and the development of attitudes and values that enable them to be responsible citizens. In other words, learning is defined as the cognitive and affective gains students accumulate from being involved in the collegiate experience. Astin's (1984) theory of involvement is the foundation from which much of college student development programs and services are intended to enhance students' intellectual growth and overall collegiate experience (Kuh & Hu, 2001).

Longitudinal studies also firmly establish the importance of involvement as essential to academic performance, retention, and graduation (Astin, 1984, 1993; Kuh & Hu, 2001; Pascarella & Terenzini, 1991). Involvement plays a vital role in cognitive and psychosocial growth for traditional-aged college students (Chickering & Reisser, 1993; Kuh, Schuh, Whitt & Associates, 1991; Upcraft, Garner & Associates, 1989). Yet, we know very little about the nature of involvement in online classes. The lack of research in this area is particularly problematic given that student involvement is identified as the most fundamental concept in college student development.

Despite a small number of works addressing traditional-aged college students' online involvement, there is little which examines their experiences in detail and which then attempts to focus on how contact is formed and maintained (Phipps & Merisotis, 1999). Instead, the limited research literature typically reports correlations between

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access, satisfaction, academic performance and degree of student-faculty interaction (Bures, Abrami & Amudsen, 2000; Phipps & Merisotis, 1999). Other studies addressing online education tend to be self-reported course assessments, perspectives in course management or comparisons of online courses with equivalent face-to-face classes (Cheng & Lehman, 1991; Hiltz & Meinke, 1989; Peterman, 2000; Ryan, 2000). To date, only a few studies examine how well traditional-aged college students who are used to the conventional classroom experience online classes (Phipps & Meritosis, 1999).

As more 4-year public and private institutions continue to increase delivery of online classes, it is important to fully understand what factors are essential to traditionalaged college student success in this new mode of learning. Student-student and studentfaculty interaction is one of the central requirements for a successful academic experience (Astin, 1984, 1993; Pascarella, 1985). Information about student-student and studentfaculty interaction may suggest helpful interventions and assist faculty in avoiding pitfalls and poor use of online distance learning for traditional-aged college students.

#### Purpose of the Study

The purpose of this study, then, was to describe the nature of student-student and student-faculty interaction in the context of the several online classes. I also sought to determine what the students perceived as factors that influenced their online learning experiences. An additional purpose was to determine ways in which traditional-aged college students approach an online class. To accomplish the purpose of this study, I

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collected data from a sample of 30 traditional-aged college students enrolled in an online class at a Midwest university.

### **Research Questions**

Three central questions guided the investigation and collection of data:

- 1. How do traditional-aged college students describe their approach in their online classes and in what ways do such experiences vary?
- 2. What factors contribute to traditional-aged college students' experiences and involvement in an online class?
- 3. In what ways are traditional-aged college students seeking support for their online learning?

### **Conceptual Guide**

I elected to be guided by Astin's (1984) theory of student involvement in examining student-student and student-faculty interaction in four online classes. Given the increasing delivery of online courses to on-campus students, the nature of their involvement in online learning is an important issue for research (Phipps & Merisotis, 1999). Astin's theory of student involvement is one of the most cited and used theories in the college student development literature (Pascarella & Terenzini, 1991). Although several theories and models have attempted to examine and explain interaction in the

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online classroom, most research studies come from the distance education literature, which is based on the characteristics, needs and experiences of non-traditional (adult) students. Thus, by exclusively using adult theories of online learning, researchers are failing to take into consideration the distinct educational characteristics of traditional colleges and universities, and the body of literature that pertains to students attending them. Furthermore, we do not know what might be understood were researchers to focus on student involvement in distinctly online classes.

Astin's (1984) theory of student involvement has clearly established that interactions that are academic in nature between students, their peers and instructors positively influence learning. However, what we do not know is what types of online academically related interactions and experiences positively influence learning and students' personal development in online classes.

### Overview of Methodology

Since the purpose of this study was to begin to examine the nature of traditionalaged college student involvement in an online class, I used a qualitative research approach in order to gain insights into the participants' experiences, feelings, beliefs, and what meanings they attach to the online learning context (Merriam, 1988; Yin, 1984). Due to the limited sample and the nature of qualitative research, this study does not make inferences of broad applicability. Instead, the intent was to select 30 traditional-aged college students enrolled in an online class and gain more in-depth understanding of their learning experiences (Lincoln & Guba, 1985).

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## **Definition of Terms**

The subsequent terms are defined in the context in which they are used in the research study:

<u>Distance education</u>: Also referred to as online learning; courses offered online that do not require the student to be on campus for most or all class participation. Students can work with course materials at their own convenience or they can work collaboratively on class projects using tools like chat and discussion groups (bulletin boards). (Retrieved online February 28, 2005, www.oit.ohio-state.edu/glossary/)

<u>Interaction</u>: Interaction is usually referred to as a transaction or communication in which two or more people are active, but not necessarily equally active (Schramm, 1983).

Internet: The Internet is a network that links computer networks all over the world by satellite and telephone, connecting users with service networks such as e-mail and the World Wide Web.

<u>Involvement</u>: Involvement entails the investment of energy in activities related to the collegiate experience (Astin, 1984).

<u>Online class</u>: Online class is a Web based course taught via the Internet. The class is taught without the constraints of time and space of face-to-face classes.
<u>Traditional-aged college student</u>: A traditional-aged college student is an undergraduate attending a residential college or university who is between 18 and 22 years of age.

<u>World Wide Web</u>: The World Wide Web (WWW) is a set of linked documents and other files located on computers connected through the Internet and used to access, manipulate, download data, and programs.

# Significance of the Study

The contributions of this study are in the areas of teaching and learning and college student development. First, faculty teaching online gain insights into academic preparation issues that students encountered because of their online learning experiences.

Second, from a college student development perspective, learners who are unfamiliar with online distance education or who lack the skills, abilities, and experiences are at a greater risk of adjusting to the demands of online instruction. Student affairs professionals can make use of this study in tailoring support services and other resources for learners enrolled in online courses. Furthermore, learning specialists and tutorial coordinators can develop practical methods for assisting students to value and excel in their online learning activities. Third, in addition to helping students learn-to-learn online, colleges and universities can begin to address factors such as academic preparation which can have an impact on students' motivation to learn, participate, and persist in online classes.

At present, many traditional colleges and universities are in a phase of transition, rapidly incorporating online learning without understanding how the unique characteristics of the online classroom influence the educational experience for the traditional-aged college student population. The collegiate experience for traditional students is vastly different than in the past. Perhaps online student-faculty and studentstudent interactions call for a re-conceptualization of student involvement (Gatz & Hirt, 2000). This research study adds to our understanding of what involvement is like for traditional-aged college students enrolled in an online class.

### Overview of the Dissertation

Chapter I contained an introduction to the research study, problem statement, purpose of the study, research questions, conceptual guide, overview of the methodology, definition of terms and significance of the study. Chapter Two provides a more in-depth review of the literature. Chapter III describes the approach used to collect, code, and present the data. Chapter IV describes the student population and the context of the four large online classes. Chapter Five presents the findings. Chapter Six presents the discussion, limitations, implications, and future streams of research, conclusions and personal reflections.

# **CHAPTER II**

#### LITERATURE REVIEW

#### Introduction

This chapter provides an overview of the teaching and learning issues faced by online instructors and their students. It also provides research on student-student and student-faculty interaction in general, and specifically their interaction within the distinct context of online learning. Thereafter, is a discussion of the literature on the multidimensional components of traditional-aged college students' involvement in the learning process. What immediately follows is a discussion of the literature on interaction in the online classroom. Toward the end of the chapter, literature on traditional education versus online learning and the multiple dimensions of distance education are presented to give the reader a better understanding of the issues that online learners encounter. The chapter ends with a summary of the literature and the gaps in the literature addressed by the research questions in this study.

#### Teaching and Learning Online

Throughout the distance education literature, scholars maintain that online learning is a distinct form of education and thus a new paradigm in teaching and learning (Harasim, 1989; Hase & Ellis, 2001; Palloff & Pratt, 2001; Schrum & Berenfeld, 1997;

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Wolfe, 2001). "...Teaching online requires another form of pedagogy, one that is more focused on the facilitation of a collaborative process than on the delivery of content" (Palloff & Pratt, 2001, p. 94).

Three distinct instructor roles are identified by Coppola, Hiltz and Rotter (2001) for online teaching: "...Online the cognitive role shifts to one of deeper complexity, the affective role requires faculty to find new tools to express emotion, and the managerial role requires greater attention to detail, more structure, and additional student monitoring" (Swan, 2001, p. 308). In the online environment, educators must shift their traditional teaching role from disseminators of knowledge to facilitators and guides (Harasim, 1987; Moore & Kearsley, 1995). "The emphasis moves from presenting information to assisting students in identifying personal relevance and integrating it into their lives" (McVay-Lynch, 2002, p. 65).

Furthermore, in traditional class settings, experts agree that effective teaching theoretically involves the students through interaction. However, creating opportunities for student interaction becomes a major challenge in online courses. A common principle held among researchers of online education is that instructors have the ability to influence the type of interaction displayed in the online classroom through an assortment of teaching decisions (Schiwtzer, Ancis & Brown, 2001; McVay-Lynch, 2001; Mehrotra, Hollister & McGahey, 2001). In the online classroom, "Teachers become designers of student learning experiences rather than just providers of content" (Collins & Berge, 2001, p. 5). Additionally, successful online instructors provide the kinds of learning activities that respond to the learning needs of students (Palloff & Pratt, 2001).

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New instructional practices can present challenges to faculty making the transition to the online classroom. In particular, we know that observational studies suggest that in many college classrooms very few students interact with faculty and other students (Howard, Short & Clark, 1996; Karp & Yoels, 1976; Nunn, 1996). Interaction patterns in the college classroom reveal that professors speak about 80 percent of the time and that this time is spent lecturing (Dunkin & Biddle, 1974; McDonald & Elias, 1976; Nunn, 1996). Thus, instructors who are accustomed to the face-to-face teaching model of the conventional classroom must develop a different set of interaction skills for the online experience.

While successful online courses require faculty to change the way they have typically interacted with students (Schrum & Benson, 2000), traditional-aged college students enrolled in online courses must also change customary expectations; specifically the student must not assume the instructor provides the relevant information and the student will learn solely from the material presented by the instructor (Hiltz, 1994; Palloff & Pratt, 2001).

Learning to learn online presents challenges to traditional-aged college students used to the face-to-face classroom. Researchers have uncovered that on average 4 to 5 students generate 89 percent of classroom interactions (Karp & Yoels, 1976; Howard, Short & Clark, 1996). Other classroom studies indicate that traditional-aged college students are less likely to interact than non-traditional students (Fritscher, 2000; Howard, Short & Clark, 1996; Howard & Henney, 1998). "Because these observational studies revealed that little participation occurs, few students are involved, and the teacher's

questions focus on recall rather than critical thinking, one must conclude that learning at the college level is indeed a *spectator sport*" (Nunn, 1996, p. 243).

In the online environment, students are expected to be more active learners. Instead of being passive receivers of knowledge, students must reduce their dependence on the instructor. Furthermore, because online learning is a new phenomenon that is highly dependent on reading, writing and communication between students, their peers and instructors, the transition from face-to-face to the online classroom presents other teaching and learning adjustments for both traditional-aged college students and faculty in at least two ways.

First, researchers note that online learning places greater demands on students than the traditional classroom format (Schrum & Benson, 2000; Wolfe, 2001). Besides needing basic computer skills and prior experience with the technologies involved in the particular course, most online educators agree that the nature of the online learning requires the following: a) learner-autonomy, b) learner-learner and learner-instructor interactivity, c) learner interactivity with the text-content, d) high levels of motivation and communication, and e) higher-order cognitive skills (Cyrs, 1997; Keegan, 1986). Therefore, traditional-aged college students who are: a) passive learners, b) unfamiliar with the demands of online learning, and c) unaccustomed to a student-centered form of instruction may possibly find the online learning environment difficult to navigate.

Second, in the traditional college classroom, there exists a coherent sense of what students and instructors are doing together and how they interact with one another. Imagine, for instance, the instructor standing before the podium engaging the students in informal conversation about her weekend activities before starting the lecture. At this

point, the students nod their heads, smile and listen attentively. The physical presence of the instructor, her body movements and facial gestures are sending messages to the students and act as a form of interaction, which creates a sense of community and belonging. According to research studies, however, building interaction into an online course involves more work than face-to-face teaching (McVay-Lynch, 2002; Palloff & Pratt, 2002; Stephenson, 2001). One of the most important factors for successful online learning is the nature of relationships between students and their instructors (Stephenson, 2001).

### Social Relationships

Numerous handbooks on online teaching emphasize the importance of instructor social presence in online facilitation. In the online environment, social presence is accomplished by self-disclosure, continual but not continuous communication, and creating opportunities for social knowledge among all participants (McVay-Lynch, 2002; Palloff & Pratt, 2001; Stephenson, 2001). Because the online environment interaction is text-based, faculty are called to clear up ambiguities, encourage and respond to threaded discussions as well as spend time online so that students have a sense that the instructor is *out there*.

Furthermore, a review of the literature revealed that good online teaching requires faculty to create and sustain trusting and meaningful relationships with their students (Hiltz, 1994; Keegan, 1986; Moore 1996), which requires investing significant amounts of time. Some faculty report that teaching online is extremely time consuming, and the workload intensive, and that it often competes with other responsibilities such as research, publication and administrative duties (Hazemi & Hailes, 2002). Yet many faculty teaching online tend to disregard or underestimate the time they plan to interact with their students (McVay-Lynch, 2002).

Clearly, besides interacting and managing a learning environment that students can access 24 hours a day, faculty making the transition from classroom instruction to the online environment face many challenges and responsibilities. In spite of the challenges they confront, few institutions offer programs to teach instructors how to teach online (Palloff & Pratt, 2001). Likewise, traditional-aged college students enrolled in online courses must also transform their approaches and attitudes about learning (Pea, 1993).

In summary, the introduction and widespread use of the Internet and World Wide Web in teaching and learning is often cited as one of the most effective ways of providing students and faculty opportunities to interact and discuss course content (Bures, Abrami & Amundsen, 2000). "Educators believe the new technologies offer opportunities to expand access to higher education, to respond to diverse learning styles, to provide vehicles for active student involvement, and to reduce costs" (Pascarella & Terenzini, 1998, p. 121). Examining the nature and meaning of student-student and student-faculty interaction in the online environment is of particular importance for those who are interested in attaining a comprehensive understanding of the setting and accurately reflecting the complexity of involvement in the online classroom.

Student development scholars clearly establish that the quality of students' interaction with faculty and peers has been identified to be almost as significant as individual effort to their academic achievement (Kuh, Schuh, Whitt & Associates, 1991). Yet very few studies examine the meaning and nature of interaction and involvement in the online classroom. "We need to consider carefully what situations and for what purposes distance education is warranted. We also need to recognize its potential limitations" (Howard, 2002, p. 778).

# The Multidimensional Components of Involvement

College student involvement has been the most investigated area to date in the college student development literature (Astin, 1984; Kuh, Schuh, Whitt & Associates, 1991; Pace, 1980, 1984; Pascarella & Terenzini, 1991). In the following section, a review of what is known about student involvement is addressed.

Defining the communication or interaction process is complex, because there are various definitions of human communication and exchange of ideas between two or more individuals. Scholars agree that a number of suppositions encompass the communication or interaction process. Interaction is usually referred to as a transaction in which two or more people are active, but not necessarily equally active (Schramm, 1983). Communication or interaction is: a) a dynamic transaction, b) a transaction that influences both the sender and recipient, and c) an individual and symbolic procedure entailing a common code or codes of abstractions (Burgoon & Ruffner, 1974). Interaction between two or more individuals may be written, oral or acted out by gestures such as shrugs or frowns to express dissatisfaction or a lackadaisical attitude.

Frequently, involvement and interaction are used interchangeably in the college student development literature. For instance, it is plausible for a student to be involved in

her studies by spending considerable amount of time studying and attending class, and yet having no contact or communication with faculty and peers. Because of the multidisciplinary nature of examining how humans interact and relate to one another, for the purposes of this study, I have chosen to base the concept of interaction on Astin's (1984) theory of student involvement.

In the college student development literature, involvement is often associated with psychosocial theories and college impact models (Pascarella & Terenzini, 1991). Psychosocial theories usually address the changes or stages students experience in individual human growth. On the other hand, college impact models tend to focus on variables "that are presumed to exert an influence on one or more aspects of student change, with particular emphasis on between-and-within institutional effects on change or development" (Pascarella & Terenzini, 1991, p.17).

Although many psychosocial theories and college impact models are routinely used by colleges and universities to identify and track developmental changes among 18-22 year old college students, and to examine the relationship between students' academics and subsequent collegiate experiences, Astin's (1984) psychosocial theory of student involvement is particularly helpful in understanding the convergence between students' personal experiences and academic success in the online classroom. Since learning online presents traditional-aged college students with the opportunity to engage in the learning process without the constraints of time and space, learning online may lead to different student expectations, motivation and attitudes about learning than the face-to-face experience.

Astin (1984, 1985) identifies four important characteristics of a highly involved student. A highly involved student: a) devotes considerable energy to studying, b) spends much time on campus, c) actively participates in student organizations, and d) frequently interacts with faculty and other students.

In contrast, an uninvolved student: a) disregards or neglects his or her studies, b) spends a small amount of time on campus, c) rarely participates or abstains from extracurricular activities, and d) seldom interacts with faculty and peers. Because involvement entails the investment of energy in activities related to the collegiate experience, the most important institutional resource is a student's time (Astin, 1984). Thus, the student plays a central role in determining the degree of involvement in his or her courses and other activities, which influences the amount of student learning and development (Astin, 1984). Astin (1996) maintains that involvement occurs along a continuum, varying in degrees of intensity for the individual student, and differing amongst students.

### Involvement and Cognitive Development

A number of researchers have addressed various components of Astin's theory of involvement. The effect of involvement or engagement on students' cognitive learning and achievement is repeatedly identified as a key factor for a successful collegiate experience (Astin, 1984; Pace 1976, 1980, 1984; Pascarella & Terenzini, 1980). For example, in a study designed to examine the amount of time students spend in learning, Johnson and Butts (1983) found that the more time students spend in activities such as

note taking and discussing course content, the greater the likelihood of knowledge acquisition. Specifically, the greater the amount of effort and time-on-task, the greater the likelihood a student earns a high college grade point average (GPA).

In an earlier study by Pascarella, Terenzini and Hibel (1978), the authors reported that the greater degree of student involvement in intellectual activities with faculty, the greater influence of students' academic outcomes. Additionally, Whitt, Edison, Pascarella, Nora and Terenzini (1999) in a longitudinal study comprised of 23 colleges and universities found "... the more students were involved with their peers in both course-related and non-course-related interactions, the greater the cognitive growth during college" (p. 72).

Influenced by Astin's cognitive development indicator (time-on-task), Pace (1984) developed a quality of effort scales, which measures students' self-reported gains in intellectual skills and discipline-specific knowledge. The scale was first administered to 4000 traditional undergraduate students. Not surprisingly, the author found students' self-reported academic achievement is influenced by the amount of energy invested in intellectual activities.

# Involvement and the Out-of-Class Experience

The amount of time and effort students spend on campus and are involved in cocurricular activities is another stream of student development research receiving considerable attention in the literature. In a major study Kuh, Schuh, Whitt and Associates (1991) identified a number of out-of-class educationally purposeful activities that positively influence student learning and personal development. These activities include: leadership roles in student organizations, service-learning activities, performing research, and actively participating in work experiences pertaining to the academic major.

An example of the relationship between involvement and out-of-class activities is Berea College's work program. At Berea College, all students are expected to be involved in the institution's Labor Program. "Many work in areas directly related to their majors; for example, sociology majors may work for Students for Appalachia, a community service agency" (Kuh, Schuh, Whitt et al, 1991). Although Berea College is a distinctive institution, research studies indicate that active involvement in out-of-class activities positively influences learning, because it serves to connect students to the institution, thus, increasing the likelihood of staying in college.

Other studies on student involvement reveal, for instance, positive effects associated with living on campus and participation in co-curricular activities. For example, Inman and Pascarella (1997) compared first-year residential and commuter students' cognitive growth. "The findings indicate that students'out-of-classroom experiences and interactions influence cognitive development" (Inman & Pascarella, 1997, p. 17).

These findings are well supported by Kuh (1993), who found that when students are involved in learning activities and the types of learning environments inside and outside the classroom that are motivating and inspiring, students' academic success increases. Terenzini, Pascarella and Blimling (1996) examined the effects of involvement and students' out-of-class experiences. The authors maintain, "The most powerful source

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Involvement and Social Integration

Another important factor influencing student success, in addition to involvement, is how well students adjust to the collegiate setting. Tinto (1993) found that the level of personal, academic, and social integration greatly influences a student's decision to remain or stay in college. For instance, attending activities such as seminars and brown bags sponsored by the institution, meeting with faculty outside of class for career advice, or holding a leadership position in an academic club are all factors that impact persistence and positively affect retention. The greater the level of involvement in the collegiate setting, the greater the likelihood the student will remain in college, because these activities enhance the student's social integration (Tinto, 1987, 1993).

Involvement and social integration are also important variables found to positively influence persistence and retention, especially among students of color. Hernandez (2000) found that Latino students attending predominantly White institutions who are involved in Latino organizations feel less isolated and are not as likely to leave the institution. The same is true for other racial and ethnic groups (Arellano & Padilla, 1996; Mallinckrodt & Sedlecek, 1987).

The above examples support the large body of existing evidence Pascarella and Terenzini (1991) examined in their seminal work <u>How Colleges Affects Students</u>. The authors maintain that it is the amount of effort (time-on-task) or what the student does

that impacts learning. More importantly, it is the institutional mission and the institution's educational opportunities available for students to get involved in that contributes to a successful academic experience. In other words, an institution's size, reputation and amount of endowments are not related to students' academic performance.

While college impact models and student development theories are very useful in understanding involvement, Pascarella and Terenzini (2001) remind us that these models are based primarily on the experiences of traditional-aged college students on traditional campuses. "At present, one can only speculate about how various approaches to distance education may alter the frequency, nature, and dynamics of such interactions, as well as what the consequences of any such alterations might be" (p. 161, 2001).

Even with the widespread interest in traditional-aged college students, there has been relatively little research in examining the nature and quality of student-student and student-faculty interaction in the online classroom. This stands as a stark contrast to the sheer quantity of published material devoted to college student involvement.

In summary, research studies indicate that involvement has the most impact on academic and personal development when it is intellectual in nature (Kuh & Hu, 2001). We also know that it is the depth and breadth of student involvement in multiple campus activities that has the most positive influence on intellectual development--that is, involvement in academic clubs, student government and working on campus (Terenzini & Pascarella, 1994). However, previous research studies have not addressed or attempted to explain the meaning of involvement in online classes. Yet online learning is increasingly emerging as part of the traditional-aged college students' experience.

### Interaction in the Online Classroom

Experts agree that online courses have to involve learners differently than face-toface instruction (Cyrs, 1997; McVay-Lynch, 2001). Yet one of the greatest challenges teachers and learners encounter in the online domain is that interaction is accomplished differently than in the traditional classroom. Instructors in the traditional classroom use visual indicators from students to expand and simplify concepts, negotiate meaning for shared understanding, and engage students to discuss their differences in viewpoints and interpretations of content (Barry, 1992; Stubbs, 1976; Waldron & Applegate, 1998). Conversely, through body language, students can convey confusion to open-ended questions or avert their eyes to avoid involvement in discussions.

Online education requires different communication patterns and learning skills (Schwiezer, Paechter & Weidenmann, 2001) because online learning is text-based. This type of learning entails the ability to engage, interpret meaning, plus negotiate relationships in an environment void of facial cues and body language. In the online environment, there are no visual cues for the instructor or students to observe or exhibit signs of approval, interest, bewilderment or boredom. Furthermore, the participants often have little or no familiarity with online student-student and student-faculty interaction since most students' and instructors' learning and teaching experiences are typically faceto-face (Jones & Wolf, 2001).

Despite, or perhaps because of, the importance of interaction to online learning, how students experience the online learning environment has proven to be somewhat problematic to understand. Online communication provides students the ability to pose

questions, exchange ideas with the instructor and other students, and work on group projects through collaborative activities (Collins, 1998; Hill, 1997). Yet many scholars report a range of student reactions to the online learning domain (DeLoach & Greenlaw, 1999).

Face-to-Face Versus Online Classes

A review of the literature reveals that much of what is known about online interaction focuses on how students evaluate traditional classroom learning versus Internet-based course delivery. For example, in a study designed to measure the effectiveness of a computer-mediated communication class with its traditional face-toface equivalent, Phillips and Santoro (1989) reported that students stated that they had more frequent contact with their online instructors than in their traditional courses. Other findings in the study suggested that there was a significantly higher level of student ratings in the computer-mediated communications course. Furthermore, the authors found that the level of discussion in the online course equaled or surpassed the traditional course. Another important finding was that the instructor's degree and level of involvement with asynchronous interaction required significant amount of time. The instructor's workload heavily increased by maintaining high levels of interaction with students.

In another study, Ryan (2000) compared online construction and methods courses with equivalent traditional lecture courses during two semesters. The goal of the author

was to examine performance assessment between the two learning environments. Ryan found that final grades between the two courses were not statistically significant.

The above findings are in stark contrast to Carr's (2000) study comparing online psychology course outcomes with its equivalent traditional classroom format. In the Carr study, students enrolled in the online version of the course greatly increased their knowledge of psychology as compared with students enrolled in the face-to-face class based on pre-test and post-test outcomes.

Interaction Patterns: Face-to-Face Versus Online

Other research studies focus on comparing interaction patterns between online, face-to-face or interactive tele-courses. Some studies suggest that students who rarely or never speak in the traditional classroom report that they are able to do so online (Sanders & Morrison-Shetlar, 2001). Yet conflicting results are also found in the literature (Halse & Gatta, 2002; Linder, Dooley & Kelsey, 2002; Rivera & Rice, 2002; Tucker, 2001). For example, in a qualitative study conducted by Cifuentes and Shih (2001), the authors examined interaction and collaboration patterns between Taiwanese and American university student pursuing degrees in teacher education. The authors found that the Taiwanese students complained that their American counterparts seldom responded to their entries or if they did respond, the messages consisted of very short sentences. Yet the study also reported positive attitudes towards online learning, specifically, "authentic language learning, and cultural exchange" (Cifuentes & Shih, 2001, p. 7), which, were contradictory findings given that the Taiwanese students often lacked clarity in

understanding course expectations. Furthermore, problems with connections and time zone differences negatively impacted the students' ability to interact.

Ruberg, Moore and Taylor (1994) who examined synchronous classroom instruction, found that the same students who dominated the discussion in the face-toface classroom, participated more and tended to dominate the online interaction. Yet Walther, Anderson and Park (1994) in a study comparing interaction patterns between online and face-to-face courses, reported that differences in communication patterns faded as time progressed.

#### Learning Styles and Interaction Patterns Online

More recently, learning styles and interaction patterns have surfaced in the online distance education literature as important topics of study. For example, Wells (2000) examined individual learning styles and attitudes towards learning online. Based on a single group sample of 13 graduate students, who are also community college faculty, the author found that all but one student had learning styles that were conducive to online learning. In other words, they preferred less-structured, self-directed learning situations. This is not surprising because adult educators maintain that because adult learners have more life experience, online courses meet their maturity levels, cognitive formations, life goals and motivations (Andrusyszyn, Iwasiwe & Goldenberg, 1999; Cross, 1981). Besides a lack of random selection of participants, one of the shortcomings of the Well's study is that the participants might have had a predisposition to online learning because they were non-traditional (adult) students. Another conclusion made by Wells (2000) was

that teaching advanced computer skills is not necessary for students to interact online. Yet Bures, Abrami and Amundsen (2000) and Hiltz (1997) maintained that experience with computers plays an important role in online discussions.

Valenta, Therriault, Dieter and Mrtek (2001) studied attitudes and learning styles of 20 undergraduate enrolled in an introductory psychology course and 54 graduate students enrolled in coursework in the health information specialization at the University of Illinois – Chicago. The authors found that social interaction in learning is important to students identified as social learners, yet no opportunity for conferencing or other forms of interaction occurred because the software and hardware were not available at the time.

Although the aforementioned studies compared the effectiveness of online course delivery and styles of learning, it remains unclear what types of communication skills are required for student success as well as the nature of the contact between instructors and peers.

The above findings are representative of current online distance education research: students' performance is equal to or better in online courses, and students' satisfaction with online learning often surpasses the quality of face-to-face instruction. "The purpose of many of these types of research is to develop recommendations to improve distance learning. These studies typically conclude that students and faculty have a positive view toward distance learning " (Phipps & Merisotis, 1999, p. 3). Furthermore, Phipps and Merisotis maintain "the most significant problem is that much of the original research is questionable and thereby renders *many* of the findings inconclusive" (1999, p. 3).

### Traditional Education Versus Online Learning

Even though much has been learned about the essential components for a successful online course, a good deal of research reveals that students often miss face-to-face communication and physical contact with instructors and peers; thus, they are left with a sense of isolation (Picciano, 2002; Wang, Kanfer, Hinn & Arvan, 2001).

In response to students' feelings of isolation, proponents of online learning emphasize that today's students must expand their conception of *learning community* beyond that which occurs within the confines of the traditional classroom and adapt to multiple learning settings. This is particularly important since lifelong learning, which is so important to personal and professional development, will occur in multiple settings. (Moore, 1989).

Critics are quick to indicate that attrition rates in online courses, which sometimes reach 50 percent or more, are largely due to the student's inability to adapt to the online learning environment (Lorensetti, 2002). Other researchers contend that because communication is done asynchronously and interaction is not in real-time, online communication does not emulate what occurs in the traditional classroom (Wang & Newlin, 2001).

It appears that although considerable efforts are made to address interactivity in the online classroom, human contact or physical presence is still expected to be an integral part of the college experience for traditional students. Thus, what could increase or encourage interaction in the online classroom is unclear.

In summary, in online teaching and learning, interaction takes many forms and is accomplished in different ways depending on the course content, student characteristics and instructor expertise. While the Internet and the World Wide Web offer students and faculty opportunities to learn and interact in new and meaningful ways that are different than in the traditional classroom, inconsistencies in the literature about students' perceptions of interaction and levels of satisfaction with learning online remain. We do know that some studies report the lack of direct interpersonal contact in online classes is a problem for some college students. In certain studies, students perform better online, yet they also report dissatisfaction with online learning. We also know that in certain classes no differences in students' academic outcomes were found between traditional and online learning formats. However, other studies demonstrate significant differences in students' performance, which are attributed to level of participation, mode of interaction and students' learning styles.

# Multiple Dimensions of Interaction in Distance Education

The previous sections discussed how college student development scholars conceptualize and examine the relationship between interaction and a successful college experience. Also covered was a brief review of current literature on online learning. Astin (1984) and other scholars are among many who have established the importance of involvement and interaction to academic and personal development. Recent developments in technology offer a wider range of learning opportunities for traditional-

aged college students. Accordingly, the distance education literature is helpful in understanding interaction in the online learning environment.

Borje Holmberg's (1986, 1995) theory of distance education reaffirms the importance of student-faculty contact. For Holmberg, quality in distance teaching and learning must be meaningful to the student and centered on the student's interest. Involving the student in the learning process through personal relationships with peers and instructors increases the likelihood of personal involvement with the subject matter. Furthermore, through *guided didactic conversations* students are more likely to be motivated and thus the more effective the learning.

According to Holmberg, the role of the teacher is to facilitate the process and to encourage critical thinking, not memorized (rote) and mechanized learning. The responsibility of the teacher is to act as compassionate motivator and to create for the student a community and a sense of belonging. Holmberg contends that an engaging academic atmosphere and well-established sense of community encourage and motivate students to learn. The author refers to student-faculty interaction as a guided educational exchange of ideas comprised of active learning activities, structured reflection and discussions.

Wedemeyer (1981), Keegan (1990), and Verduin and Clark (1991) also identify personalized communication between the student and instructor as paramount to effective distance education for adult learners. Verduin and Clark maintain that instructors should create an educational environment where exchange of ideas, discussions and differing opinions are shared without fear of repercussion. Furthermore, the authors encourage instructors to collect pre-assessment information such as academic background,

employment history, educational goals and learning styles preferences and link the students' characteristics with learning activities that are compatible and consistent with the students' educational aspirations.

Adults bring real-world professional and life experiences that are often directly related to their educational goals (Keegan, 1983, 1986, 1990). Accordingly, purposeful learning experiences and activities are paramount to successful distance education for adult students. Yet drawing on what is known about traditional-aged college students, their limited life, work experiences, levels of motivation and degrees of maturity (Creamer, 1990; King, 1990; Perry, 1968,1970) might affect their levels of comprehension and the kinds of interactions pertinent to learning at a distance. It is important to note that the aforementioned concerns relate to the academic subject being studied.

### Forms of Interaction in Distance Learning

Expanding on Holmberg's (1986) didactic conversation model, Moore (1989, 1993) identified three forms of interaction as essential to learning at a distance: studentcontent interaction, student-faculty interaction and student-student interaction. Studentstudent interaction acts as a motivational mechanism and is central for the development of social skill learning, such as group process and teamwork. For example, interaction with other learners, especially in small group activities, provides students the opportunity to establish relationships, improve their communication skills, and engage in active learning (McVay-Lynch, 2002). Student-content interaction engages the student in the learning process and knowledge construction. According to McIsaac and Gunawardena (2001), the most typical form of "learner-content interaction is the method by which students obtain information from the material" (p. 5). The process of interacting with the text-content brings cognitive changes encompassing the learner's understanding, analysis and synthesis of the material — in other words, what goes on inside of the learners as they reason, react, respond and interpret the subject.

Student-content interaction is viewed as a powerful medium for improving education since it improves understanding course-content for students whose learning styles and learning preferences are self-directed and self-reflective (Wolfe, 2001). Student-faculty interaction impacts student performance and satisfaction with the learning experience. The role of the instructor is central because the ability to communicate and establish meaningful and trusting relationships is a critical component of teaching and learning at a distance (Harasim, 1997; Fulford & Zhang, 1993; Sherry, 1996).

Due to technological innovations in computer-mediated communication (CMC), in recent years, a fourth component has been added to the literature on distance education: human-interface interaction (HCI). In this context, the learner has to interact with the technology in order to relate to the instructor, peers and the text-content (Hillman, Willis & Gunawardena, 1994).

The importance for understanding human-interface interaction in terms of how students work through the educational material, as well as how comfortable and selfassured the students are with using the particular technology, cannot be underestimated

(Hiltz, 1997). Shank (1998) maintained that access to information is not learning. Olson and Clough (2001) warned that technology could also undercut the learning process because it has the potential to entertain and diminish discussion of ideas. Instead of engaging in the learning experience, the focus is on the electronic medium, which tends to capture the student's attention.

Investigators looking at human-interface interaction have also found that learners with low levels of computer self-efficacy and inadequate levels of training and experience are unable to accomplish online tasks (Sherry & Sherry, 1997). Consequently, if students lack the skills or confidence in using computers, they are more likely to drop out of online courses.

While researchers have established various components related to effective distance learning, we know very little about how online learning relates to traditionalaged college students' perceptions of involvement. We do know that involvement is related to students' academic performance, but we do not know how traditional-aged college students familiar with the face-to-face classroom describe involvement in their online classes.

#### Asynchronous and Synchronous Interaction

Interactivity is often integrated in online courses via electronic bulletin boards, listservs, e-mail, chat rooms and threaded discussions (McKeage, 2001; Schwitzer & Lovell, 1999). In certain courses, instructors require scheduled chat room meetings as well as mandatory postings on the class Web site to view students' progress and give

feedback (Schwitzer, Ancis & Brown, 2001; Sener, 2001). In doing so, faculty personalize interactions by expanding on students' ideas and asking follow-up questions (Cook & Cook, 1998; Nantz & Lungren, 1998; Piburn & Middleton, 1998). Additionally, instructors can glean whether individual students understand the material and address points of confusion in greater detail (Anatamian & DeMoville, 1998; Brown, 2000).

An important issue to consider in online course design and delivery is whether to use asynchronous or synchronous interaction. Each form of communication presents considerable benefits as well as challenges to instructors and students.

### Asynchronous Interaction

Asynchronous interaction usually consists of bulletin boards, discussion groups and listservs, which all serve similar purposes, yet they vary in how the information is disseminated and how it influences interaction between students, their peers and their instructors. In most instances, the instructor usually designates a topic for discussion or presents a series of questions and then asks for student input.

One of the benefits attributed to asynchronous communication is that it permits flexibility because students can participate at their convenience and thus it is the most prevalent tool used in online education (McVay-Lynch, 2001; Palloff & Pratt, 2001). Asynchronous interaction is probably the most examined form of online instruction (Swan, 2001). These studies usually focus on student attitudes toward online learning, interaction with peers, and interaction with instructors.

In a study conducted by Wang, Kanfer, Hinn and Arvan (2001), the authors examined learner satisfaction, learning outcomes, learning environment, skills, prior experience with computers and gender in a required economics course. Overall, the 29 traditional on-campus undergraduate students indicated a lukewarm attitude toward the online learning experience and asynchronous method of communication. Of particular interest, students noted that they did not get a chance to get to know their classmates; yet, they also indicated ambivalence towards the lack of peer-peer interaction.

Hiltz (1997), however, reported that online classroom students in her longitudinal study of students enrolled in sociology, communication, English, mathematics and statistics courses did not develop as many friendships as students in the face-to-face classroom. Hiltz's online students, however, reported more participation with peers and instructors than they experienced in their traditional courses.

Asynchronous communication requires that students take responsibility for managing their learning because often several topics are simultaneously discussed. A number of researchers note that asynchronous interaction in discussion boards is often non-sequential. It is not rare for students to become disoriented by the multiple discussion threads and lose interest because they are overwhelmed with information or are falling behind on reacting to others' ideas (Winiecki & Chyung, 1998).

For instance, Ryan, Carlton, Hodson and Nagia (1999) noted that some students felt disconnected from the online course, missed sharing ideas, did not enjoy learning from a machine and missed face-to-face contact. Other concerns voiced by some students included a lack of flow in the discussions.

Some studies have found that the least useful aspect of using listservs is the volume of mail and lack of face-to-face contact (Hazemi & Hailes, 2002). Students often report, "that they felt flooded with e-mail, and took time to read only faculty-generated messages because those messages contained information directly pertinent to their assignments" (Witmer, 1998, p. 5).

In other studies, students have commented that they experienced isolation and devaluing of their ideas if others did not address their postings (Hazemi & Hailes, 2002). However, other research reports concluded that students in both threaded bulletin boards and chat rooms found each of the discussion components to be valuable and integral to their learning (Navarro & Shoemaker, 2000). Additionally, Harasim (1990) reported that students perceived asynchronous discussions as more equitable and more egalitarian than discussions in the traditional classroom.

To summarize, while asynchronous interaction is dominant in Internet-based learning, many research studies have shown that difficulty keeping up with discussions and feelings of isolation are reported by some students. On the other hand, students also have reported strong levels of satisfaction with asynchronous communication because of the afforded flexibility to learn at students' own pace. Still, students also have reported that a lack of face-to-face interaction diminishes their participation while other students have perceived asynchronous interaction as an integral part of online learning.

To date, researchers have focused on the advantages and disadvantages of asynchronous interaction between faculty and students and among students, as well as students' perceived benefits and drawbacks to asynchronous communication. Little is

known, however, about how students maintain, develop and negotiate interaction between their instructors and peers.

### Synchronous Interaction

In synchronous online learning environments, students and faculty interact at the same time although they are in different places. Synchronous interaction usually takes the form of chat room discussion, and less often in real-time video and audio because of the high cost and the difficulty of synchronizing input. Through small group teaching activities, online instructors often use student-student interaction as supplemental instruction, to create community, and as a means for students to discuss the course content and learn from one another.

In a study investigating community development among distance learners, Haythornthwaite, Kazmer and Robins (2000) concluded, "Synchronous communication, particularly during the live lecture times, contributes much more to community building than asynchronous communication..."(p. 11). Additionally, Barry and Sibbald (2000) contended, "chats provide a platform for discussion of the class work, but they also serve to promote the type of interaction that will become central to the group dynamic" (p. 471). The authors also suggested that students seem to be more apt to chat online than in the traditional classroom. This assertion is supported by well-documented evidence that shy students tend to contribute more online than in face-to-face courses (Siegel, 1997).

On the other hand, other studies examining participation patterns in synchronous interaction have noted that a few students tend to dominate the majority of the discussion

(Siegel, 1997), which mirror similar findings examining interaction patterns in the college classroom. Furthermore, Hase and Ellis (2001) noted that students often have to be motivated by the instructor to participate in listservs, threaded discussions and chat rooms, which is not only very time consuming for faculty, but is still teacher-centered because their prompts are maintaining participation.

Some studies have suggested that low levels of student-student interaction in a synchronous format might be attributed to learners' inexperience with real-time discussions, previous experience with computers, and learning styles (Moore & Kearsley, 1995). Schrum (1989) also pointed out that, because synchronous activities require considerable coordination, students who are unable to participate synchronously might have other commitments or difficulty connecting to the Internet.

Regardless of the method of delivery, successful online courses require faculty to change the way they have traditionally interacted with students. Online educators must choose effective ways for students to communicate, collaborate and manage the flow of information. Palloff & Pratt (2000) advised that faculty teaching online should have clear ideas and expectations of the type of interaction they want. The authors cautioned that it is the instructor and not the technology that is crucial to the success of online courses. These assertions supported one of Harasim's (1997) hypotheses, which states that an integral component for online student success and satisfaction is effective student-student and student-faculty interaction.

#### Summary

Researchers have attempted to identify student characteristics that are conducive to online learning. These studies include: self-motivation, self-directedness, prior experience with computers, particular learning styles, and whether students choose or are compelled to enroll in online courses. Research studies have produced contradictory conclusions on the experiences of traditional-aged college students enrolled in online courses. These contradictions are attributed to delivery or models of instruction, student and instructor characteristics, course content, expectations, and types of tasks among other factors.

The types of strategies instructors use to encourage interaction vary by the type of course, academic subject and student characteristics. Because online learning is a mutually dependent process, instructors need to create a virtual community that values contributions of others, as well as establish a safe environment for the exchange of ideas.

As indicated in the preceding pages, online education presents a number of educational opportunities to personally reach students, which enhances academic and social integration, engages students in discussions to encourage critical thinking and reflection, and provides a learner-centered educational experience. Nevertheless, research studies indicate that some students often feel isolated and disconnected from the instructor, and thus they experience difficulties in the online classroom. Since both students and faculty are used to interacting within the context of the traditional classroom, the online environment presents considerable challenges.

There is no doubt that lack of student-faculty and student-student interaction for traditional-aged college students can affect learning (Chickering & Gamson, 1987; Chickering & Reisser, 1993). Ample literature supports the value of student-student and student-faculty interaction, yet a need exists for researchers to examine the nature of online involvement and interactions between traditional-aged college students, their peers and their instructors. With more and more traditional colleges and universities increasing the number of online courses, previous research has provided limited and repeatedly puzzling findings on the nature and quality of student-student and student-faculty interactions (Picciano, 2002).

A number of research studies have concluded students' academic outcomes in many online classes are equal to or better than their equivalent traditional classes. Other studies indicate that in many online courses participation decreases, and in certain instances students' grades decline in comparison to grades of students enrolled in equivalent face-to-face courses. Other research studies have indicated that interaction patterns in online classes often mirror what occurs in the traditional classroom format: a small number of students tend to dominate the communication between their peers and instructors. While other studies report that because interaction is text-based, many students have a difficult time communicating their thoughts online. Thus, they are reluctant to participate in discussions because they prefer face-to-face communication. What is perplexing is that often the same students who report that they missed face-toface interaction would be willing to participate in another online course.

We know that four forms of interaction are essential to learning at a distance: student-content, student-faculty, student-student and student-interface interaction. I
define interaction as a transaction or communication in which two or more people are active, but not necessarily equally active (Schramm, 1983). Second, I define involvement as the investment of energy in activities related to the collegiate experience (Astin, 1984). Third, I define participation as the students' presence during discussion but lack of engagement on a meaningful level. However, what remains unclear is which types of interaction influence traditional-aged college students' online participation and how the form of interaction affects the learners' satisfaction.

### **CHAPTER III**

### METHODOLOGY

#### Introduction

The primary focus of this study was three-pronged. The three foci were to describe the nature of traditional-aged college students' approaches to their online class; the second focus was to identify the factors that contributed to their experiences and involvement in an online class, and the third was to examine ways that traditional-aged college students sought support for their online learning.

This chapter begins with an explanation of the research design, followed by a restatement of the research questions, which guided the collection of data. After that, the methodology employed in the study is described. Next, the setting, the context, the sample and the selection of the participants are discussed. Lastly, the instrumentation and procedures used to analyze the data are described and the researcher's bias is addressed.

### **Research Design**

The approach to this study was based on a phenomenological philosophy. The fundamental belief in phenomenological research is that reality is intrinsically subjective and relative to the circumstances (Moustakas, 1994). "In this view, subjectivity is paramount as the scientific observer deals with how social objects are made meaningful" (Holstein & Gubrium, 1994, p. 263). Accordingly, the participants' knowledge and interpretations of the experiences are socially constructed. The study was concerned with the participants' point of view, and in understanding social interactions; thus, a qualitative study grounded in the phenomenological tradition was appropriate (Creswell, 1998; Moustakas, 1994). Furthermore, because the phenomenological research tradition assumes that knowledge is situated locally, socially constructed and contextually rooted (Denzin & Lincoln, 1994), the criteria used in attempting to understand the participants' experiences in four online courses was well-suited for the data analysis stage of the project (Straus & Corbin, 1990).

This study employed qualitative data collection measures, because the goal was to understand what involvement means to traditional-aged college students enrolled in an online class. The nature of the study relied on a series of open-ended, in-depth and semistructured face-to-face or telephone interviews with participants at various times.

Three central questions guided the collection of the data:

- How do traditional-aged college students describe their approach in their online classes and in what ways do such experiences vary?
- 2) What factors contribute to traditional-aged college students' experiences and involvement in an online class?
- 3) In what ways are traditional-aged college students seeking support for their online learning?

# The Setting

This study was conducted at Midwest University (MU), a Research I doctoralgranting institution with an undergraduate student population of approximately 42,000 students. At present, the University offers over 100 courses, and sixteen degrees and programs online. Students interested in taking courses online can enroll as Lifelong Education students or as regular degree candidates. For this study, however, only regularly enrolled full-time undergraduate students, that is, those pursuing a degree, were included in the sample.

# The Context

The sample for this study was selected from approximately 400 undergraduate students enrolled in the following classes: Accounting Concepts (ACCT 200); Introduction to the Study of Economics (ECN 200); Environmental Globalization in Social Science (SSC 300); and Introduction to Pulp, Paper, and Container Design PPCD (100). All four classes were offered fall and spring semesters in face-to-face formats as well as online. These courses were selected because the classes normally enroll undergraduate students across all academic majors. The participants were invited to participate in the study as long as they met the established criteria. The criteria for selection was as follows: The student (a) had been admitted to Midwest University as a regular degree candidate, (b) was enrolled in a minimum of 12 credits, (c) was enrolled in at least one of the online courses, d) and was 18 years of age or older.

An e-mail list of all students enrolled in each course was obtained from each instructor (Appendix A) who had agreed to give access to the class and was willing to personally participate (Appendix B) in the project. The e-mail contained a general statement about the study (Appendix C), which described the study and the responsibilities and obligations the researchers had, including confidentiality assurance. Recruitment and selection of participants occurred after approval from the University Committee on Research Involving Human Subjects (UCRIHS) was received.

Beginning with a randomly selected student, every other student on the e-mail list provided by the instructor was contacted and invited (Appendix D) to participate in the research project. The students, who elected to participate in the study, were then contacted via e-mail or telephone to schedule an interview. The thirty participants for the study were selected from the pool of students (Appendix E) who indicated a willingness to participate in the project. Attempts were made to obtain equal representation of students from all four online courses.

### **Data Collection Procedures**

Interviews lasted between 75 and 90 minutes. The study involved the use of two primary data collection tools: a background questionnaire (Appendix F) and an openended set of questions conducted via one-on-one interviews (Appendix G). All of the interviews were approved to be tape-recorded by the participants. The interview protocol consisted of a series of questions (Appendix G), which addressed several topics, including students' feelings, beliefs, thoughts, and experiences with online teaching and learning. The syllabi from each course were also reviewed to provide the researcher with a descriptive record, thus providing different insights than those provided by the interviews (Creswell, 1998). Additionally, the instructors (Appendix H) were interviewed to gain detailed information about their online classes.

A copy of the signed Informed Consent Form was given to each participant before the interview. The participants in the study were ensured of confidentiality. Each participant's interview was coded numerically. The taped interviews and accompanying transcripts were stored in a locked drawer in the principal investigator's office. Pseudonyms were used instead of names of people or places. Pseudonyms corresponding with each numerically coded interview were kept separate in a locked drawer.

In writing the findings, precautions were taken to conceal the students' identities. During the transcription and analysis phase of the study, pseudonyms were used to further guarantee confidentiality.

The participants were informed that they could refrain from answering any questions and that they could stop the interview at any time and that they had the option

to withdraw from the research study. The interviews were conducted in a private office. Each participant was informed that his/her identity in the study was masked and that a different name was assigned to each file. Several participants reviewed the transcripts to verify the accuracy of the transcriptions: instructors and students alike (Stake, 1995). The dissertation chair acted as an external auditor (Lincoln & Guba, 1985), evaluating every phase of the research process and end result of the investigation.

There was potential for the participants to voice criticisms, dissatisfaction with the University, and with their online teaching and learning experiences. Every precaution possible was taken to conceal the identity of the participants in any publications, conference presentations or reports.

### Data Analysis Procedures

I transcribed the interviews in order to immerse myself in the information presented (Creswell, 1998). Each transcript was judiciously examined and synthesized. The analysis was conducted during the data collection phase as well as after all the interviews were completed. In a diagrammatic form, the data was organized into four major components, which represented each class examined. Verbatim words, phrases and similar incidents were used to develop codes for categories to fully organize the data. The advice of Huberman & Miles (1994) in examining the data by highlighting the patterns and themes in the transcripts was followed. Through the process of analysis, a conscious effort was made to identify any deviations from patterns that emerged. The initial data analysis entailed using open coding to identify emerging themes (Hammersley & Atkinson, 1995). Afterwards axial coding was employed to describe relationships among categories and within categories. Although axial coding is normally used in grounded theory, the use of the technique was helpful to examine the central experience of the students. After completion of all the interviews, the data were coded, analyzed, synthesized and summarized.

#### **Researcher's Bias**

Understanding and disclosing researcher bias is an integral part of qualitative study (Merriam, 1988). In this study, I relied on the participants' viewpoints as well as my own interpretations to guide and shape the narrative. I was compelled to examine student-student and student-faculty interaction in online learning because of my semester experience teaching a hybrid leadership development course to traditional-aged college students. I observed that many of the students had difficulty interacting online and that the same students who did most of the talking in the seven-week face-to-face portion of the course, also did so during the online class sessions.

As an academic adviser, I was often privy to students' experiences with faculty. Many of the students I advised over the years shared feelings of apprehension when I suggested meeting with their professors about academic matters. These experiences increased my curiosity to examine how Internet-based instruction influences studentfaculty interaction. Furthermore, my own experience with online teaching and learning has been very frustrating at times. During this study, I made sure to consult peer

reviewers to discuss the findings and themes. Additionally, after each interview I kept a journal of my feelings, attitudes and thoughts in order to make sure that I did not make assumptions based on my personal experiences in analyzing the data.

### **CHAPTER IV**

### **CASE DESCRIPTIONS**

### Introduction

The primary purpose of this study was to expand the level of understanding of what learning was like for traditional-aged college students enrolled in an online class. In an effort to provide the reader with concrete descriptive information for understanding the experiences of the participants, this chapter provides a contextual explanation of each online course, which includes types of learning activities, goals, expectations, and academic requirements. Characteristics of the participants including prior experience with online learning are portrayed in Tables 1 through 4. A brief description of the collegiate context is also included before the description of the courses. The information presented supplies the reader with the environmental aspects of the four classes examined and the collegiate setting, which will later help the reader in understanding the inferences drawn from the students' comments and reported behaviors to answer the following questions:

- 1. How do traditional-aged college students describe their approach in their online classes and in what ways do such experiences vary?
- 2. What factors contribute to traditional-aged college students' experiences and involvement in an online class?

3. In what ways are traditional-aged college students seeking support for their online learning?

### Context of the Study

In this section, a description of the institution is presented. Moreover, the participants' characteristics and a detailed view of the online courses, including content, course expectations, assignment submission, examination and grading procedures are provided.

The Collegiate Environment

At Midwest University (MU), the residential college experience is considered an integral part of a traditional-aged student's undergraduate education. On-campus living is designed to cultivate relationships between students, faculty and student services personnel. For example, advisers are on hand in the residence halls to assist students in resolving academic and career concerns. In addition, social events, intramural sports, student government, and academic clubs are just a few of the many activities available to undergraduate students. In essence, MU is often described as a vibrant and diverse institution that offers academic, cultural, and living-learning environments that encourage and enhance college student development.

First-year students are required to live on campus. Exceptions are made, however, for students residing within a fifty-mile radius of the college grounds. Married students,

veterans, and students who have reached their twentieth birthday before the beginning of fall semester are also exempt. MU provides a variety of housing options for on-campus students. A number of student housing alternatives are also available within walking distance from the campus. Quite a few upperclassmen select off-campus housing, yet still benefit from the multitude of resources and activities the campus has to offer.

Attending college for many traditional-aged students is often viewed as an opportunity to enjoy new freedoms while managing their own time and behaviors. For the participants in this study, the activities and experiences that usually accompany collegiate life, such as attending class, meeting academic expectations, making decisions about career goals and ways to accomplish them and working part-time influenced their decision to enroll in an online class. For all of the participants, online learning afforded them opportunities to work fluctuating schedules and to engage in internship, volunteer or study-abroad activities.

### The Courses

Four large online courses offered at Midwest University (MU) were chosen for this study. Each course was traditionally delivered face-to-face, but in recent years, their online counterparts have been developed to meet the diverse learning needs of students. Students undertaking online classes were expected to be familiar with computers and various computer applications. An online orientation was offered by MU to prospective online learners; however, the orientation was not mandatory for enrollment.

The cost of tuition was the same for online courses as it was for face-to-face equivalents including refund policies. Like many other institutions, an additional technology development and services fee accompanied enrollment in online courses. Many of the students in this study were not aware of the additional fee until they received the tuition bill.

In order for students to take online courses at MU, they had to have access to a computer. A 56 modem or connection to the Internet was necessary. Hardware and software basic equipment requirements included Netscape 4.5 or Microsoft Internet Explorer 4.01 or higher. The student's computer had to be able to run Java as well as JavaScript and have a color monitor with a minimum 800 x 750 screen resolution. Certain courses required the installation of other equipment such as Real Player and Real Player plug-in, which allowed students to view multimedia presentations in audio, video, 3D, and animation.

In this study, the pseudonyms of the participants correspond with the first letter of the enrollment code for the course. For instance, Alana was a student in Accounting Concepts (ACCT 200), while Eva and Ezra were both enrolled in Introduction to the Study of Economics (ECN 200).

### Accounting

Accounting Concepts (ACCT 200). This three-credit course introduced students to accounting methods and practices including decision-making for planning and control. The course focused on the key skills needed for non-business majors to apply

accountancy concepts in multiple business settings. The class was restricted to students enrolled in academic programs that specifically required the course for admission or to fulfill a requirement for graduation.

ACCT 200 was offered every semester including summer. During the fall and spring semesters of every year, typically, enrollment ranged between 150 and 200 students in the face-to-face sections of the course. Online fall and spring enrollment was generally around 100 students. The summer 2003 session, which lasted seven weeks, was the focus of this study. In the summer session, 106 students enrolled and eight were interviewed.

The structure of the online version of ACCT 200 was designed, developed, and delivered by the instructor in this study. The first day of class, the instructor conducted a face-to-face orientation on campus, which entailed a review of the syllabus, course requirements, expectations, and examination procedures. Students were cautioned that enrolling in ACCT 200 online required self-discipline, self-directedness, and self-motivation. Students were advised that a steep learning curve was required in order to master the material in a short period.

The delivery format for ACCT 200 combined a series of modules, video lectures, tutorials, and self-study questions that provided the student with immediate feedback. The content of the course was presented in a way that the students had to understand previous concepts before attempting to advance to the next unit. This allowed the students to approach the material at their own pace. Each module consisted of a video-lecture delivered by the instructor. The textbook and course notes supplemented the context of the lecture, which enabled the students to follow along with the video-lecture

clips. Students were able to navigate among the lecture slides for each module. Therefore, previously presented materials were easily accessible to the learners.

A discussion board where students could post questions, interact with classmates, impart and obtain academic support from fellow students and receive information from the instructor about assignments also comprised the structure of the course. Face-to-face and online office hours were also available. Furthermore, the instructor's profile included a headshot photo, information about research interests, hobbies, and family life.

Examinations for ACCT 200 were conducted at designated sites throughout the state and at the University's main campus. Although the midterm and final examinations were conducted online, they were proctored and offered only during a specified time. Each exam lasted 90 minutes. Students were expected to use a non-programmable calculator. If a student was found cheating, a grade of zero was awarded for the course. Furthermore, disciplinary action as outlined in the University's Student Code of Conduct was enforced. On the other hand, quizzes were not proctored; however, there was a 45-minute time limit for quizzes and a designated date and time to take them. The Student Code of Conduct for quizzes was the same as the examination policy.

As noted previously, 106 students enrolled in ACCT 200. Eight students were randomly selected and invited to participate in the study. The students ranged in age from 18-21 years. Two of the students had prior experience with online learning. Table 1 on the next page provides a description of the students enrolled in ACCT 200.

Name	Major/Status	Gender/Race/ Age	Online Learning Experience	Weekly Hours dedicated to ACCT 200
Alicia	Advertising/ Sophomore	F/White/20	Yes	15
Alistair	Advertising/ Sophomore	M/White/20	No	12
Ariel	Food Systems Management/ Sophomore	M/White/18	No	10
Armand	Agribusiness/ Sophomore	M/White/20	No	15
Annabelle	Food Industry Management/ Sophomore	F/Biracial/21	Yes	12
Alana	Advertising/ Sophomore	F/White/21	No	10
Alonzo	Construction Management/ Sophomore	M/White/20	No	10
Anita	Merchandising Management/ Sophomore	F/White/20	No	15

# Table 1 - Accounting Concepts

# Economics

Introduction to the Study of Economics (ECN 200). This three-credit course introduced the student to general principles of economics. Topics covered include unemployment, inflation, income distribution, consumption, production, market behavior, and factors that determine the Gross National Product. Although a prerequisite was not listed for ECN 200, the course was not recommended to freshmen students.

In the same way as ACCT 200, ECN 200 was a course required by many departments for graduation or for admission into a restricted major. ECN 200 was offered every semester including summer. On average, during the academic year, a typical face-to-face class enrolled about 750 students per section. It was not rare for the University to offer five or six face-to-face sections of ECN 200 during fall and spring semesters. On the other hand, online fall and spring enrollments had a range of 150 to 200 students. Summer enrollment was a little different. ECN 200 was offered at various satellite locations throughout the state including the main campus. At the satellite locations, enrollment varied between 30 and 50 students.

Technical requirements for ECN 200 online were the same as for ACCT 200. Students had to have access to Microsoft PowerPoint, Excel 97 or higher, Acrobat Reader, and the ability to download files. A unique aspect of ECN 200 was that during fall and spring semesters, students in the online version of the course through real-time video could watch the actual classroom instruction of the campus course, which was taught by a different instructor. The real-time video-audio transmission allowed the online learner to watch and hear the classroom instructor and students could ask and respond to questions.

In the summer session of online ECN 200, however, students were able to view video lectures conducted by one of the developers and principal instructors, who has been a leader in the integration of technology in economics education. Students were able to post questions and comments on Web Talk, check for course updates and review assignment instructions from the instructor. It is important to note that an advanced

doctoral student taught the summer 2003 session of ECN 200 under the direct supervision of one of the developers of the course.

Topic guidelines supplemented with video lectures, practice exams, quizzes, and online assignments encompassed the structure of ECN 200 online. Students in the online version of ECN 200 were expected to purchase the textbook and accompanying lecture slides. CDs containing the lectures were also available for purchase. The CDs were recommended for students who did not have a speedy Internet connection.

An important factor in a student's overall grade was the submission of the correct answers to the Excel assignments. Students were warned that grades allocated to the Excel assignments carried significant weight. Furthermore, the consequences for missed, incomplete, late, or incorrect answers on Excel assignments were severe because failure to comply with the assignment conditions would make a significant difference in a student's final grade.

Unlike ACCT 200, examinations for ECN 200 were not offered via a computer program. Instead, paper exams were used. However, similar to ACCT 200, the examinations were proctored at dates and times noted on the syllabus. The examinations were conducted on the main campus. However, students who lived beyond 75 miles of the main campus were expected to arrange for their own proctors. Thus, it was not rare for a student to take her exam at the local community college, a public library, or her place of employment. Arrangements for proctored tests had to be made in advance. After the student made the proctoring arrangements, the examination was mailed to the proctor. Because ECN 200 examinations were proctored and completed on paper, a statement of student conduct was not posted on the syllabus.

The summer of 2003 online version of ECN 200 was the focus of this study. Similar to ACCT 200, ECN 200 lasted seven weeks. Out of 108 students enrolled, eight students participated in this study. None of the students had prior experience with online learning. The students ranged in age from 18-22. Table 2 on the next page provides a description of the students enrolled in ECN 200.

Name	Major/Status	Gender/Race/ Age	Online Learning Experience	Weekly Hours dedicated to ECN 200
Eva	Advertising/ Junior	F/White/22	No	12
Ezra	Food Systems Management/ Sophomore	M/White/20	No	10
Ernesto	No Preference/ Sophomore	M/Hispanic/20	No	10
Earl	Construction Management/ Sophomore	M/White/20	No	10
Estella	Food Science/Junior	F/White/21	No	15
Esther	Journalism/ Junior	F/White/20	No	12
Eugene	Advertising/ Sophomore	M/White/18	No	10
Emilia	Advertising/ Junior	F/White/20	No	10

Table 2 - Introduction to the Study of Economics

# Social Science

*Environmental Globalization in Social Science (SSC 300).* Social Science 300 was a four-credit upper-division course designated to meet one of the University's general education requirements. The course introduced the student to a variety of ways to study society and the environment, especially the impact that weather, climate, and global environmental policies have on population growth and human migration. Students must have completed a lower-division Social Science general education designated course before being allowed to enroll in a 300 level class.

Social Science 300 was offered in a face-to-face format during fall and spring semesters. Usually enrollment in the traditional classroom courses was between 190 and 250 students per class section. On average, five to six sections were offered during the academic year. Unlike ACCT 200 and ECN 200, SSC 300 was offered online only during the summer.

Akin to the aforementioned courses in this study, the minimum technology requirements established by the University also applied to students enrolled in SSC 300. However, the CD-Rom accompanying the course readings packet only worked on personal computers (PCs). Thus, students using a Macintosh (Mac) computer had to arrange to use a PC for the CD-Rom.

Like the other courses in this study, SSC 300 was comprised of a series of lesson plans, which were then divided into units. Learners were required to click the Web links on the unit modules. The students were also able to test their knowledge and mastery of the material by answering a series of questions pertaining to each unit. The answers were

not graded and did not have to be turned in, which was different from the requirements for ECN 200. As part of the course structure, the correct answers to the questions were available immediately for students to review. Students were informed that many of the examination questions were directly derived from the Web links. Students were also notified that not all Web links were mandatory for review; however, according to the syllabus the supplementary links were extremely helpful to other students in understanding the material.

A number of factors distinguished SSC 300 from the other online courses in this study. First, all students were required to submit responses to the weekly questions posted on the Web Talk discussion board. Failure to comply with Web Talk participation on or before the specified date and time resulted in zero points. A maximum of five points for each question could be earned. The rubric for grading the Web Talk postings included the degree of insightfulness and supporting references.

Second, in an effort to address academic honesty and plagiarism, the syllabus for the course provided specific examples of plagiarized and acceptable answers to a Web Talk question. Thus, the students were able to view an example of a plagiarized answer as well as an appropriate answer, which integrated Web site materials.

Third, the examinations for SSC 300 were conducted online and the exam could be taken at any location. All of the students interviewed for this study completed their examinations from home. The exams consisted of a series of multiple-choice questions that had to be completed within an 87-minute time limit. Because the computer program randomly selected the questions, the sequence of the questions differed for each student. Students were informed that they could not have other programs open during the exams

and that they could not use books, annotations or receive assistance from others. Although the instructors had no way of monitoring the students during the exams, they were able to ascertain how long each student spent answering each question. It is important to note that all of the exam questions appeared on the computer screen at the same time.

Fourth, the syllabus also addressed net-etiquette issues by giving examples of proper and improper ways to communicate with fellow students and instructors. Students were reminded that online communication differs from face-to-face; subsequently they needed to give careful thought to text-based interaction with others.

Lastly, section instructors (teaching assistants) were responsible for all aspects of the online SSC 300 course, including grading. The instructors were supervised by the professor who developed and designed the course. In addition, the academic department staffed a distance education coordinator who along with the professor of the course addressed technical problems. The distance education coordinator for SSC 300 was instrumental in putting together the course content.

SSC 300 lasted seven weeks. The participants for this study were selected from the summer 2003 class list. Out of 200 students (100 per section), eight students volunteered to participate in the study. The students' ages ranged from 18-20. Table 3 on the next page provides a description of the students enrolled in SSC 300.

Name	Major/Status	Gender/Race/Age	Online Learning Experience	Weekly Hours Dedicated to SSC 300
Silas	Communications/ Junior	M/White/20	No	10
Stanley	Agricultural science/ Sophomore	M/White/19	No	10
Sabra	No-Preference/ Sophomore	F/White/18	No	8
Sebastian	Communications/ Junior	M/White/20	No	6
Selma	Elementary Education/ Sophomore	F/White/19	No	10
Serena	Biology/ Sophomore	F/White/19	No	10
Shirley	Multidisciplinary Studies/ Sophomore	F/White/20	No	12
Sigmund	Sociology/ Sophomore	M/White/20	No	6

 Table 3 - Environmental Globalization in Social Science

Pulp, Paper and Container Design Science

Introduction to Pulp, Paper, and Container Design PPCD (100). This 3-credit

course introduced the students to the fundamentals of container processing and design, which included the nature and scope of the container industry, along with employment opportunities in food, manufacturing, distribution, and product development. The intended audience for PPCD 100 consisted of students interested in a major that combines engineering, business, communication, and the social sciences. intended audience for PPCD 100 consisted of students interested in a major that combines engineering, business, communication, and the social sciences.

PPCD 100 was offered every semester including summer. During fall and spring semesters, the course was offered in a face-to-face format as well as online. Enrollment for the face-to-face class ranged from 180 to 200 students per section. The online section during fall and spring usually enrolled 150 students. Unlike the other courses in this study that were offered online and face-to-face during the academic year, one section of the online version was specifically designated for on-campus students during fall and spring semesters, while the other online section was open only to high school students and lifelong learners.

Out of the 108 students enrolled, six participated in the study. A distinguishing characteristic of PPCD 100 was that it was not conducted in the shortened 7-week summer sessions; this course was offered for a full fourteen weeks of the summer.

The instructor who also taught the online class during the summer of 2003 was responsible for designing course objectives. All of the content materials for the course were online. Consequently, students did not have to purchase textbooks or supplementary materials. It is important to note that the course syllabus included the instructor's biography, and discussion of hobbies, future personal goals, as well as research interests. In addition, the syllabus included ways to address the instructor in e-mail correspondence.

PPCD 100 was structured in a series of learning modules, which contained animation, and in some instances interactive components. Thus, students had to have the minimum hardware and software equipment requirements established by the University.

Similar to the other courses in this study, each topic section consisted of a set of lessons followed by a series of review questions. A set of learning objectives also accompanied each module. The instructor encouraged students to work together on the review questions by using the course discussion board. Students were also able to visit other Web sites within the modules for additional information on specific topics.

The course requirements and examination policies for PPCD 100 closely resembled those of SSC 300. Students completed their midterm and final examinations from a location of their own choosing. All of the students participating in this study chose to take their examinations from their home computers. Each exam consisted of multiplechoice questions. The students had 72 hours to log on for each exam. Once the student logged on, 80 minutes were allotted to complete the test. Analogous to SSC 300, the students could not use notes, supplemental materials, or assistance from others.

As noted previously, PPCD 100 lasted a total of fourteen weeks. From a class list of 108 students, six students were selected to participate in the study. The students' ages ranged from 18-20. Table 4, on the next page, provides a description of the students enrolled in PPCD 100.

Name	Major/Status	Gender/Race/ Age	Online Learning Experience	Weekly Hours dedicated to PCD 100
Pearl	Criminal Justice/Sophomore	F/White/19	No	6
Pandora	Forestry/ Sophomore	F/White/20	No	10
Pia	No Preference/ Freshman	F/White/19	No	6
Paloma	Psychology/ Sophomore	F/White/20	No	4
Pierson	Pre-law/ Sophomore	M/White/19	No	10
Percy	No Preference/ Sophomore	M/White/19	No	8

Table 4 - Introduction to Pulp, Paper, and Container Design

All of the courses in this study were designed in a way that the learners had to understand certain concepts within each lesson before moving to the next unit. Although some courses had mandatory face-to-face meetings, other courses had no mandatory meetings with the instructor or contact with other students. Communication in all of the courses, however, was accomplished asynchronously. That is, students and their instructors responded to each other at their convenience.

Another common characteristic of the courses in this study was that they were designed to allow students to interact with the instructors and fellow classmates. Furthermore, many of the lessons were presented in a manner which enabled the learners to apply the concepts to real-world experiences. None of the courses, however, had previous online learning as a prerequisite.

### Summary

The preceding Tables suggest that students varied in age, gender, status, academic major, online learning experiences, and reported weekly time spent on the online classes examined. Furthermore, anyone who is familiar with online teaching and learning will recognize the unique set of circumstances encountered by students and instructors in the online classroom. For instance, the structure of the online classes required students to be disciplined and assiduous learners. As a result, the responsibility for logging on, taking the initiative, and using the resources to understand the course content and complete the assignments rested solely on the student. The instructor, on the other hand, was responsible for the structure and content, and for establishing the academic expectations for the class.

Needless to say, many of the same practices in face-to-face education function likewise in the online learning environment. For example, students were assigned grades, earned academic credit hours, and in many instances, students' academic performance affected their suitability and admission to certain majors.

### **CHAPTER V**

# FINDINGS

### Introduction

In this chapter, the nature of student-student and student-faculty interaction and students' involvement within the context of four large online courses are examined through a cross-case analysis of the data. Interviews, background questionnaires, and email comments provided by the students were utilized to paint a portrait of the participants' experiences as online learners. The students' feelings, habits, perceptions, and attitudes about their learning experiences were sorted and labeled into general themes followed by specific categories. Rather than compartmentalizing the findings by course, the participants' experiences were thematically woven to report how the students made sense of online learning.

Chapter Five begins with the definition of involvement, as it is understood in the student development literature. After that, the first research question is addressed by identifying key elements that characterized the nature of the students' online involvement. In the next section, the second research question is addressed by describing the factors that contribute to traditional-aged college students' experiences and involvement in an online class. Lastly, the students' relationships with their instructors and fellow classmates are presented. Chapter Five concludes with a summary of the findings.

### Definition of Involvement

Student involvement is one of the most pervasive, important, and complicated set of behaviors examined in the student development literature. Involvement explains certain aspects of student behavior that contribute to academic excellence and satisfaction in college. Recall from Chapter Two that the central tenet of involvement is the amount of physical and psychological energy a student exerts in educationally purposeful activities. That is, the amount of time spent studying, the extent of interaction with faculty and peers, and participation in extra-curricular activities are all characteristics of an involved student.

As pointed out in Chapter Two, the vast amount of literature on college student development suggests that involvement affects students' academic performance. Students who spend time studying or developing friendships and social relationships with peers increase the probability of developing a satisfactory collegiate experience by earning better grades than students who shy away from situations that require interaction and cooperation. For instance, students who participate in a study group in preparation for a biology final examination benefit from the collective knowledge and support of the study group. Involvement, especially in terms of interaction with peers, can help students achieve greater academic performance.

Yet very little is known about the important factors that influence how traditionalaged college students relate to their instructors and their peers in the online learning environment. Examining the reasons why students behave in certain ways and how they go about establishing and maintaining effective relationships in an online setting provides

an opportunity to ascertain the most successful ways students function in this relatively new context of teaching and learning.

College student development scholars consistently cite one factor as central to a successful collegiate experience---involvement. Because student involvement has a wide range of behaviors in the online learning setting, there might be important differences in the type and extent of a student's online involvement because of the difference in context. It is also possible that grades and other rewards take on a different type of importance in the online learning setting.

Furthermore, because communication between students, their peers, and instructors in the courses examined was text-based, the nature of their involvement imposed different kinds of contact than what both students and instructors usually experience in the face-to-face context. As a first step to examine students' experiences in online settings, the following segment addresses the first research question: How do traditional-aged college students describe their approach in their online classes and in what ways do such experiences vary?

### Research Question #1

# How do traditional-aged college students describe their approach in their online classes and in what ways do such experiences vary?

There were four different ways that the students described the nature of their online learning experiences: a) meeting the instructors' expectations, b) performing beyond the instructors' expectations, c) enduring a painful process, and d) engaging in a casual and carefree activity. In the following pages, each of the four kinds of experiences

# Figure 1



# **Meeting Instructors' Expectations**

# Meeting the Instructors' Expectations

Nineteen out of the thirty participants described their online learning experiences as meeting the instructors' expectations by spending a significant amount of time reviewing the modules and completing the assignments. Meeting the instructors' expectations translated for these students as engaging in the physical function of logging on, and the cognitive process of reading and interpreting the material presented.

# Regular Time and Effort

Online learning for many of the students in this study was marked by a fast and dramatic adjustment to a new learning environment, which entailed making decisions about how to meet the expectations established by their instructors. One of the ways students decided and attempted to meet their instructors' expectations was by allotting regular time and effort to studying and reviewing the material.

For example, Annabelle, a food industry management sophomore, felt that even though she is a good student, she was anxious about learning online because she was keenly aware of the time commitment online learning presented. Annabelle was also afraid that she might fail the class although she performed better than expected on her first quiz. Annabelle described how she approached her online class. Annabelle said,

For each module, I probably spent about three or four hours sometimes more. It was challenging because I am not a strong accounting student... I think for a class like accounting, it is perfect to learn online, because I had to do it everyday. Well, I made myself do it everyday and I knew that I could always go back and review things.

Notice that Annabelle expressed concerns about her ability to handle the course content. Her reaction to the challenges she faced as an online learner was to take charge of her concerns by spending time studying. Annabelle allotted and spent significant time reviewing the materials. In addition, Annabelle made a decision to review the material on a daily basis. Annabelle's efforts, like some of the participants in the study, were concrete and typical of students who intentionally spent regular time performing the expectations set forth by their instructors.

In another example, Emilia, a junior majoring in advertising, described a similar approach. She said, "Basically I just sat down everyday, and went through the

macromedia assignments or whatever else was on the class Web site...and I made sure I understood the material...I logged on everyday." Paloma, a psychology sophomore, took an approach similar to Emilia's. She said, "I always went back and reviewed the lectures [video clips], you can't do that in a live class...I reviewed the lectures every day."

Students like Annabelle and Emilia identified an important factor in meeting the expectations established by their instructors: time-on-task. All of these students said that they reviewed the course content every day and that their efforts were consistent and did not change over time.

# Completing Assignments and Tutorials

Another way that students met the instructors' expectations entailed completing the homework assignments and other course-related activities in the accompanying course-packs or online tutorials. Completing the homework assignments and performing other related tasks was a strategic activity that served a variety of functions for these students. In certain cases, using the course-pack helped students to understand the material. For example, Annabelle explained, "The course pack was helpful because we just didn't have the notes; we had stuff to fill in, so it felt like you were participating in the lecture [video clip] in some level..."

In other instances, the exercises in the course-pack were assigned by the instructors to augment the modules, especially for students to practice problem solving. For instance, Armand, an agribusiness sophomore, explained how he used the supplementary materials that accompanied the modules to understand complicated accounting concepts. Armand explained,

I made sure to buy the notes...I used them extensively... Without the notes it was impossible to pass the quizzes and final exam...there were sample problems...with step-by-step directions...I felt much better after a quiz because I knew how to do it...I had seen the stuff before.

In many instances, too, the completion of the homework assignments was an integral component of a student's final grade. For example, Esther, a junior majoring in journalism, recounted how many hours per week she allotted to the Excel homework assignments. Esther said, "I probably spent about [pause] I don't know...ten hours or more on the homework...I did the assignments because if I didn't my grade suffered."

In another example, the comments of Alistair, an advertising sophomore, revealed what he was willing to do in order to excel academically. Alistair said: "The quizzes didn't count. I took them anyway because some of the questions might be on the test... The quizzes were of tremendous help to me."

On the other hand, Eva, a third-year student majoring in advertising, felt that she needed to do the homework and other course-related tasks in order to ask the instructor questions. When asked to describe her online learning experiences, Eva said: "Online, it is all about your own motivation. I could not ask any questions, I had to do all the work, to know what I didn't know." Realizing that learning online heavily rested on her own motivation and effort, Eva's zeal to review the course content and complete the assignments was significantly influenced by her awareness that she could ask questions only after reviewing the material presented.

What is underscored in the examples given is that by completing the homework assignments, online tutorials, and practice quizzes, the students were able to evaluate their progress and their understanding of the material.
The students' approaches to their online classes suggest that scheduling regular time to study, to review the material, to complete the assignments, and to take tutorials contributed to meeting the instructors' expectations. In light of these factors, the nature of these students' involvement largely depended on the strategies students used to perform assigned tasks and produce an academically purposeful online learning experience.

## Performing Beyond the Instructors' Expectations

A second way that (four out of the thirty) students managed their online class was by performing beyond the expectations established by their instructors. In contrast to the students whose approach was *to meet expectations*, these students felt that there was much more to online learning beyond reviewing the material and fulfilling the course requirements. Students whose strategy was *to perform beyond their instructors*' *expectations* expressed a sense of responsibility and self-efficacy about their role as online learners. This feeling played an important part in how these students reacted to certain tasks, and responded to the unique conditions of online learning.

Students who performed beyond the instructors' expectations related online learning to their ability to spell out their personal goals for the class, challenge themselves, and work on the process of learning by themselves. In addition to possessing a sense of self-efficacy about their online academic endeavors, students who performed beyond their instructors' expectations felt passionate about the course content, which was a vital component to academic performance, success, and their overall enjoyment of the online learning experience.

#### Responsibility and Self-efficacy

A sense of responsibility for taking the initiative and using the resources available to learn and make the most of their online learning experience was an important characteristic of students who performed beyond their instructors' expectations. For example, Pierson, a business pre-law sophomore, revealed how his personal values, beliefs, and goals influenced him to perform beyond the instructors' expectations. Pierson was rather concerned about his academics because he was getting close to *junior status*, which involved a formal review for admission into his chosen major. In explaining his approach to online learning, Pierson echoed many of the sentiments expressed by students who performed beyond their instructors' expectations. Pierson said,

I knew that it was my job to manage the material, but I always assumed that I could get help from the professor...I was still in charge of myself...I had to make sure that I got everything done on time. There were deadlines and I wanted a good grade....

When asked to elaborate, Pierson explained that, in the classroom, the professor was taking the initiative because the entire focus was on what the instructor had to say. He went on to state, "online the structure is set up for you already. You can go back and forth until it makes sense. It is up to you to log on and do it." Pierson felt that even though he had control, responsibility, and ownership over his own learning, the instructor still played a central role in the online learning process.

Pierson exceeded his instructor's expectations because he developed a proactive stance towards his own learning. In the face of a new learning situation and challenge, Pierson's approach to his online class learning emanated from within. Pierson realized that his learning was not limited to what the instructor had to say, that in fact, learning occurred through many different channels including his own initiative. Pierson developed the strategies of an involved online learner: how to plan for and how to approach his online class and how to handle the responsibilities that come with being an online student.

## Passion

Another way students performed beyond their instructors' expectations was by developing long-range plans to incorporate online teaching and learning as part of their professional skills set. Students who performed beyond their instructors' expectations also felt that other online learners must be encouraged to be active participants in the learning process. These individuals wanted to encourage others to do the same by helping fellow classmates attain the skills necessary to address the unique conditions of online learning. Because they spent so much time online and off-line involved in class-related activities, these individuals exhibited a strong sense of passion and determination.

For instance, Selma, an elementary education major, emphasized the need for online learners to understand the dynamic interplay of time management, motivation, and discipline. She said,

I would tell other students to be prepared to immerse themselves, to be organized and to be serious because I know that if you are disciplined, you can be successful. It is a lot of responsibility to take a class online...no one is doing it for you. I would even consider teaching a class online.... Teaching a class online is attractive because the student has some degree of control...I don't think students should be underestimated.... I am ready...and willing to try....

Selma exceeded her instructor's expectations because she showed continued interest in online learning by considering teaching online as part of her future professional endeavors. Furthermore, Selma was passionate about her online learning: she immersed herself in the subject matter, assumed responsibility for learning, and understood the inherent challenges of learning online. Both Selma and Pierson made two strategic decisions: 1) they exerted control over their time, and 2) they each recognized that they had choices in how to approach the process of learning online.

Besides possessing a deep sense of commitment to their academic endeavors, students who performed beyond the instructors' expectations reported self-awareness, as well as an understanding of their own abilities beyond the learning environment. For instance, Shirley, a multidisciplinary studies sophomore, made it clear that online learning was not a passive process when she described her approach to her online class. Shirley declared, "I was intensely active." When asked to go into details, Shirley explained the following:

...I went over the extra-readings and optional [Web sites] links. I made note cards...that is something that I never do in my other classes. I responded to other people's comments...in the classroom I just don't do that...I actually found myself talking about what I learned with my roommate....I started to think about the environment, the world, and my place in it. It was becoming obvious to me that I viewed things differently than she did.

Along the way, Shirley also connected the relevance of the course topic to her own intellectual development. In this way, Shirley was not only able to understand the subject matter, but to develop a deeper insight into how her learning experiences were shaping how she viewed her environment.

Responsibility, self-efficacy, and passion were elements experienced by students like Selma and Shirley who performed beyond their instructors' expectations. First, these students approached their online class activities in an engaging, challenging, and creative manner. Second, students who performed beyond their instructors' expectations were

intensely involved in their learning and believed that online learning was something to be shared with other individuals as well. Third, the students who performed beyond their instructors' expectations maintained a level of commitment to their online classes that emanated from within. Fourth, these same students surpassed their instructors' expectations because they showed a long-lasting interest in their online class and in excelling academically. Lastly, students who performed beyond their instructors' expectations embraced the freedom and responsibility that accompanied the process of online learning.

Enduring a Painful Process

A third way that students (four out of the thirty students interviewed) described and experienced their online classes was as a painful and agonizing process. Students who described their online learning experiences as a painful process noted that they lacked the skills to succeed. Consequently, the students described their efforts as agonizing and confining experiences that they endured.

The students who described online learning as a painful experience indicated that they encountered difficulties managing their time, were unprepared academically, and disliked online learning. Consequently, these students experienced personal stress and jeopardized their psychological health. As a result, these individuals were not well prepared to meet the academic and personal challenges students usually encounter in the online learning environment.

#### Ineffective Time Management

One of the most important tasks online learners in this study faced was how to manage their time effectively. The time and effort required to read and review the supplemental materials, to complete homework assignments, and to process the information was substantial. Since the students were also working or taking other classes, the amount of available time to prepare for tests and to complete the assignments was limited.

Not surprisingly, the lack of time management skills often resulted in increased anxiety and frustration for students who described their online learning experiences as a painful process. Ariel, who is majoring in food systems management, is a striking example of a student who described his experiences as painful because of his inability to effectively manage his time.

He explained that, at times, he had considerable difficulty managing all of his activities because he spent most of his energy focusing on the online class. Ariel admitted that the nature of online learning was not without its shortcomings. He explained,

...It is not a day to day thing, online learning is twenty-four seven... it is difficult because of the time management aspect...when you think you have a free moment, you don't, you have to remember that you have an online class that you should be working on. An online class is always something that is constantly looming over you. It never goes away until the class is finished because either there is always something that you have to do or will have to do later... When the online class was over, it made me appreciate the importance of face-to-face contact...it is nice to know that you are not confined to the computer anymore. I would get up early in the morning and the computer is right there, waiting for me to log on because the class was there. When I think about it, I felt very confined! ...I needed audio, so I had to work in a quiet place; somewhere that was very quiet and that was at home. I felt stuck. I had a desktop, so I was there. It was also difficult because when my roommates came in, I would have to stop it and go back to the session. I hated that, so I had a discussion with my roommates, they would say, "Oh, you are doing accounting," and then they would leave because they knew how difficult accounting was for me. They were supportive through the whole ordeal.

Ariel described his online learning experiences as confining and extremely demanding to the extent that he felt like online learning warranted hourly attention. Ariel's efforts backfired because he was unable to manage the time he spent working on the assignments. Although the behavior patterns that Ariel recounted are typical of students who are highly motivated and concerned about their academic endeavors, Ariel invested a lot more time and effort than other students in the study, which still rendered his efforts ineffective. Ariel's real-life situation highlights the demands and challenges four out of the thirty online learners encountered in learning to manage time effectively.

### Academically Unprepared

Being academically unprepared to handle the course content coupled with the unique conditions of online learning also contributed to a painful experience for some students. Additionally, the lack of academic preparedness in the subject often resulted in low levels of confidence, increased anxiety, and frustration. Some students were unable to cope with the demands of the course content and the expectations set forth by their instructors.

For instance, Anita, a second-year student, majoring in merchandising management, chose to enroll in an online class because of her out-of-state internship commitments. The online version of ACCN 200 was Anita's second attempt to complete the class. However, instead of taking the class face-to-face, she elected to take the class online. When asked to describe her online learning experiences, Anita said,

Well, the professor gave us an informational session at the end of the spring semester, just to let us know what the class was going to be like and detailing some of the things we were going to be doing. Then I got really nervous because it seemed that I was not going to do well, because I had taken an accounting course before and I did not enjoy it because it was very difficult for me. I did not know if I could handle it. I really thought about dropping the class many, many times before the class started. Once it started, it was pretty much a constant pain for me because it was really difficult for me. I mean the workload was ok, but the things I had to do to pass were things that I do not enjoy doing, but we were all under stress. I am not into accounting or into the concepts and hopefully they are things I will never have to do. So it was really difficult to take on concepts that I realized I would probably not use again....

Clearly, Anita's previous difficulties with accounting influenced her online learning experiences. Notice too that Anita's apprehensive feelings about the class existed before the class started. These feelings made the online learning experience one of enduring a painful process. Anita also felt that she was under tremendous pressure to excel in the class.

Anita and Ariel's narratives tell us a couple of things about the origins of their frustrations with online learning. First, both students were able to discern that there were certain skills needed for online learning. Both mentioned that they were not academically prepared to take the class. Second, their comments tell us that they thought that the course content was extremely difficult for them. Both students portrayed their online journeys as ordeals that they endured. Therefore, it was unlikely that as the class progressed they would warm up to the online learning environment.

### Dislike of Online Learning

Students who described online learning as an agonizing and stressful experience also disliked learning online because they were insecure and uncertain about their academic standing and online learning in general.

Ernesto, who was a no-preference sophomore, described his online learning experiences as enduring a painful process. He provides an example of how students' insecurities about their academic standing sometimes contributed to an unpleasant experience. Ernesto held two part-time jobs to pay for his college education. As the first person in his family to attend college, he felt that he was under tremendous pressure to succeed. He enrolled in the online version of economics because he felt that taking a class online afforded him the flexibility to meet his other commitments. When he was asked to describe his online learning experiences, Ernesto explained that he dedicated between ten and fifteen hours per week just to the Excel homework assignments. He said,

I was worried about my grade in econ [economics] so I e-mailed him about my grade. I always let the professor know if I was having any difficulties. I usually did not ask about specific content, just in general stuff...sometimes his answers made me cautious about talking about the grade. He would just say, "You just have to keep on trying." He would not give anyone any answers about their grades. It was very stressful because I didn't know if I should drop it or should I keep it. He would say, "I don't know how you will do on the final; I can't answer that for you." His answers made me very nervous so I went to my adviser immediately, you know, 'cause I was very worried because I am used to getting very good grades... I stuck with the class...I don't know if I made the best decision...to stay in the class...I always put in the time, in fact, all of my spare time...

Even though he dedicated time and effort to the assignments, Ernesto's efforts might have been better used if he had addressed specific questions regarding the course content to the instructor. Furthermore, it is possible that Ernesto's difficulties stemmed from his inability to communicate his questions online because he was used to dealing with instructors about course content face-to-face.

Similarly, Ariel was insecure about his skills as an online learner. He said, "I

think that it is difficult online because we don't have face-to-face contact and you don't know the professor or the other people in the class or maybe we've seen the professor just once." In retrospect, Ariel's comments indicate he valued face-to-face contact with instructors and fellow students, which were components that were absent in his online class.

Anita, Ariel, and Ernesto's situations were similar in four ways. First, they contemplated dropping their respective online classes because they were unprepared academically. Second, they all mentioned that feeling stressed was a condition they experienced throughout the class. Third, they did not express any pleasure in online learning. Fourth, they were all involved in a number of activities in addition to their online classes. Their comments indicated that they had a tough time maintaining interest and momentum.

### Engaging in a Casual and Carefree Activity

Certain students (three out of thirty interviewed) simply did not share the same care and concern as other online learners. These students' experiences were atypical from other individuals in the study. Instead of devoting time and energy to their online classes, these individuals viewed and approached their online courses as a casual and carefree activity.

There were two reasons that students gave for approaching their online classes as a casual and carefree activity. First, their motivations for enrolling in an online course stemmed from the idea that learning online would not be like a *real class*, and that the instructor's expectations of online learners would be less demanding than in traditional

classes. Second, students who approached their online class as a carefree and casual activity were interested in earning the credits and not in performing well academically. As a result, their approach to their academic endeavors lacked effort, commitment, and consistency.

### Not A Real Class

Students who approached their online classes as a casual and carefree activity performed as such because they believed that online instructors understood and accepted that a cut-rate performance by students was an inherent component of online learning. These individuals also believed that online classes did not hold the same value as face-toface classes.

For example, Pia, a psychology major, had relied on the recommendation of friends who encouraged her to take a class online. Pia recounted her reasons for enrolling in an online class. She said, "...I had friends who had taken online classes before kind of tell me a bit about them. They told me that online courses are pretty laid back. I wouldn't have to work too much...." In another example, Alicia, an advertising sophomore, offered similar ideas to Pia's when she described her decision to take an online class. Alicia said, "...I figured that it would be a pretty easy curve [grading scale] since it was an online class. So that was enough to push me to enroll."

The relationship between students' carefree approach to their online classes and their beliefs that online classes are *not real* classes is complex. It seems to depend on such factors as other priorities, personal values, and goals. These factors were common to all of the students in the study; however, their relative importance varied depending on the individual.

## **Other Priorities**

In addition to perceiving online classes to be less demanding than regular classes, students who approached their online classes as a casual and carefree activity revealed that they had other competing interests besides academics. These competing interests led some students to approach their online classes differently than did other students. For instance, Pia explained that she really did not know what to expect when she enrolled in an online class, except that, because the class was for the full summer term, she anticipated having plenty of time for work as well as recreational activities. Pia recalled how her approach to online learning was influenced by her relaxed attitude. In describing her online learning experiences, Pia said,

At first, I was more sedate, you know, more laid back...eventually all the work started to back up. We didn't have to do them [modules] by a set time.... That was a mistake on my part. I hated playing catch up.... I carried eight credits this semester and I work forty hours a week. It is hard to be self-motivated sometimes. I do my work the day that it is due, so I am not really motivated...I just enrolled in the class because it was convenient, and because it is online I could get it out of the way... I expect a good grade in this course even though I didn't put in that much effort.

In many ways, Pia's online learning experiences typify the uninvolved online student. Pia's attitude and behavior toward her online class were the result of her multiple obligations coupled with her failure to attain a sound balance between school, work, and fun. Furthermore, Pia was unable to see herself as a student enrolled in PPCD 100 because she was not required to physically attend class, purchase a text or complete the assignments within a specified time. According to Pia's statements, she did not have the sense of being a student because the online class presented a set of circumstances vastly different from face-to-face classes.

Furthermore, Pia said that the online class gave her the ability to exercise control over her learning and yet she repeatedly delayed completing the modules, which resulted in her having to play catch-up. In addition, Pia reported she lacked motivation in her academic endeavors. Pia was aware that she was deficient in her efforts and yet she still expected to earn a good mark in the course.

Sigmund, a sociology sophomore, enjoys the freedom of living away from home while attending college, however, he was anxious to move out of the residence halls. When he was asked to describe his online learning experiences, Sigmund said: "I did all of the work at the last minute...I needed the four credits to move off-campus next year...I wasn't too concerned about the grade."

Sigmund and Pia's goals and beliefs influenced and reduced their chances for success in their online classes. Notice, for example, where Pia and Sigmund placed their priorities. Both students mentioned that they enrolled in the online class to earn the credits because they either wanted to "get it out of the way" or "move off-campus."

Another aspect of Pia and Sigmund's comments that merits careful scrutiny is that they both mentioned that they did their online learning activities at the last minute. Pia and Sigmund's comments are indicators of their priorities. Students who approached their online classes as a casual and carefree activity had priorities, other than the class, which was a different approach than the other students in the study exhibited.

### Summary

For a variety of reasons, traditional-aged college students' approach to online learning varies. Some students tried to meet instructors' expectations by being good time managers. These students approached their online classes in a systematic manner by reviewing the material and completing the assignments. They reviewed the material and completed the assignments at their own pace.

Other students described their online learning experiences as opportunities to challenge themselves academically and to develop new skills. These students enjoyed the responsibilities that accompany online learning such as controlling their time, immersing themselves in the course content, and engaging in supplemental activities such as completing practice quizzes. As a result, these students performed beyond their instructors' expectations.

In other instances, students depicted their online learning experiences as cumbersome and overwhelming, which eventually resulted in a markedly painful online learning experience. These students encountered difficulties in their approach to their online classes because they were ineffective time managers, academically unprepared, and did not enjoy the process of learning online.

In a few situations, students approached their online classes as a casual and carefree activity because they believed that online classes were not real classes. These students also believed that online classes were less demanding than face-to-face classes. In addition, students who approached their classes as a casual and carefree activity believed that passing or earning academic credits was more important than doing well

academically. With the exception of the students who approached their online classes as a casual and carefree activity, the students in this study demonstrated a certain degree of care and effort in their approach to their online academic endeavors.

Research Question # 2

What factors contribute to traditional-aged college students' experiences and involvement in an online class?

The data suggest two critical factors contribute to traditional-aged college students' experiences in an online class: a) academic preparation for the subject, and b) perceived significance of the class. These factors were identified on the basis of the questionnaire data and students' interview comments. The questionnaire sought information on a wide range of background characteristics such as academic status, number of credits in which a student enrolled during spring and summer semesters of 2003, courses taken, self-reported grade point average, and current academic major. Additionally, the background questionnaire helped identify the students' experiences with various computer applications and prior experiences with online learning.

The background questionnaires and interviews also provided important information on what difference the students' academic preparation makes in regard to students' online involvement. For instance, a student's academic preparation for the subject and experience with online learning were not mutually exclusive or necessarily convergent. In certain cases, a strong academic preparation for the subject influenced the

nature of the student's online involvement, while in other situations it did not. Other influences were at work as well. These are discussed in the chapter.

Furthermore, although learning online was a new experience for twenty-eight out of the thirty participants in the study, the students reported that they were very familiar with basic online computer applications such as searching the Web; downloading files; and managing, organizing, and submitting documents via the Internet. Consequently, the extent to which online computer skills impacted online involvement was insignificant.

In the following segment, I discuss how academic preparation for the subject and significance of the class contributed to the students' experiences and involvement in an online class. After the critical factors are presented, online computer skills in relation to students' experiences and involvement are discussed.

## Definition of Critical Factors

## Academic Preparation

Academic preparation for the subject pertains to how students described their mathematical skills, reading comprehension, and composition or writing abilities to handle their online classes. Academic preparation for the subject varied because of the differences in students. Certain students who had completed advanced classes in calculus or the natural sciences, for example, reported that, because of their *strong* academic preparation, they were at ease with the subject matter and thus were able to excel in their online academic endeavors. In other instances, students reported that they lacked the mathematical skills, reading comprehension or adequate writing abilities to succeed in the online classes examined. As a result of their *weak* academic preparation for the subject, these students reported that they had difficulty understanding the material and therefore performed poorly on homework assignments, examinations, and other course-related activities.

# Significance of the Class

Significance of the class refers to the value the student attributed to the class. For instance, certain students with high sense of significance of the class reported that they actively engaged in their online class activities because they wanted to earn good grades or accomplish their academic goals such gaining admission to a selective major. Sense of significance for the class translated for these students as the importance of grades. Grades were identified by these students as an external tangible reward which might lead to a rewarding career or admission to a competitive graduate program. In many instances they stated that their grades are a tribute to their competence and resilience as college students. On the other hand, students with low sense of the significance of the class mentioned that their priority was in getting the credits and not in earning a good grade in the class.

The data suggest students' academic preparation strongly related to the value or significance students attributed to their online classes but in different ways depending on the level of academic preparation. For instance, in many cases students with high sense of the significance of the class, reported that they actively engaged in their online class activities because their strong academic preparation gave them confidence in their ability to succeed. In other cases, certain students with high sense of the significance of the

class, for example, stated that they were *weak* in their academic preparation, but succeeded academically because they made a concerted attempt to excel.

In order to facilitate a better understanding of students' online experiences and involvement, the data are clustered together under four quadrants or main categories:

- Strong academic preparation and high sense of the significance of the class;
- Strong academic preparation and low sense of the significance of the class;
- Weak academic preparation and high sense of the significance of the class;
- Weak academic preparation and low sense of the significance of the class;

Each quadrant in Figure 2 indicates how the students in this study experienced their online classes based on their approach, preparation and the significance accorded to the class.

# Figure 2

	Strong	Weak
	Quadrant A	Quadrant D
	Academic Excellence	Develop Competence
High	Participation	Positive Attitude
	Proactive Planning	Active Learning
Significance of the Class	(14 students)	(6 students)
	Quadrant B	Quadrant C
	Apathetic	Unsuccessful Academically
		Difficulty Asking Questions
Low		Failure and Despair
		Dishonest Behaviors
	(1student)	(9 students)

# Academic Preparation for the Subject

The following is a discussion of each quadrant.

Quadrant A: Strong Academic Preparation and High Sense of the Significance of the Class.

A strong academic preparation for the subject and high sense of the significance of the class notably contributed positively to students' experiences and involvement in an online class. These students reported that they had the mathematical skills, reading comprehension, and composition or writing abilities to handle their online classes. In certain cases, they had completed advanced classes in calculus or the natural sciences. These students reported that they were at ease with the subject matter. Additionally, the students mentioned that they immersed themselves in their classes because they were committed to learning. Because of their strong academic preparation and high commitment to their online classes, these students were able to excel in their online academic endeavors.

These students with strong academic preparation for the subject and high sense of the significance of their online classes said that they were able to grasp the course content easily and therefore perform well on the tests. These same students reported that they were comfortable participating online by answering and responding to questions from instructors and fellow classmates because they understood the material. These students seem to exhibit a proactive behavior that enabled them to determine the academic requirements before they enrolled in their online classes

## Academic Excellence

Students with strong academic preparation for the subject and high sense of the significance of the class reported that they were able to understand the modules, complete

the assignments, and excel in their online academic endeavors. For instance, Earl, a construction management sophomore, felt that because he was a good student and spent time studying, he was confident in his abilities to do well in an online class. When Earl was asked to describe his reasons for enrolling in an online class, he said, "I wasn't taking a risk taking econ online. I'm a fairly good student. I have a solid GPA [Grade Point Average]...I had AP [Advance Placement] classes in high school." Earl later explained that he did not encounter any problems with his online class and that he always performed well on the tests and homework assignments. Earl said,

Taking econ online was no different than any of my other classes...I never felt like "I just have to live through this class." The assignments took a lot of my time, but they weren't something that I couldn't handle...I went in with a 3.5... before the final exam. Econ is not that complicated.

In another example, Percy, a no-preference sophomore, felt that he was able to understand the general topics and thus progress through the modules because he was academically prepared to handle the course content. Percy explained that he had a strong background and interest in science, thus he was able to do well on the final exam. He said,

I had a good-idea of what the major is about. My dad knew enough about the class to give me good advice...I like physics and chemistry, but I don't want engineering... I knew a little bit about design and performance testing...the final [exam] was easy...taking a class online was a good decision for me.

A strong academic preparation for the subject and high sense of the significance of the class enabled students to grasp the material with ease and thus excel on their examinations. For example, Alana, an advertising sophomore, explained the reasons she performed well in her accounting class. Alana said,

On average, I spend about a couple of hours on the assignments...they basically weren't that difficult...I know some students had problems...you could tell by the postings [Blackboard]...for me the homework was easy because I like math... To take accounting, you need to like math."

Earl, Percy, and Alana's statements are quite clear: They were able to approach their respective online class without problems---because they were academically prepared. A strong academic preparation for the relevant subject allowed students like Percy and Earl to engage in and sustain a commitment to their online class, which resulted in having good academic performance and in meeting the instructors' expectations. In Alana's case, her particular enjoyment of math enabled her to transfer and incorporate mathematical skills to accounting concepts. Students credited their success in their online learning experience to their prior academic preparation.

## Participation

Besides good academic performances on quizzes, tests and homework assignments, students with strong academic preparation for the subject and high sense of the significance of the class reported that they routinely participated in their online classes. These students said that part of the reason for their participation was that they knew how to formulate questions based on their knowledge of the material. For example, Pandora, a forestry major, stated that she e-mailed the instructor often, and that she had no apprehension about asking for help, especially if she was unclear about some concepts. When asked to elaborate, Pandora explained that she wanted to be prepared for any questions in a test situation. Pandora described a particularly memorable circumstance,

I emailed him [instructor] a couple of times, but the emails kept bouncing back, because his mailbox was full. I finally decided to call him. He was really nice...we talked for about twenty minutes. I asked a lot of questions. He told me that I really knew the material...I had prepared a couple of questions...I ended up doing fine on the test.

In another situation, Emilia, an advertising junior, explained that she enjoyed online learning because she had the willingness and commitment to engage in the class, to know the material, to check with the instructor, and to make sure she understood the directions on the assignments correctly. Emilia said, "I asked the same question until I got a good explanation...asking questions by e-mail is very comfortable for me...probably because I've been told I am a high achiever...[laughter]."

The strategies and approaches students like Emilia and Pandora used illustrate that they were willing to take time and effort to ask their instructors questions, because they wanted to reach a certain level of competence and performance in the class. For example, Serena, a second-year biology major, explained that she did not have comments for other students on the discussion board, but she maintained open lines of communication with her instructor because she asked complex questions. Serena said,

I would e-mail my professor back and forth and we had a section where you could go in and write comments. I didn't have comments for other students, but my questions were pretty lengthy... so I just e-mailed [the instructor]...

Students with strong academic preparation for the subject were comfortable asking questions, posting their comments, and responding to their instructors' remarks because they were confident in their understanding of the material. Strong academic preparation for the subject positively contributed to the students' experiences and involvement because it reinforced the students' enjoyment of the class. Additionally, students with strong academic preparation understood how their efforts and academic values related to their educational goals.

# Proactive Planning

Students with strong academic preparation for the subject and high sense of the significance of the class engaged in proactive planning activities. These individuals reported that they were knowledgeable about the course requirements before enrolling. Not surprisingly, knowledge of the course requirements acted as an important factor, which influenced students' experiences and involvement in their online classes because these students formulated plans that were likely to support their academic success. For instance, Pandora, a forestry major, is an excellent example of a student who engaged in proactive planning. Pandora said that she set the tone and direction for her online class activities at the beginning of the term by checking to see if she could handle the course content. Reflecting on her online learning experiences, Pandora described how she planned her online academic endeavors. She said,

Before enrolling I went on the Web site to see if I was ready to take the class...I wanted to make sure that I could pass with a good grade...not just a 2.0...I checked the syllabus to look at what we were going to be doing... I actually used my planner...I had everything mapped out...including when to read and take the tests...I always felt that I had options...I wasn't tied down to a set time or place...that's what's so great about online classes...you can always go and hang out but you have to tell yourself what you ought to do...there were shortcuts, but I didn't take them...I always made sure I got it [achieved sufficient understanding] before going on to the next section... I just used common sense...I mapped out the summer...I really liked taking a class online...because I could do it [study] anytime.

Students who engaged in proactive planning before enrolling frequently mentioned experiences similar to Pandora's. For instance, when asked to describe how prepared she was for online learning Selma, an elementary education major said,

On a scale of 1 to 10, I would say around a 9. I checked to see what books we were going to use...the amount of reading and tests...I checked and made sure I was ready to handle a 300 level class...after reviewing the syllabus, I did not have any apprehensions, so I enrolled.

Both Selma and Pandora made a rational decision to enroll in their respective online classes with greater conviction because they had strong academic preparation for the subject and therefore knew they were prepared. The choice to engage in proactive planning activities was an important factor governed by the students' aptitude and academic goals, as well as by their strong academic preparation for the subject.

**Quadrant B**: Strong Academic Preparation and Low Sense of the Significance of the Class

## <u>Apathetic</u>

It is important to note that in one particular situation, strong academic preparation for the subject influenced the student's approach to the online class in a negative way. Even though the student had the mathematical skills to do well in the class, she approached the class apathetically because the online class was not a high priority. In the following example, Alicia, an advertising sophomore, explained the extent of her online efforts. Alicia said,

... I figured that it would be a pretty easy curve [grading scale] since it was an online class. So that was enough to push me to enroll.... I spent time doing the assignments...I just wasn't that careful...the class was boring...dull...I still did

better than probably most people... to me the tests were standard solutions...I've always been good in math...

Alicia believed the class did not pose a challenge. Alicia also associated her decision to enroll in the course based on her beliefs about the grading standards in online classes, not with the importance of being a disciplined and self-motivated individual.

When Alicia was asked to explain her feelings, she said that because she had taken an online class before and had some idea of what the tests were like, she felt that she did not need to apply considerable energy to the class. Alicia also revealed that in retrospect, she felt that the class was boring and she did not take it seriously seeing that the class was offered online instead of face-to-face. Moreover, Alicia felt that online classes were rather dull and monotonous unless the student was interested in the subject. When asked to give a more detailed illustration, Alicia described her experiences regarding an exam. She said,

There were questions on the exam including true and false answers. A lot of them were questions that we had already reviewed, but there was some comprehensive information that students needed to know...the answers were easy to figure out...it was a blow-off class...I ended up with a 2.0 and I can't repeat the class. That's pretty lame considering I got a 4.0 in Math 133 [Calculus II].

Alicia did not recognize until it was too late that, no matter what the learning context, certain behaviors and expectations await online learners. Alicia learned that her instructor expected online students to give the same attention to their academic endeavors as their students enrolled in face-to-face classes.

As noted, strong academic preparation for the subject did not necessarily enhance the nature of involvement for Alicia. However, it is important to emphasize here that a combination of strong academic preparation for the subject, good academic performance, participation, and proactive planning are factors that contributed to the nature of online involvement for many of the students in this study.

Quadrant C: Weak Academic Preparation and Low Sense of the Significance of the Class

In contrast to students with strong academic preparation for the subject, a second group of students reported that they lacked the mathematical skills, reading comprehension or adequate writing abilities to succeed in their online classes. These students also devalued their online classes because they felt that the courses were not related to their major or future career aspirations. As a result of their weak academic preparation for the subject and low sense of the significance of the class, these students reported that they experienced their online classes as an unsuccessful process. Not only were these students unable to excel in their online academic endeavors, but also they were unable to seek assistance from instructors and fellow students regarding the course content because they did not know how to ask the right questions.

Because knowledge of certain concepts was essential to advance onto the next module or unit, weak academic preparation added to the students' levels of anxiety as well. These students mentioned that they felt anxious and lacked the willingness to continue with the class, especially when they did not perform well on quizzes, homework assignments or examinations. During the interview, these students released pent-up feelings of despair, because they felt the process of online learning was stressful and

frustrating. Furthermore, as a result of their weak academic preparation, they reported engaging in unethical behaviors.

## Unsuccessful Academically

One of the ways that weak academic preparation for the subject affected the students' online learning experiences related to their inability to understand the material and perform well on tests, quizzes, and homework assignments. For instance, when Ernesto was asked to describe his readiness to learn online he said, "...In terms of being computer-wise I was very prepared. Course-wise, I had no idea. I never even had econ in high school. The class was much harder than I anticipated. I had no background at all."

Ernesto's comments exemplify how weak academic preparation for the subject influenced certain students' online learning experiences. The most frequently mentioned comments by these individuals revolved around their inability to perform well on exams and homework assignments because they were ill equipped to understand the most basic concepts in the course. For example, Pearl, a criminal justice sophomore, described the difficulties she encountered in her online class. Pearl said,

It was a 100 level class, so I enrolled. I went in it blindly. There was a lot of links and plenty of reading...The concepts were difficult for me...even though it was an introductory class, I was not ready to take it...my final grade is a good indication of that... I will never take a class online...the whole thing was too difficult for me...too much stress was involved.

Pearl's comments illustrated that, even though the class was an introductory course, weak academic preparation for the subject negatively affected her ability to succeed.

Students often mentioned that, prior to enrolling in their online class, they failed to recognize the influence academic readiness would have on their grades. Anita, who had taken an accounting class the previous semester uttered similar feelings as other students who failed to recognize the importance of academic preparedness. Anita said,

My first test was a total disaster because it was not similar to my homework. It was just impossible to do. So that was difficult and this was not my first accounting class, it was a rough start...I decided to take the course because I want to graduate on time and I did not want to be on campus to take a class.

Besides being unable to fully engage in the learning process because she was unable to comprehend the material, Anita's weak academic preparation for the subject and her reasons for taking the class also influenced her overall online learning

experience.

Homework assignments, especially those involving mathematical calculations or

formulas had to be submitted without errors since partial credit was not awarded.

Students mentioned that, because they did not know what to do to accurately complete

the homework assignment, they failed to perform at an optimal level.

For example, Ernesto described his surprise and dismay when he logged on the

first day of class and found that he already had an assignment due. Ernesto said,

I signed in and clicked on the schedule...and I read through the modules...and I saw that the structure of the course was kind of strange...I wasn't familiar with the topics. I didn't feel ok about it. I've been told that the class is the same as when you go to the lecture, but I don't feel that way. When I pulled out the lectures and slides...I saw that we had an assignment...frankly, I didn't get it [assignment], somehow I got all the answers wrong...I didn't know what I was doing. It only got worse from then on.

Ernesto's description of his first day of class suggested that weak academic preparation was an important factor, which contributed to how he experienced online

learning. Since homework assignments had a proficiency level that students needed to reach, students with low abilities and inadequate preparation encountered difficulties in their assigned tasks.

# **Difficulty Asking Questions**

Weak academic preparation for the subject also influenced students' abilities to meet the course objectives, because they needed to be able to understand and know how to apply the material. Some students said that they were unable to seek help because they did not know how to ask the right questions. For example, Pearl said,

At first I cried a great deal because I didn't get it... There was a great emphasis on tiny details...science concepts...every once in a while I thought about asking for help, but I didn't because I wasn't sure what parts I understood...what I should say...I thought that I was ok getting by with a 2.5...but I was working much harder then when I get 4.0's and I still didn't get it...

In another example, Ariel, a food systems management sophomore, described the

difficulties he experienced understanding and posting questions on the discussion board.

Ariel said,

I think that the discussion board had its pros and cons because normally you couldn't understand what one student was asking or what they were saying... You just had to ask the questions as specifically as you can, and it still made it difficult because people would go in different directions. Also, the professor would answer the questions as specifically as they were asked, so it was difficult because it would always lead to more questions. And because we were taking the class online, we didn't have time to constantly check back and see how broader other students, or the professor, would make the answers...asking questions was extremely difficult for me... because the class was a pain...

Pearl and Ariel's comments revealed that because of their weak academic

preparation for the subject, they were unable to acquire a better understanding of the

material from their instructor and fellow classmates. Merely reading other students' questions and the instructor's comments did not improve or add to their understanding of the material. Their difficulty in asking and responding to questions only exasperated their situation.

Some students reported that they felt insecure about their grasp of the material, which significantly determined their ability and comfort level in asking and responding to questions or posting their thoughts on the threaded discussion board. These same students also experienced high stress levels, which influenced how they approached their online class. In addition to experiencing high stress levels, these students reported dissatisfaction with online learning because they had a difficult time formulating questions that could help them with their grasp of the material.

# Failure and Despair

A sense of despair and indecision regarding completing the class also arose in certain students, because of their weak academic preparation for the subject. In these cases, students experienced despair and failure because they were unable to develop and maintain the desire to engage in the class. For instance, Ariel recounted his attempts to discontinue with the class after the drop deadline. He said,

I considered dropping the course. I went through a big ordeal over that. I tried to drop it after the day that you could and I called the Registrar's office to drop it... So I had to stick out the class. But I would have dropped it for sure. I tried to explain the difficulty of my situation, but they [Registrar] didn't understand. There was not much compassion on the other end.

In another example, when Ernesto was asked what recommendations he makes based on his online learning experiences, he said, "If I had to make any recommendations, it would be that you should be able to drop the class anytime." When he was asked to describe his reasons, Ernesto said that he did not anticipate the difficulties he encountered in his online class.

The students' comments reinforced that their weak academic preparation for the subject had an influence on the nature of their online involvement. Weak academic preparation for the subject contributed to students' sense of failure and despair because their deficiencies were reinforced by bad grades. Since they were unable to see any improvement in their performance, students experienced problems with motivation and commitment to online learning.

# **Dishonest Behaviors in Examined Online Classes**

As discussed in Chapter Four, grades were an important factor instructors used to involve students in the learning process and to evaluate, measure, and reward students' knowledge and accomplishments. Since the stakes for doing well in certain courses were very high, there were several approaches taken by students who lacked the mathematical skills, reading comprehension or adequate writing abilities, which violated the examination conditions established by the instructors.

In the four online classes examined, only nine students reported engaging in these dishonest behaviors while enrolled in their class. Students candidly shared information about how they dealt with exams, test anxiety, and the examination conditions established by their online instructors. Some students, for instance, were not subtle in describing their online test taking strategies. In those situations, they responded to the questions about exams and grades---giving full information by speaking frankly, as long as the

interviewer reiterated that their identities would be masked and their names would never be exposed. For example, Pearl revealed,

My mom sat right next to me when I took the exam. I get nervous.... so she [mom] helped me out. If I wasn't sure about an answer, she could look it up. I felt ok about it. No regrets whatsoever.

There were differences, however, in how these students viewed the examination conditions established by their instructors. For instance, on the one hand, Pearl did not feel there was a problem with seeking assistance from others. She explained, "In class you can raise your hand. Online there is no one there to answer questions. I don't see a problem with getting help even with tests."

Pia, on the other hand, felt that one of the best advantages of taking PPCD online was that the exams were open book. She also felt that it was up to the instructor to take preventive measures, if he was concerned about students' cheating. She said, "It's hardly new. Test taking can be somewhat unnerving. If he was that much concerned about it, then don't offer the course online or make other arrangements. We aren't stupid, you know."

One of the major issues in online teaching is testing and student accountability, an issue that certain students took advantage of. For example, Sigmund described his actions during an exam. He said,

It was supposed to be closed book and closed everything, but I did it with two other people...we worked together... I mean the classes that we are doing are not classes that are important.... so if I don't learn it 100% I am still going to be ok. In the real world those classes are not going to be used. It is best to just offer online courses that are fun. That's why they [University] let me take it [SSC] online. They [University] are only offering courses that are not important, not like a major course. Dishonest behaviors such as violating the examination conditions tended to be committed by students like Sigmund who lacked the mathematical skills, reading comprehension and writing abilities to handle the online class. Sigmund's intention was to earn the credit with little to no effort. Weak academic preparation for the subject coupled with a low sense of the significance of the class propelled these students to seek assistance and gain information in ways that directly violated the expectations established by their instructors.

In another example, Pia revealed that an online community existed at MU where she sought and received assistance with homework assignments and answers to exams.

Describing the nature of the student-only online Web site, she said:

It's strictly for students. But I'm sure some professors know about it. You can go in and get tickets for a game, buy used books and view how students rate professors or if you are having trouble figuring out a problem, someone will post the answer...It's like the students against the profs.... Students will stay online and help you.

Elaborating on why she used the student-only online Web site, Pia said:

You can get the answers to exams online, especially physics and chemistry. Recent exams are posted online...by good students too, students who do well. Some people even schedule study sessions.... It is our own space. I think the people who mostly use it are disgruntled students or students that don't do that well. You know, students who are disconnected from everything...

Weak academic preparation and low sense of the significance of the class

influenced certain students to engage in dishonest behaviors. These students provided

excuses and reasons that justified their actions.

it's in

### Dishonest Behaviors Beyond Online Classes Examined

In this section I discuss the topic of students' dishonest behaviors beyond the online classes examined since those reported experiences aid in understanding the actions and attitudes of their peers. When the students were asked to describe the process of fulfilling requirements both within and beyond their online classes (i.e., exams, essays, reports, etc.), they reported that they used material from the Internet – without crediting their sources – as a way to survive some of the demands of college.

All of the students in this study mentioned that they had either observed, condoned or engaged in some form of online interaction with peers by posting exams on student-only Web sites, viewing or using homework assignments, and recent exam questions posted by other students. Though only a particular group of students reported engaging in dishonest behaviors within the context of the online classes examined, all of the students expressed social approval and many noted that exchanging tests, essays, copying or sharing assignments was an acceptable form of interacting via the Internet with peers in college.

### Observed

Students reported that they observed their friends, roommates, and sometimes siblings in face-to-face classes use the Internet in either proctored test situations or takehome exams. For instance, when Sigmund described his experiences in a proctored test situation, he said,

You know, they checked our ID to make sure that we were who we were supposed to be. Then we filled out this card. I guess that it was ok because the professors have to do something about honesty...there is a lot of pressure...from
professors have to do something about honesty...there is a lot of pressure...from your family...my roommate still had someone else take his test...he just e-mailed him the questions from the test room.

In another example, Ariel said,

I didn't like having to take the exams in accounting face-to-face because then the class was not entirely online. I mean, they say it is online, but not really. I still had to travel. I didn't like the idea that I had to leave my comfort zone in order to take an exam. It was also difficult because the exams on campus were offered at designated areas, so we would all be crowded and it was really uncomfortable. All of us were in there with all of our notes spread out everywhere. It was awful. It was very crammed. Approximately there were about 100 people coming and going while the exam was going on...a couple of guys were helping each other out...by answering questions...with their palm pilots...

In addition to simply witnessing other students' use of Internet resources in test situations, a couple of students mentioned that they felt removed from any concerns associated with dishonest behaviors among their peers. For instance, Ernesto stated, "What he told us that we needed to know and what we actually were tested on were completely different things...I wasn't about to say anything when I saw the cheating... it wasn't directed at me...personally."

Clearly, students observed situations in which their fellow peers engaged in dishonest online behaviors. Even though there are expectations established by the University regarding academic integrity, the students in this study reported different forms of expectations regarding their fellow peers, tests, and the use of the Internet to interact and consequently survive in college.

### Condoned

Accordingly, those same students easily condoned their peers' unethical use of the Internet by stating that meeting academic standards and instructors' expectations required different kinds of approaches, because of the increased competition in college and in the workforce. For example, Alana discussed the obstacles that call upon students' ability to handle multiple and competing commitments and responsibilities. Alana said, "Students do it [cheat] because they have to...they are frustrated...work, school, you name it. For the most part, students have to be savvy...not getting a 4.0 can cost them a job later on." In another example, Annabelle supposed,

I thought that having to take the tests proctored was very appropriate for the course that we were taking. I already had a great amount of freedom with the course, so it was ok... It was already better than how the professor does it in the classroom. I think that if it was a real concern [cheating online] the University would make all the courses online proctored. Obviously it is not a concern for me...if students do it, I can't do anything about it. It is not my problem.

For Alana and Annabelle, the use of the Internet in test situations by fellow peers did not create conflict with their values. Instead, both Alana and Annabelle supposed that in order for some students to be successful they have to survive through their own devices.

One of the latest and most popular Internet resources mentioned by many of the students is the MU student-only online (Web site) community. These students reported that probably one of the most important components of the student-only Web site is the availability of recent tests and homework assignments. For example, Pia said, "...it is like we have an obligation to help each other out...students post the information...and they use it." When asked to elaborate, Pia explained, "...it is unrealistic to expect that

students won't check it out...especially for classes...with hard professors...the ones [professors] that are hard on students."

Regardless of context and method, the students in this study felt that connecting with other students via the resources that are available on the Internet is one of personal choice or circumstance. For instance, Selma explained that for certain students past educational experiences have been mostly negative, unsuccessful or void of serious effort, which accounted for their tendency to use the Internet to survive in college. Selma believed, "Not everyone likes school...and sees the benefits of applying themselves [in high school]...until they get to college... some students never had to study...." Selma went on to explain that failure for these students is something that they try to avoid and that using the Internet is one of many ways students manage as they go through college.

Because students had concerns about career prospects and increased competition in college, they condoned their peers' behavior. In dealing with their peers' use of the Internet to accomplish academic demands, the students in this study felt that a host of considerations encountered in the collegiate setting propelled their peers to take borrowed and purchased pathways to reach academic goals. For example, Percy said, "Plenty of students use Web sites that can complete a paper...when they need a short turn around time...I know someone that does it all the time."

In another example, Sabra explained why she believed her roommate was compelled to purchase a research paper online. Sabra said, "She needed help with her term paper ...and there a plenty of places that guarantee a good grade...." Sabra explained that often her roommate studied very hard, only to discover that this does not

always yield good results. Therefore, she understood her roommate's choice to use Internet resources to help her with college academics.

### Engaged

A couple of students in the study said that they engaged in posting information on the student-only Web site or viewed the content of a test posted by another student. These students said that they were quite adept at finding out whose information was reliable and authentic. For example, Pia described how she managed to make sure the information was correct. She said, "Ask...someone will tell you..." When Pia was asked why she used the student-only Web site, she said, "I was a little nervous about the test...I'm paying for the class...I want to get my money's worth...."

In another example, Eugene explained his ambivalence when he decided to share his experience in a particularly difficult class. He said, "I had reservations about it, but I basically ended up saying what was on the test...." Some students were most likely to mention that they viewed tests posted on the student-only Web site strictly as a study or preparation guide. Anita, however, believed that because the expectations to succeed from her family were so great, she needed to minimize the risk of failure. Anita said,

... We get comfortable doing the class in one place, like home, then you have to go somewhere else for the exams. The exams were open everything. So we could use anything...and I did...my parents expect me to always do exceptionally well...

In a time when academic success and financial considerations are becoming more important to students and their families, students who reported retrieving information on tests from the Internet believed that such an option was prudent. On the other hand, posting information about tests was seen by some students as demonstrating concern for the academic welfare of their peers. Such actions strongly suggest that because of their heightened awareness of the multiple issues students face in college, these students felt that sharing information about tests via the Internet is an important component of support for their peers.

Even though all of the students in this study reported that they observed, condoned or engaged in some form of dishonest behaviors beyond the four large online classes examined, not all of the students who reported that they lacked the mathematic skills, reading comprehension and writing abilities to handle their online classes, experienced online learning the same way or turned to dishonest behaviors. The following segment addresses how some students weak in their academic preparation overcame their academic challenges because they placed high value on their online classes.

Quadrant D: Weak Academic Preparation and High Sense of the Significance of the Class

A third group of students also reported that they were weak in their mathematical skills, reading comprehension and writing skills relevant to their online classes. However, they differed from other students with similar factors, because they reported high commitment to the class. These students mentioned that they strived to succeed in their online class because they needed the course in order to be admitted into a restricted major. In other instances, these students said that they needed to increase their grade

point average to stay off probation or return to good academic standing. Because of their persistent attitude and commitment to grasp the material, these students managed to do well by overcoming obstacles that deterred other students with similar factors from succeeding academically.

Three specific factors distinguished these students from other students with similar academic preparation. First, these students focused on the development of competence and knowledge relevant to completing their online class. Second, rather than succumbing to stress and despair because of low grades on exams, homework assignments, and quizzes, these students reviewed previous modules and practiced problem-solving until they understood the material. These students also reported maintaining a positive attitude. Third, students who were committed to their online class engaged in active learning. Active learning for these students entailed asking and responding to questions, seeking clarification, and asking for guidance from their instructors and fellow classmates.

#### Developing Competence

Awareness of their weak academic preparation for the subject influenced certain students to increase their competence in order to succeed academically. The payoffs of such efforts are illustrated by the following comments. When Silas, a communications junior, described his online learning experiences: "I don't like to read or write that much...I read the same pages a couple of times...quite often in fact."

Silas knew that because of his difficulty with reading, he needed to spend more time and effort reviewing the material. This knowledge influenced Silas' approach to his online class, resulting in his developing the strategies necessary to meet the instructor's expectations. As a result of re-reading the material, Silas increased his ability to complete the assigned tasks successfully. Students like Silas placed a high significance on their online academic endeavors.

In another example, Stanley, an agricultural science sophomore, recounted his adjustment to online learning, more specifically, his attempts to earn the maximum points on his discussion board postings. Stanley explained how he was able to overcome his difficulties by putting his thoughts in writing. He said,

I don't think I am like everyone. I had little experience using Blackboard...and I had to get used to that...I prefer face-to-face activities...to sit in a lecture and ask questions if I need to...I hate to write...I asked people where I work to read my answers...I asked them to help me in terms of the quality...I wrote my answers and did a spell check before cutting and pasting them to the discussion board...I didn't want to lose points because he [instructor] was very strict about your writing...and I'm pretty weak in that area.

Silas and Stanley managed to increase their potential for success by incorporating activities such as repeatedly reviewing the material and checking the quality of their work. Furthermore, Stanley and Silas believed that their academic preparation was not an insurmountable detriment. Instead, these students recognized that they needed to strengthen their academic preparation in order to succeed.

Another way students attempted to overcome their weak academic preparation for the subject entailed taking appropriate steps to develop the skills needed to succeed because they felt that they had something to gain. For instance, according to Eugene, an advertising sophomore, one of the reasons he was able to overcome his academic preparation entailed concentrating on changing his study habits. Eugene said, I took the class because of my work hours. I needed something that would not require me to attend class until after hours [work]. I made some major adjustments...like studying more than usual...because I heard the class was hard...and I don't like classes that have a lot to do with numbers...

Notice that Eugene identified his needs and problems and then he undertook steps to correct them. Eugene consciously made some adjustments to his study habits because he was aware that the class was challenging and he did not enjoy courses that required mathematical skills. Students like Eugene and Stanley knew that in order to succeed academically, they had to acknowledge their deficiencies and then develop and implement strategies to address them. These students placed high value on their online classes.

Certain students in this study believed that they could succeed academically regardless of their weak academic preparation for the subject. These students focused on the course content that was particularly difficult for them until they were able to achieve an adequate understanding of the material. Furthermore, they understood and recognized the importance of reviewing the material and checking the quality of their work. These students managed to succeed academically because they behaved in ways that placed a high priority on their online classes.

#### Positive Attitude

Students who were committed to their online classes despite their weak academic preparation also approached their class with a positive attitude. For example, Esther, a journalism junior, explained her concerns regarding the results of a test because the efforts she expended to do well were not fruitful. Esther said, "...I was disappointed that

my first test did not go as well as I anticipated...but I knew that I could do better on the next exam." Instead of focusing on the negative aspects of the test results, Esther affirmed her potential to do well in the future by maintaining a positive attitude.

In another example, Eva, an advertising junior, recounted why she did not feel comfortable with her performance on her first exam. Eva said, "...I was worried because I don't particularly like economics...I was not that confident anyway." When Eva was asked how she dealt with her concerns, she replied, "I can tell you one thing. Failing the class is one thing I was never going to do."

Although students like Esther and Eva were aware of their inadequate preparation to handle the course content, they viewed themselves as capable of overcoming their deficiencies. For example, Sabra, an agricultural science sophomore said, "I was worried about my final grade, but I knew it was possible...I wasn't expecting immediate success." Students who managed to succeed academically despite their weak academic preparation demonstrated an interest in and commitment to their online classes. These students fared well without the proper academic preparation relevant to the subject, because they valued the class. Furthermore, these individuals reported no self-doubt or self-defeating attitudes.

#### Active Learning

Students who attributed high significance to their online classes managed to succeed academically in spite of their weak academic preparation. These students engaged in proactive learning activities such as asking questions and seeking assistance from others as part of their ongoing efforts to effectively understand the course content.

In other instances, these students said that they also learned from their fellow classmates by carefully reading the discussion board postings, which helped them to better grasp the material. For instance, Sabra said,

On the discussion board there were maybe anywhere from twenty-five to fifty people or more.... Basically, there was a topic for discussion and you had to go in and write your opinion... There were a lot of opinionated people in the class...because the class dealt with social issues we all had a lot of opinions. Every once in awhile I read something interesting that someone said or had done...and I thought, hmm, ...I better ask them...to explain what they said, in more detail.... Some people's comments were impressive...smart.

To better understand the material, Sabra read her classmates' postings and when she found a comment or idea that intensified her interests, she did not hesitate to ask for further clarification. Furthermore, Sabra recognized the benefits of active learning by spending time and energy reading the contributions of fellow classmates on the discussion board. As a result of her proactive stance, Sabra positively engaged in the educational process.

Students who managed to succeed academically, regardless of their weak academic preparation, consulted their instructors for feedback on their academic performance as well as for suggestions for improvement. In other instances, these students re-read previous modules until their understanding of the material was consistent with the instructor's expectations. For example, Shirley, a multidisciplinary studies sophomore, recalled how her performance changed after not doing well on the first exam, because eventually she was able to grasp the material. Shirley said,

...After the first exam I didn't do as well as I wanted to...I went back and checked my answers...I didn't understand some of the readings as well as I should have...I got more of a feel for what exactly she [instructor] wanted out of the lectures [modules]....

Shirley's initial understanding of the material was sketchy, yet she developed an understanding of the material by going back and reviewing the readings and by comparing her answers to the instructor's answer key. Shirley progressed from not knowing, to making errors, to grasping the material. Shirley's approach to her online class was influenced and changed through the process of experience.

In another example, Sebastian, a communications junior, explained that initially he was cautious about posting on the threaded discussion board. However, he was able to overcome his reluctance to ask questions and respond to fellow classmates' comments, even though he was very concerned with his grasp of the material. Sebastian said,

...Your comments had to relate to something personal like where you were from...but all I could think about was that what I had to say was different than anyone else's postings...Online you can't tell if you are understanding the readings...insofar as my postings...well [pause] they were mediocre at best... but a couple of people thought otherwise...then I thought, I've been reading up...so why should I worry? ...I wrote quite a bit.

Students who managed to succeed regardless of their weak academic preparation seized learning opportunities. Though they entered their online classes with the knowledge that their aptitudes and skills were not adequate, these students understood that the skills by which their competence would be evaluated was attainable by applying extra effort. The overall picture was one of these students being highly involved and committed to learning. Therefore, because they were aware of their weak academic preparation for the subject, but also involved in the class, they were ardently influenced to overcome their shortcomings.

### **Online Computer Skills**

The students' online computer skills were not a factor that contributed to their experiences and involvement in their online classes. All of the students in this study reported that they were comfortable with their online computer skills. In fact, the students in the study felt that they did not need instruction in PC (Personal Computer) applications and operations such as files manipulation, Internet navigation, and or how to use Message Boards or install plug-ins. All of the students mentioned that they were very comfortable with their online computers skills because, in many of their face-to-face courses, their instructors used the Internet to supplement the material that was presented in class. In other instances, too, students had either taken an introductory to computing class or used computers at work. Therefore, they were familiar with basic computer skills.

For example, Annabelle said, "Last year [fall] I took a course online, so I had a little experience; plus I've had classes that used Blackboard, so I felt comfortable doing things online...." Along similar lines Sabra said,

The format for the class was very organized...very well structured. I had no problems getting the information. Anyone could do it...I use the Internet everyday ...e-mail and instant messaging...I can't say that I had problems with my computer skills...I've owned one [computer] for some time now.

In another example, Alana said,

Because I am an advertising major we do a lot of group work. Most of the time, we meet after class and we divide our work, and send it to each other...we send emails with attachments... then someone puts it together as one. We use e-mail to communicate...and to do the work...it is much easier than trying to meet... my computer skills?...I have a Web page and I had a computer class last year. Stanley's remarks best captured the computer competencies of the students in this study.

Stanley said,

So let me tell you this, of all the work that was required, you know which one do you think was the easiest for me? ...using Blackboard ...as far as I could tell, nobody had problems with knowing how to get around the class Web site...what I'd like to say is that students here [MU] use computers all the time...they are well-rounded....

As the above comments suggest, the students in this study had a history using computers and therefore did not encounter any difficulties with their online computer skills. Regardless of their academic preparation, online learning history, or levels of experiences with computer applications, online computers skills did not affect online involvement.

## Summary

What factors contribute to traditional-aged students' experiences and involvement in an online class? The data suggest two critical factors contribute to students' experiences and involvement in an online class: a) academic preparation for the subject, and b) students' perceptions of the significance of the class.

It is worth noting, with the exception of one student, that strong academic preparation for the subject influenced students' online involvement in a positive way. Students with strong academic preparation and high sense of the significance of the class established a course of action that guided and determined their success and satisfaction with online learning. These individuals had a vision for realizing short- and long-term learning objectives. Strong academic preparation for the subject enabled students to perform well on quizzes, examinations, and homework assignments because they understood the material. These students were able to easily engage in activities such as posting questions on the threaded discussion board. Strong academic preparation and high sense of the significance of the class resulted in a number of positive experiences for most students, including excellent grades and self-confidence in one's ability to handle the material.

Weak academic preparation for the subject and a sense of low significance of the class caused certain students to encounter difficulties in their online classes because they lacked the skills and confidence in their ability to understand the material. These particular students experienced poor academic performance on homework assignments and exams. In addition to poor academic performance, weak academic preparation for the subject influenced certain students to experience motivational problems and bouts of stress. These bouts of stress were often a reaction to low grades and because they had difficulties in communicating their questions with their instructors and fellow classmates. Additionally, weak academic preparation influenced certain students to violate their instructors' expectations by engaging in academic dishonesty. Because of the low significance these students attributed to their online classes, they viewed the excuses and reasons they used to justify their unethical behaviors as acceptable.

There were, however, a group of students who managed to overcome their weak academic preparation for the subject because of the high significance the class had on their academic plans. These individuals recognized that they needed to develop competence in the subject. Being aware of their weak academic preparation for the subject propelled certain students to engage in proactive activities such as spending

significant time studying, seeking assistance from others, and reviewing the material in order to bolster their chances for academic success.

Furthermore, these students reported a number of personal qualities, which enhanced their potential to achieve academic success. First, these individuals were committed to learning the material. Second, they had the ability to create and sustain a positive attitude. Third, they had faith in their ability to succeed.

The students in this study reported an unorthodox use of the Internet and peer support as a way of surviving in college. This type of interaction entailed posting or viewing information about recent tests as well as using the Internet to communicate during proctored exams. Though only a particular group of students reported engaging in dishonest behaviors within the context of the online classes examined, all of the students expressed social approval and many noted that exchanging tests, papers, copying or sharing assignments was an acceptable form of interacting via the Internet and form of supporting their peers in college.

As mentioned, online computers skills were not related to the students' online learning experiences. Although learning online was a new experience for twenty-eight out of the thirty participants in the study, the students reported that they were very familiar with basic online computer applications such as searching the Web, downloading files, managing, organizing, submitting documents and using the Internet.

In what ways are traditional-aged college students seeking support for their online learning?

There were two major patterns of interaction or intentional ways students sought assistance from their instructors and fellow classmates in the large online classes examined: a) collaborative-oriented and b) authoritative-oriented. (Figure 3 depicts the trends in students' responses to the aforementioned question).

Figure 3



For the students in this study, *seeking support* meant ways of communicating with their peers and instructors to discuss course content or to boost their chances for academic success. It is important to note that, in this study, seeking support is identified as a form of interaction that involves with an attempt to understand the instructors' ideas and to confirm the accuracy of the information presented.

Students who were collaborative-oriented in their interactions reported making a conscious effort to communicate with instructors and fellow classmates. These students viewed their communication efforts as a way to unite with fellow classmates and to create relationships with their instructors. Additionally, the students directed their efforts to interact with others because they recognized that communication was crucial to their academic success. These students also mentioned that interacting with their instructors and fellow classmates was the cornerstone of online learning for them since they believed that sharing ideas and participation is a central component of the college student experience.

Students who were authoritative-oriented in their interactions with their instructors and fellow classmates stated that the instructor's knowledge and expertise was at the center of their online academic endeavors. These students said that in order to succeed academically, they felt that it was in their best interest to rely on the knowledge and experience of the instructor. Moreover, students who were authoritative-oriented in their interactions said that communicating, connecting, and getting to know their fellow classmates was not an important aspect of their online learning endeavors.

In a sense, students who were authoritative-oriented can be thought of as being at one extreme end of the spectrum and students who were collaborative-oriented in their

interactions at the opposite extreme. It is important to note that no value is attached to being collaborative-oriented or authoritative-oriented in one's interactions with fellow classmates and instructors. That is, the undertones that these terms may transmit in other contexts (such as in organizational cultures) hold neither a positive nor negative connotation in this study.

#### Collaborative-oriented with Instructors

Students who were collaborative-oriented reported complex and wide-ranging interactions with their instructors. These students initiated conversations to establish rapport, to gain further clarification about the course content, and to obtain feedback on their academic progress and performance. The interactions between students and their instructors were described as harmonious and trusting.

## Initiating Conversations

Many students reported choosing to develop a one-to-one relationship by personally contacting the instructor via e-mail. These students felt that communicating with their instructor directly instead of using the class discussion board was an important aspect of being an online student. For these students, it was very important to establish contact with their instructor as soon as possible, instead of merely waiting for the instructor to contact them. For example, Selma said,

I think it is really hard to develop relationships with professors, but it is a good idea for students to do it, regardless of whether the class is face-to-face or online. I still think that students need a lot of instruction and contact with the professors.... You learn more from them that way. I e-mailed because I wanted

her to know who I am...it is a good habit to get into...to get to know your professors...

In another example, Sabra described the reasons she attempted to establish rapport

with her instructor. Sabra stated,

I don't get into a lot of the social aspects of being a student. It is just class and work. Usually it is ok to be a student here, even though a lot of time I feel like a number. My classes are fine, but I have big lecture classes and I am not sure if the professors even know my name...I sent an email to my online professor introducing myself...it is much easier for them to remember who you are...because they have something written from you.

Sabra felt that because of the size of her face-to-face classes, instructors did not notice her. Yet, she contacted her online instructor, because she believed that her online class presented a unique opportunity to easily establish a connection. Emilia also felt that it was important to make herself known to her economics instructor. When she was asked why, Emilia replied, "Large classes can be dehumanizing and impersonal...online classes don't necessarily have to be that way...for the student...." Percy echoed similar sentiments about large classes as Emilia. Percy said,

...There were more than 100 students in the class...and it's hard to know every student...when it comes to asking for a letter of recommendation, I want a good one...it is impossible to remember that many students...good grades help...but online you need to stand out.

Students initiated contact with their online instructor, because they were primarily concerned with the establishment and maintenance of a relationship. Contact with their instructor provided individual opportunities for learning and personal validation. According to many of the students, the development of a relationship with their instructor was vital to their education.

# Course Content Clarification

Besides establishing rapport, students who were collaborative-oriented in their interactions corresponded frequently with their instructors in order to obtain clarification about the course content. These students commented that they benefited from the clarity and denotation the instructor was able to give to the course content, since it was sometimes difficult to discern what material was significant to know and master. For example, Shirley said,

...I was intensely active... There was a lot of material to cover...Instead of making it harder for myself; I e-mailed him when I didn't understand...I adjusted my approach... In the face-to-face classroom, you can usually tell when the instructor is really set on something...in the online classroom it is really hard to pick up what they [instructors] want...what she really wants it to be really important...not knowing what is important can make a difference...it can determine the grade you get in the class.

Students who were collaborative-oriented in their interactions recognized that communicating with instructors about course content also facilitated their learning. For example, Sebastian felt that he had much to gain when he asked for further clarification on the modules. Sebastian said,

The class is set up by modules, so basically you had so many modules you had to do per week, and you had to read a lot...you had to study a problem then write about it. If you didn't do it the way you were supposed to, you'll lose points...he [instructor] answered all my questions...he was pretty thorough.... the modules were easier to understand then.

In another example, Ariel described the reasons he e-mailed his instructor. Ariel said,

When I e-mailed him [instructor] for help he helped... He also went over the homework problems, each individually. Most of us, well, you know, it is an accounting class for people who are non-business majors, you know, for people that don't necessarily like numbers. I think most of us did not like the stuff, I

don't think that we [students] even cared about accounting; he did what he could to help us and teach us...he did his best to teach us. He was very patient...very concerned... online courses are a good idea, but students need a lot of support.

Ariel's frequent interaction with his instructor regarding the course content gave him the sense that the instructor cared about his students. In addition to ascertaining that his instructor understood the students in the class, Ariel's contact with his instructor was positive and purposeful.

Students, who were collaborative-oriented with their instructors, were satisfied with their interactions because their communication entailed educational improvement. Furthermore, these students appreciated their instructors' expertise. From the students' perspective, their instructors were not only responsible for transmitting the information, but the instructors also had the knowledge and authority to interpret it. Consequently, students who were collaborative-oriented viewed their instructors as sources of both information and guidance.

#### <u>Feedback</u>

Many students indicated that obtaining feedback on their academic progress and performance acted as a reinforcement mechanism for their online class activities. For example, Shirley said, "I received feedback from my instructor in terms of what areas I needed to improve in. I found I needed feedback to do well...." In another example, Paloma said,

My instructor was very available; as soon as I sent an e-mail I got an answer right away. I thought that he was great! I felt very comfortable with the instructor discussing my grade in the class...I was not reluctant at all...he [instructor] said that he had confidence in my ability to get high marks... Both Shirley and Paloma reported that feedback from their instructors reduced any uncertainty they had about their progress. Shirley and Paloma also used their instructors' feedback as an early warning mechanism to identify any potential problems in order to address them in a timely manner.

Other students stated that feedback from their instructors was valuable and productive because they were working towards certain goals, such as mastering the material and doing well academically. For instance, Esther explained that she consciously kept the channels of communication active with her instructor. Esther also stated that she was taking a more rigorous approach to the class in order to increase her chances for a successful academic outcome. Esther explained,

I like to find out what we were being tested on...I guess there's nothing wrong with asking...I kept thinking, I can do it. I think I can do it. I didn't want any surprises...I e-mailed my questions to him...never putting it off ...that's the secret to success. I asked what was going to be on the test and he answered, always. Being that it was an online class, I felt it was important to do so.

Esther relied heavily on her instructor's feedback to find out information on areas she needed to focus her efforts in order to prepare for the exam. Feedback from the instructor reinforced Esther's commitment to the class.

In another example, Alonzo, a construction management sophomore, explained

why he valued and appreciated feedback from the instructor. Alonzo said,

He [instructor] had office hours...on campus. I made two appointments, but I was only able to keep one...because of work. I was with him for over an hour...to review my midterm. He went over all of the problems with me... When I asked him questions online he did know who I was...

Alonzo was aware that he needed concrete information about his exam; therefore, he scheduled time to meet with the instructor. When Alonzo was asked about his online

communication with his instructor, he mentioned that he felt much more comfortable asking for assistance and feedback by e-mail after their face-to-face meeting.

Students who were collaborative-oriented with their instructors reported that their interactions had a positive impact on their online learning experiences. One point is particularly clear: students appreciated and valued the individualized support they received from their instructors.

The kind of relationships and one-to-one contacts between students and their instructors varied in depth and scope. In certain situations, students initiated contact with their instructors to establish rapport. In other instances, students contacted their instructors because they needed further clarification about the course content. In many instances too, students sought feedback from their instructors because they were concerned about their academic progress and performance. Overall, students who were collaborative-oriented in their interactions demonstrated a genuine interest in connecting with their instructors.

## Collaborative-oriented with Fellow Classmates

The kinds of communication strategies used by students who were collaborativeoriented in their interactions with fellow classmates entailed helping others to understand the course content, and responding to fellow students' comments. These students also reported a sense of synergy, oneness or solidarity with fellow classmates. Accordingly, they felt compelled to act by providing assistance, support and responding to comments when fellow classmates requested help.

## Academic Support

The interactions between students and their fellow classmates varied in intensity and strength. Students who were collaborative-oriented in their interactions with fellow classmates helped others overcome difficulties with the course content. These students felt that helping their fellow classmates process the material was appropriate, because they understood that the course content was formidable. For instance, Pierson recalled a particularly spirited discussion posting with a fellow classmate. Pierson said,

I went back and forth with this one guy, but he just didn't get it, so I thought I should stop wasting my time...but then I thought I should help him out, because it was not an easy class...I ended up helping him anyway...I just changed the way I explained the assignment...he e-mailed to tell me that I really helped him... my time paid off...

In another example, Alana explained how she helped a fellow classmate

understand the material. Alana said,

I use instant messaging frequently just to chat with friends... A couple of people asked for extra help...it was easier to just instant message...there were too many postings on the discussion board...it was more comfortable to talk to one person...to answer their questions...I was sort of tutoring except it was online and I didn't get paid...I wanted to do it anyway...I wanted to help.

Pierson and Alana were aware that some of their classmates had difficulties

understanding the material. Instead of ignoring their calls for assistance, Pierson and

Alana intervened by taking time to address their fellow classmates' concerns.

In another example, Earl described the frequency and depth of his interactions

with fellow classmates. He said,

My time was limited...there was always a new posting...and I worried about getting too many e-mails...invading my personal space...but it is almost second nature to me...to help...after the midterm we got together...to hang out...there were

five of us, and we met regularly...to work on the assignments...and to study...we emailed all the time...about class...what was going on...

Along similar comments as Earl's, Sabra said, "A couple of people had questions and I responded. People tended to share and help each other out." In another example, Eugene said, "...regardless of how difficult the class was for me, I posted what I thought was the right answer."

Students who were collaborative-oriented in their interactions with fellow classmates provided academic support, which was a valuable service. These students shared their knowledge with others, without expecting anything in return.

### Synergy and Solidarity

Students who were collaborative-oriented in their interactions with fellow classmates responded to other students' comments on the class discussion board. These students also said that interacting with fellow classmates enriched their online learning experiences. Furthermore, students who were collaborative-oriented with fellow classmates reported more personal forms of interaction such as providing moral support, using humor, and challenging or supporting each other's ideas on the threaded discussion forum.

For example, Eva, said, "I saw that my brother's friend was in the class...I wrote him right away...." When she was asked to elaborate on the content of their communication, Eva said, "...He wanted to check with someone...about the exam...he sounded pretty tense...wired...he said my comments were reassuring. " In another example, Estella, a third-year student majoring in food science, described her online

interactions with a fellow classmate. She said, "We kept the communication flowing...we gave each other support... by sending jokes."

Besides providing support, students who were collaborative-oriented in their interactions with fellow classmates enjoyed the online discussion boards. For instance, Sebastian said, "...I cleared up some faulty assumptions...inaccuracies and misunderstandings...that was the best part of the class...the Web talks." In another example, Stanley said, "Some people were very persuasive...I emailed them anyway...when I didn't agree with them."

In other instances, students who were collaborative-oriented mentioned that they benefited from their interactions with fellow classmates. For example, Selma explained why she believed online learning was good for her cognitive development when she described how she approached the threaded discussion board. She said,

When you are taking a class online you have to concentrate on what other people are saying...You just don't write frivolously...you have to think about your comments and about what the other person is saying...you couldn't just write what you thought...your comments had to be supported by the readings. I think it made people think before they said anything... it made me more responsive...more thoughtful.

Selma exhibited the qualities of a student who was collaborative-oriented with fellow classmates, because she attempted to capture and process their comments with meaningful analysis and synthesis.

Common to students who were collaborative-oriented in their interactions is that they enjoyed and appreciated communicating with fellow classmates. These students also mentioned that they made time and effort to respond to their fellow classmates' comments. In certain cases too, students said that they contacted fellow classmates to offer motivation and support. In other instances, students who were collaborativeoriented shared their ideas and knowledge of the course content with fellow classmates, because they understood the academic challenges certain topics presented.

#### Authoritative-oriented with Instructors

Students who were authoritative-oriented in their interactions regarded their instructors as highly credible sources of information. These students perceived their fellow classmates as lacking in knowledge and expertise. Consequently, they mistrusted their fellow classmates' responses, ideas, and comments. These students also mentioned that they only accepted information about the course content from the person who was responsible for grading their academic performance. Students who were authoritativeoriented in their interactions exercised caution by waiting until their instructor posted directions and comments on the discussion board before following a course of action.

## Credible Source

Students who were authoritative-oriented in their interactions frequently mentioned that they only accepted an answer or position on a given issue from their instructor. These students felt that the consequences were too great by risking trusting other sources. For example, Anita said, "I always waited for the instructor to post the answer, not from another student...it was too risky..., and it wasn't worth taking a chance." In another example, Sigmund explained his reasons for only accepting

information that was posted by the instructor. He said, "There were too many contradictions...everyone had an opinion...I went with whatever the instructor said."

Authoritative-oriented students also perceived that their instructor was the only competent person able to provide information since he or she evaluated their academic performance. For instance, when Armand was asked to describe his online class participation, he said:

I did not bother to read the postings from other students...communication was difficult...I doubted their answers anyway. We're the students... the instructor is the person that made up the assignments...the questions on the midterm and final ...he's the one doing the grading.

In another example, Ezra, a food systems management sophomore, believed that the instructor's expertise was unquestionable. He said, "...if I had any questions I asked the instructor...not another student..." When Ezra was asked his reasons, he said: "The instructor is in charge of teaching the class...." Along similar comments as Ezra's, Alistair said, "I don't have time to sit around and read... I contacted the instructor...he [instructor] knows how the assignments are supposed to be done."

Students who were authoritative-oriented in their interactions said that they relied on the information provided by the instructor, because he or she was better able to explain concepts and answer their questions. For example, Serena said,

I would e-mail my professor back and forth, and we had a section where you could go in and write comments. I didn't have comments for other students, but my questions were pretty lengthy... so I just e-mailed [the instructor]...her answers were easier to understand...easier to read.

These students perceived that their instructors were more competent to address questions and explain topics in a manner that was easy to understand. Students who were authoritative-oriented in their interactions expressed concerns about the trustworthiness of their fellow classmates' knowledge. Because the source of credibility was important to these students, their instructors' position or answers about academic matters was deemed accurate and conclusive.

# Authoritative-oriented with Fellow Classmates

Students who were authoritative-oriented did not offer their fellow classmates academic assistance. These students also refrained from posting their ideas and comments on the discussion board, because they felt that they had nothing to gain by it. Students who were authoritative-oriented said that they preferred working alone in academically related activities. Furthermore, these students preferred to focus their time and effort on their personal academic interests and needs.

## No Rewards

Students who were authoritative-oriented in their interactions abstained from offering their fellow classmates assistance on the discussion board because in doing so they would have nothing to show for it. For example, Armand said, "I never participated in the discussion board because he never said that he wanted everyone to respond. It wasn't mandatory. It wouldn't affect my grade." In another example, Pearl said, "...participation was voluntary... answering their questions was not a priority for me...I wasn't getting graded..." Annabelle echoed Pearl's comments. Annabelle said,

For each module, I probably spent about three or four hours sometimes more...I couldn't do it...help other students... I wasn't willing to get together with other

people anyway. For me, study groups aren't beneficial...I couldn't afford to waste my time getting together with other people.

Students who were authoritative-oriented in their interactions mentioned that they preferred working alone because they wanted sole recognition and credit for their efforts. For example, Ezra said, "...I usually spend about four hours a night and that is very demanding..." Ezra went on to explain that he was not willing to give other students the information needed to figure out the answers to the assignments because he worked hard for his grades.

In short, the notion of helping fellow classmates was not valued by students who were authoritative-oriented in their interactions. Rather then spending their time and effort helping fellow classmates, students who were authoritative-oriented refrained from communicating with other students because it was not personally beneficial. Their comments revealed that receiving sole credit for their efforts was important.

#### Summary

The students described two ways of interacting and seeking support within the context of the classes examined. The two ways are collaborative-oriented and authoritative-oriented. Students who were collaborative-oriented in their interactions with their instructors and fellow classmates described their communication as harmonious, trusting, supportive, and productive. Collaborative-oriented interactions between students and their instructors consisted of initiating conversations to establish rapport, to gain further clarification about the course content, and to obtain feedback on their academic progress and performance. Developing relationships with their instructors was vital to

their education. These students viewed their instructors as sources of both information and guidance.

Collaborative-oriented interactions between students and fellow classmates entailed helping others to understand the course content, and responding to fellow classmates' comments. These students also said that interacting with fellow classmates enriched their online learning experiences. By tutoring fellow classmates and providing support, students who were collaborative-oriented in their interactions reported that their efforts were worthwhile.

Students who were authoritative-oriented in their interactions believed that the instructor possessed the knowledge and expertise to answer their questions and help them with the course content. These individuals also felt that because the instructor was responsible for awarding grades, their instructor's position or answers about academic matters were deemed accurate and conclusive. Additionally, students who were authoritative-oriented in their interactions refrained from offering assistance to fellow classmates because their time and effort were not formally rewarded.

#### Summary of the Findings

It is important to recognize that individual student involvement in the online courses examined varied considerably. The nature of online involvement for the students in this study was influenced by such factors as study skills and academic preparation. A number of students approached their online class by systematically reviewing the course content. These students reported spending significant time studying and completing assigned tasks.

Certain students viewed their role as online learners as an opportunity to take ownership of their educational experience. These students reported a sense of responsibility and self-efficacy in their online academic endeavors. Other students, however, viewed online learning as a painful and agonizing process. The most common reason these students gave for their stressful online learning experiences was that they were academically unprepared to handle the course content.

All of the students in the study reported that they felt comfortable with their online computer skills. Consequently, online computer skills were not related to the nature of the students' involvement. Involvement for the students in this study was complex. For certain students, their online learning experiences were guided by what they wanted to achieve such as earning credits or gaining admission into a restricted major. In other instances, the students' online involvement was delineated by the interactions with their instructors and fellow classmates. Certain students exchanged ideas, posted questions, and sought academic assistance from their instructors and fellow classmates. Other students chose to communicate with the instructor exclusively, because they believed he or she had the knowledge and authority to answer their questions and evaluate their progress.

Interestingly enough, the Internet was viewed or used by all the students as a way to interact with their college peers. In certain situations, students capitalized on recent test information posted by peers in the student-only Web site. In other instances, students said that they were aware that their peers used Internet resources to purchase research papers.

Above all, the students in this study felt that using or posting information on the studentonly Web site or purchasing a paper from an Internet source was a matter of personal choice and circumstance. Even though the data indicate that students' online interactions vary by context, it is important to emphasize that the nature of traditional-aged college students' experiences have changed significantly due to the advent of the Internet and other electronic forms of communication.

### **CHAPTER VI**

## **DISCUSSION AND CONCLUSION**

### Introduction

For over three decades, research on student involvement and academics has been diverse, ranging from institutional case studies to longitudinal national surveys (Astin 1993; Chickering & Reisser, 1993). While the most widely cited sources on involvement examine students' contact with faculty and other students in face-to-face contexts, the experiences of traditional-aged college students in the online classroom are relatively ignored. The lack of research on the nature of traditional-aged college students' online involvement is particularly problematic because it leaves academicians void of specific guidelines for creating opportunities for student interaction with faculty and peers. This is noted because such interaction has been found to be among the most important factors that influence quality learning (Terenzini & Pascarella, 1980).

## Summary of the Methodology

The goal of this research was to explain how, when and to what extent college student involvement in the online learning setting occurs. The research questions guiding this investigation were: How do traditional-aged college students describe their approach in their large online classes and in what ways do such experiences vary? What factors contribute to traditional-aged college students' experiences and involvement in an online class? In what ways are traditional-aged college students seeking support for their online learning?

This study utilized qualitative methodologies because it was the best way to collect information regarding traditional-aged college students' experiences with online learning. Due to the situational context in understanding students' reported behavior and the exploratory nature of the research questions, an interpretive analytic framework and a phenomenological approach as recommended by Creswell (1994) were used in collecting the data as reported by the participants and in analyzing the results.

Four case study sites or large undergraduate online classes that represented at least one area in the social sciences and physical sciences were selected in order to include a group of participants with various academic interests. Three professionals with prior online teaching experience reviewed the interview protocol. The interview protocol focused specifically on students' descriptions of their online learning experiences, with additional probing questions as appropriate. The interviews lasted between 75 and 90 minutes.

Three primary qualitative strategies were used to examine the nature of traditional-aged students' online involvement in four large undergraduate classes: 1) a semi-structured interview, 2) a survey of the students' experiences with technology, and 3) the students' self-reported academic preparation. By using multiple data collection strategies, a broader understanding of the students' online experiences was produced.

Other relevant documents included instructor interviews and course syllabi, which provided additional insights about the specific nature of the classes examined. These

materials along with the responses to the semi-structured interviews enabled the researcher to identify the major themes across the students' experiences. The major themes identified were then organized into categories. Although wide varieties of issues were identified, there were a number of specific issues common to the students in the study. Consequently, a cross-case analysis of the data was the most effective method to present the findings.

Chapter Six is divided into three parts. The chapter begins with the discussion of the findings followed by the implications for practice, limitations of the study, suggestions for future streams of research, and conclusions. Lastly, the researcher's personal reflections are presented.

## Discussion of the Findings

In light of the experiences described by traditional-aged college students in four large online undergraduate courses, it is possible to speculate that these experiences can be categorized and examined in a theoretical framework. To this end, the theories of Perry (1970), Kohlberg (1964), Bourdieu & Passeron (1973, 1984) and Astin (1974) are particularly helpful.

William Perry's theory of college student intellectual development can be an aid to understanding students' experiences in the four large online undergraduate classes examined. The students, who stated that they relied solely on the information provided to them by their professors and tended to disregard the contributions of their peers, displayed dualistic behavior (the first stage of intellectual development according to
Perry's theory) in that they felt that the professor's information was correct, and that from their peers was unreliable. These students also stated that they were more concerned with getting the right answers on tests and quizzes than developing both a broader and deeper understanding of the course material.

It is important to note that it appears that students in the dualistic stage of development are more likely to thrive in large online courses that utilize objective testing methods requiring dualistic behavior. Additionally, in three out of the four courses examined, assignments, quizzes, and tests were designed in a way that encouraged dualistic behavior, which did not promote more critical thinking which students need to progress to the next developmental level as they continue movement through their academic careers.

Further, those students who stated that their opinions were as valid as those of the professors appear to have moved into the Perry's second stage of intellectual development known as multiplicity/subjective knowledge. These students who engaged in a more superficial analytical approach to the course material are perhaps those who would fair well in large online undergraduate courses that require significant interaction and discussion. On the other hand, these students may fall short of retaining significant portions of the material because they believe that truth in academia is an opinion.

Students reporting behavior representative of the third and final stage of Perry's theory of intellectual development (relativism/constructed knowledge) were small in number. These students reported having extensive discussion within and beyond the online environment. In those discussions they tended to go beyond the sharing of factual information of the course and interject reflections of their experiences and values. Such

students operating at this highest level would perhaps thrive in online courses that enabled them to analyze material and draw inferences of their own. Likewise, these same students could well shun participation because of the difficulty in following threaded discussions that are more often disrupted by the volume of people participating in large online course discussions.

Lawrence Kohlberg believed that human beings arrive at ethical decision making through three levels of progressive moral reasoning. Each level contains two stages (six in total) with each stage supporting movement to the next. For instance, on Level 1( Preconventional level), in the first stage, an individual's motives and behaviors are influenced by external pressures such as reward and punishment. Thus, if a child refuses to steal something, it may not be because he/she knows that it is wrong but because there is fear of punishment by the parent. In the second stage individuals behave in a way that promotes their own interests.

However, in the study, the students' reported foundations for ethical decisionmaking do not reflect Kohlberg's first stage of moral development. Many of the students commented that they did not abide by their professors' expectations regarding tests. Instead of adhering to the examination guidelines established by their online professors, it looks as if the students rejected the stage one (Obedience and Punishment) and readily accepted stage two's Individualism which is characterized by behaving in ways that benefit and promote one's own interests and personal goals. Additionally, when students discussed their peers' use of Internet resources as a way of surviving in college, they condoned the behavior by rationalizing the importance of good grades in a competitive employment market.

The students' reported online behavior and their views on the use of the Internet resources to purchase research papers or review recent test information posted by peers in the student-only Web site were not viewed as ethical dilemmas. Traditional-aged college students in the four large online undergraduate classes examined reported not experiencing [cognitive] contradictions in the ways in which they sought support or arrived at decisions regarding their academic endeavors and that of their peers. It seems that for the students in this study, the use of Internet resources to achieve their goals was viewed as a matter of survival and personal choice void of the guilt associated with plagiarism and academic dishonest behaviors. Moreover, obeying the rules was of no concern to these students, and the possible punishment associated with their behavior was likewise a non-issue. What was even more alarming was the realization that those students who were not actively involved in purchasing essays to submit as their own actually condoned the academic dishonesty of their peers.

Students' attitudes about academic dishonesty stemmed from a culture of pressure to succeed during and after college. The common perception by the students in this study was that doing whatever it takes to get ahead represented an acceptable alternative to failing. These students' attitudes about academic dishonesty are consistent with the study by McBane and Travino (1993) who found that approximately 78% of undergraduate students reported cheating sometime during their college career.

What is appalling about the acceptance of academic dishonesty is that it typifies a pervasive downward spiraling of our society's moral code. If prime time television shows such as <u>Survivor</u> and <u>The Apprentice</u> are able to handsomely reward contestants for

cheating and deceiving others, it is not surprising that the traditional-aged college students in this study believed that such are acceptable behaviors in achieving success.

Consequently, institutions need to analyze processes, policies, practices and approaches to character education in online undergraduate courses offered to traditionalaged college students. On the other hand, colleges and universities may need to reexamine the universality of appropriate courses of action in the online learning environment since Kohlberg's theory of moral reasoning and ethical decision making did not take into consideration the rapid adaptation of computer applications in course delivery and the predisposition of students to accessing completed assignments in unethical ways. Lastly, instructors should perhaps consider how direct they are in explaining what counts as academic dishonesty.

Another viable theory by which to discuss the findings of the study is to look at the theory of cultural capital, developed by Pierre Bourdieu and Jean-Claude Passeron. These theorists suggest that people enter new environments with a set of information, skills and beliefs that positions the bearer to succeed or fail. Bourdieu and Passeron contend that the middle and upper classes enter social institutions (i.e., elementary, secondary and post-secondary) with the academic and social skills, which better position them to succeed than students from lower socio-economic backgrounds. Thus, the theory holds implications for student success in online learning environments. Those students who entered their online courses with strong preparation tended to do well. Moreover, they reported having familial support and guidance in planning their academic programs. Those who entered their online courses with weak preparation reported being frustrated during the course and believed that they performed poorly because of their lack of

preparation. These students also reported having financial hardships, multiple responsibilities, and commitments outside of their online course that diminished their time on task.

Additionally, students who reported performing poorly on exams, quizzes and homework assignments also commented that they felt inferior to their fellow classmates. These students assumed that something was wrong with their skills and abilities rather than the online learning environment. Perhaps students who reported poor academic performances entered their online classes with skills (cultural capital) that work well in the face-to-face classroom. However, the degree to which these students might have been successful in equivalent face-to-face classes was not tested.

Perhaps because many disadvantaged students lack the academic preparation to engage in strictly online learning, many may find themselves excluded from certain majors that significantly use online learning. Moreover, once enrolled in an online class, students who lack academic preparation and have a low sense of significance for the class may distance themselves from the instructors and other students therefore minimizing learning opportunities.

Additionally, online faculty may subconsciously reinforce negative beliefs of students with limited cultural capital by focusing attention on the students who initiate and demand significant amounts of interaction while ignoring those who distance themselves from the professor, regardless of the reason(s).

Certain aspects of Astin's involvement theory do not fit the findings of this study. For example, Astin maintains that the amount of time spent studying (i.e., time on task) correlates with the degree of success achieved. However, despite student reports of

having spent extensive amounts of time on task, some of these students reported failures. Many of these students previously reported having been frustrated by not knowing which questions to ask so as to gain an understanding of the material due to the unique features of online learning. Though the Internet offers instructors highly effective means of communicating with their students, the ease of interacting online posed communication problems that can often be gauged through eye contact and body language for students weak in their academic preparation. For instance, contact with the instructors and their fellow peers involving academic discussion was not possible because they felt that they had nothing to contribute to the discussions. Many also reported not knowing how to post notes or questions on the discussion board, and they lacked command of the discipline's language.

Nevertheless, these students reported spending significant amounts of time and effort on studying the material of their online course. What becomes clear here is that Astin's involvement theory assumes that time on task is always productive. Additionally, Astin's theory of involvement places the responsibility for engaging in online discussions on the students – particularly in large online courses. This theory does not take into consideration the lack of cultural capital that may be inhibiting the engagement of certain students (i.e., low self-esteem, lack of knowledge in navigating the online environment, lack of awareness of the expectations of students in online courses).

Further, students whose home culture may prohibit challenging conversation with revered authority figures may tend to accept information from professors without questioning or adding to the learning experience. Thus, it is possible that they are penalized for their lack of involvement and interaction. Perhaps the most alarming aspect

of Astin's theory is that Astin's theory does not suggest that the involvement be substantive. Students must simply interact and demonstrate involvement in the online discussions.

Therefore, in the case of students who are not preconditioned to engage in superficial interactions, there may be the tendency to withhold comments until a more substantive exchange can occur. And, students who have a lack of cultural capital and significant problems in performing well in the online course may tend to shy away from self-predicted embarrassment in calling attention to their deficits. Although Alexander Astin's theory made significant contributions to the understanding of college student development, there are a number of criticisms of his theory. In particular, Astin's theory of involvement does not take into consideration students' cultural differences, especially nonverbal cues that may affect online behavior and interaction.

An aspect of Astin's theory that <u>does</u> appear to fit has to do with contact with professors. When the contact involved discussion of the course content, the interaction was productive; however when the discussion centered on the topic of grades and the student's progress in the course, the contact was less beneficial to the student.

Online computer skills did not influence the students' online involvement as the students reported that it was a non-issue. They had already acquired extensive experience in using various computer applications. It is important to note here that the diversity of the study's participants did not include representation of individuals who may not have had access to home computers.

The theories of Perry, Kohlberg, Bourdieu and Passeron, and Astin help to suggest ways to understand and interpret the study's findings. Additionally, they are

particularly helpful in critically evaluating fundamental assumptions about the role of online learning and the kind of educational experiences institutions aim to produce for their traditional-aged student population.

#### Digital Involvement

In looking at the findings of this study, it appears that a new form of involvement or *digital involvement* may need to be conceptualized as an essential component for traditional-aged college student success. I propose that digital involvement encompasses specific online behaviors, attitudes, and values, which can be powerful forces in shaping students' achievement outcomes. These factors influence how a student interacts with his or her peers and instructors, which, in turn affects how the student responds to and experiences online learning.

Digital involvement must be long-lasting. Students must be willing to work on their own initiative, act on their goals and value their online learning irrespective of the praise received from their instructors or grades earned. For example, the effect high sense of the significance for the class had on students who said that they were academically unprepared in the relevant subject to handle their online class is particularly relevant because students need not just grades as reward, but also an onward and upward desire to achieve. These students reported a significant difference in their academic performance from those students who were weak in their academic preparation and felt a low sense of the significance for the class, because when faced with challenging assignments, they

persevered until they understood the material. Furthermore, when these students earned a poor grade on a test, they worked harder for the next test.

Since digital involvement does not rest solely on a student's academic preparation, I propose that an individual's motivation to succeed is a major determining factor for success. For instance, data from this sample suggest that one of the major differences between strong academic preparation and weak academic preparation may be an individual's motivation. The reported habits and attitudes of students who were weak in academic preparation yet had high sense of the significance of the class were associated with favorable involvement outcomes. These students also reported that they were not distracted by fear of failure. Students who valued their online class despite their weak academic preparation said that they did not dwell on the difficulty of the class. Instead, they were easily able to focus on their assigned tasks because they believed in their ultimate ability to succeed.

Digital involvement can be recognized in a number of ways. Proactive learners felt it critical to connect with faculty and fellow classmates in making the online learning experience meaningful. In so doing, traditional-aged college students were able to actively engage themselves in the learning process within an online course in the following ways: 1) they actively initiated and engaged in discussion regarding course content; 2) many with the proclivity to interact with classmates responded to requests for assistance and served as unpaid tutors; 3) those who valued the opinions of their classmates openly shared ideas and information while benefiting from the collective knowledge of the group. Students exhibiting these characteristics can be considered digitally involved.

Digital involvement is a complex issue that entails not only what the student desires to achieve, but the process and appropriateness of the goal. It seems that the online environment does enhance involvement for academically unprepared students who acknowledge and address their deficiencies, actively modify or change their approach to the course content, and enjoy learning under fairly autonomous conditions. The online learning environment does enhance involvement for students who are confident in their academic skills as well.

On the other hand, students who had difficulty in their large online course because of weak academic preparation and low sense of significance of the course reported lower academic achievement. It was not surprising that they were unable to maintain motivation to learn or demonstrate and apply pivotal concepts presented in the class. The online learning environment deters or diminishes involvement for those students who stated that they doubted their competency or confidence to successfully complete their online course. These students who neglected their online learning activities entered the course with such internal factors as uncertainty, unwillingness to meet the instructor's expectations, and the belief that their effort was not critical to their academic achievement. Accordingly, weak academic preparation and low sense of the significance of the class may contribute to the significantly high drop-out rates observed among online learners in general and traditional-aged college students in particular.

#### Implications for Faculty Teaching Large Online Courses

Faculty teaching online courses may have to take a long hard look at the pedagogy of teaching as they attempt to facilitate learning for a diverse audience that they cannot see. Issues such as time management, assessment and grading, preparation for the next course, equity in student contact, reaching the unengaged and significantly challenged students, and concern for retention influence the quality of the teaching and learning experience. Long gone are the days when professors can walk into a classroom and commence lecturing without regard for the receptivity of their audience. Now, especially in online learning environments that have larger numbers of students, there is a lack of eye contact and an inability to read physical cues. Thus, professors need to employ strategies for sharing academic material so as to effectively connect with the diverse learning styles of their students.

Faculty teaching large online classes need to design activities that match students' learning styles and online learning preferences. Large online class instructors might consider multiple ways of organizing course materials such as highlighting key concepts in the curriculum. Concept maps, weekly reviews, and summary sheets are also tools that online instructors can employ to enhance the online learning experience for their students. Additionally, providing students with online time monitors and planning tools as part of the syllabus can assist students to effectively stay on track.

Additionally, what would make these online classes better is a reduction in the class size. While many research studies emphasize the importance of communication between students and their online instructors, there were over one hundred students

enrolled per online class examined, which placed the initiation for the communication directly on the student. In addition, even when a student proactively communicates with the instructor, it is unlikely that the instructor is able to communicate at length with the student because of the number of students enrolled in the class. Of special concern is the fact that online instructors pay more attention to students who initiate contact. Consequently, instructors were more likely to communicate with involved students and less likely to pay attention to uninvolved online students. Therefore, it is particularly important that both instructors and departments take steps to ensure that the potential for online contact is realized by offering smaller class sizes.

When enrollment is too large to ensure contact manageability, feedback to students, clarity of information transfer, student understanding, and use of varied assessment methods, the integrity of the learning experience is undermined. To curtail large online enrollment issues, graduate assistants can conduct guided discussions, study sessions, and online tutoring. Additionally, graduate assistants can intentionally develop small online learning or student-support communities, which serve as sites for study sessions and also serve as places where students can discuss their academic frustrations with the course content.

Another issue of serious concern is that faculty teaching large online courses may jeopardize their movement toward tenure by sacrificing valuable research time for managing lengthy e-mail communications with their large online course enrollees. Additionally, for faculty at institutions that value teaching, faculty teaching large online courses run the risk of receiving negative student evaluations because the volume of emails is often unmanageable, and methods of assessment do not always enable the

majority of the students to succeed. Thus the criteria for evaluating the quality of online teaching in large undergraduate courses must be reviewed and redesigned so as to accurately identify those factors that are within the faculty members' control.

Implications for Institutions

Potential practice implications from this study at the institutional level include providing support for online learners by integrating learning-to-learn online projects and programs as part of the mission of tutorial centers and other academic support units. Because most colleges and universities offer some form of assistance for students who desire to improve their academic performance, online learning academic support services is both a viable and productive use of institutional resources. Colleges and universities can set up online learning modules that cut across disciplinary boundaries by involving multiple departments in the design and implementation of online academic support initiatives.

As a way of enhancing and promoting the value of online courses for traditionalaged college students at the departmental level, colleges and universities should establish mechanisms that reward faculty efforts that focus on early intervention at enhancing intellectual growth, improving student performance, and academic engagement. Through a combination of shared vision and clear priorities, traditional-aged college students would begin to see and approach online classes as part of the core curriculum of the institution.

In order for colleges and universities to provide a quality online educational experience for traditional-aged students, institutions must foster and reinforce the importance of academic preparation for their online classes. Fostering and reinforcing includes, but is not limited to, assisting students to develop competence in the subject and directly blocking enrollment if the course prerequisites are not met. Online involvement of traditional-aged college students is most likely when the institution, academic departments, instructors, and academic advisers systematically work together to support and encourage student interest and academic proficiencies.

Academic dishonesty, by using material found on the Web, is noted by many researchers as reaching epidemic proportions at the high school and college level (Rittman, 1996). Colleges and universities could incorporate appropriate use of online resources in an existing orientation program for entering freshmen and transfer students. Additionally, online instructors can publish clear-cut information and examples regarding the institution's academic honor policy. These efforts can be noted on campus newspaper ads, bulletin boards, department Web sites, and students' academic progress reports. Programming activities that address responsible and appropriate use of online resources among all college students can be supported by such coordinated efforts.

College students must also recognize that academic dishonesty occurs regardless of the medium and that they have a responsibility to exercise integrity. Students must understand that the value of their degree is greatly diminished when they allow other students to cheat during exams or purchase customized essays via the Internet. Students need to understand that dishonest behaviors hurt the integrity of the academy and push for stronger regulations and severe punishments to violators.

Online teaching and learning is in its infancy, but clearly expanding especially in course delivery for traditional-aged college students. At the same time, faculty teaching traditional-aged students are faced with issues associated with information sharing, grades, and testing which are vastly different than in the past. For example, the Internet presents a set of conditions that are especially favorable for academic dishonesty because traditional-aged college students can purchase research papers for as little as \$14.95 per page one hour before the paper is due. Institutions offering large online undergraduate courses need to support their faculty by providing them with the resources (software) to ensure that students are adhering to the academic policies of the institution. Online instructors also need training and assistance in managing large classes. A broad range of seminars and services specifically designed for the online teaching and learning setting is also warranted.

### Limitations of the Study

Due to the limited sample in this study, cautioned must be exercised in interpreting the findings for several reasons. First, this study examined the reported behaviors of the participants and not the actual behaviors of the participants. Second, since all of the participants in this study were from the same institution, a more varied sample across institutions is warranted. Third, the sample size and scope of the research questions make it difficult to tease out the degree to which other factors such as high school preparation contribute to the students' online learning experiences. Lastly, more research is needed to determine what factors other than academic preparation, sense of

the significance of the class, and level of motivation influence online involvement for traditional-aged college students.

#### Future Research

To date, the field of online teaching and learning for traditional-aged college students is virtually uncharted in regard to the element of student involvement as it relates to promoting success. Traditional colleges and universities are offering large online courses to their students in an effort to meet demands and offer an innovative learning environment. Yet, very few studies, if any, examine the actual effects of online learning outcomes for traditional-aged college students.

Research might be undertaken to examine if there are any differences between students who failed in the face-to-face and in the online equivalent class. More studies need to be conducted on the content, purpose, and structure of online courses and activities in relation to the extent of student learning and competency in the subject.

Also, it is important to identify and examine online instructional strategies that help in connecting the student to the instructor. Online instructors need guidance implementing ways to involve students cognitively and emotionally in the learning process especially if they want to address feelings of alienation, isolation and frustration experienced by some online learners.

Students entering college who lack the academic preparation to achieve in specific classes enter the online classroom with a marked disadvantage. Studies need to be conducted on how large undergraduate online classes exclude those students whose

lack of cultural capital deters them from achieving a level of involvement that is favorable to success in the online learning environment. Additionally, it is important to examine the new demands that online learning imposes on the overall collegiate experience (i.e., self-authorship, study habits, moral reasoning).

To gain additional perspective on the impact of academic dishonesty and Internet resources as they relate to the traditional-aged college students' experiences, researchers may want to administer surveys asking both how college students use Internet resources and how custom term papers and reports have affected their grades. Fundamentally, colleges and universities educating the traditional-aged student population need to effectively examine how academic dishonesty may be advancing certain students at the expense of their peers. There has to be some means of examining the truthfulness of students' understanding and mastery of the material especially in courses that determine admission in restricted majors.

A study of the impact that *paper mills* or companies that sell custom-written essays is particularly important, first in determining the pervasiveness of the problem, and second in assessing the need to develop stronger institutional policies, and perhaps national policies that address how these companies will be held accountable for producing counterfeit academic documents for students. Additionally, research is needed to determine the impact that degrees acquired through academic dishonesty are having on the degree holder. Lastly, studies related to the issues of how colleges and universities can align the curriculum, practices, and expectations as part of an effort to curtail academic dishonesty and Internet resources in the collegiate setting are also warranted.

#### Conclusion

Perhaps, more than at any other time in the history of postsecondary education, colleges and universities are being asked to meet the increasing educational demands of a diverse student population and to do so with limited resources. Many colleges and universities embrace online course delivery as a way to serve their undergraduate students. At the same time, traditional colleges and universities are also being increasingly held accountable for students' academic achievement. Meeting educational demands with limited resources and increased accountability will be most difficult for traditional colleges and universities since online teaching and learning is a relatively new experience for students and instructors.

Traditional-aged college student online involvement is multidimensional in form and process. To date, the field of student involvement research has focused much of its energy on identifying factors that explain the reason students participate in various aspects of collegiate life. While studies on online interaction and students' participation have burgeoned, the literature has provided little information on the nature of traditionalaged college student involvement in a large online class.

In beginning to fill this research gap, this study identified some of the factors that relate to the nature of traditional-aged college student involvement in an online class. As shown in Figure 2, academic preparation and sense of the significance of the class are factors that contribute to traditional-aged college students' online learning experiences. Because students enter the online classroom with different motivational priorities, beliefs, and learning objectives, extensive research (expanding Astin's model of involvement to

include online learning) needs to be done to enable colleges and universities to effectively serve the traditional-aged college student population.

#### **Personal Reflections**

I began this study with the premise that traditional-aged college students face many challenges learning online because of the relative infancy of this mode of teaching and learning. Accordingly, I assumed that the nature of the students' online involvement was influenced by the lack of face-to-face contact. Surprisingly, the data suggest that the most common determinants of student involvement in the online learning setting are academic preparation and students' sense of the significance of the class. These two essential factors influenced the nature of students' involvement. It was not enough for a student to expend time studying and reviewing the material. Online involvement also relates to students' tendency to strive toward certain objectives coupled with sufficient academic preparation, strong expectations, and honorable perceptions of acceptable ways to meet those expectations.

# **APPENDIX** A

# Announcement to Faculty/Teaching Assistants

College Student Involvement in an Online Class

**Purpose:** Thank you for your interest to participate in a study designed to obtain information about the experiences of traditional-aged college students enrolled in online courses.

**Criteria for Eligibility**: Please note that in order to participate in this study you must be (a) the faculty member of record and the facilitator in one of the designated online courses (ACC, ECN, SSC or PPCD). As a Teaching Assistants you are eligible to participate if you teach in one of the designated courses.

No financial remuneration accompanies this study.

### Time Commitment: 60 minutes.

If you have any questions, please contact Liliana Mina at <u>mina@msu.edu</u> or 353-8768 ext. 1 or 339-2397. I will be calling you within a few days to schedule your interview. I assure you that I will take every measure possible to protect your confidentiality (this will be explained more in-depth when we meet. Please note that you will be able to withdraw from the study at any point you desire to do so).

Thank you for your time and consideration.

Dr. Ann E. Austin 417 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 355-6757 or <u>aaustin@msu.edu</u> Liliana Mina 424 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 353-8768 ext. 1, 339 –2397 or <u>mina@msu.edu</u>

## **APPENDIX B**

## **Faculty Consent Form**

College Student Involvement in an Online Class

**Purpose of Study:** Thank you for agreeing to participate in the research project: College Student Involvement in an Online Class. I am conducting this interview as part of an inquiry of what teaching and learning is like for traditional-aged college students and their instructors in online courses. The results of this study will be used to describe the experiences of the participants in the online classroom. As a participant, you will benefit from this study through helping to describe what occurs in the online teaching and learning environment. I believe this information can help to develop a better understanding of the needs of traditional-aged college students enrolled in online courses and thus attend to their specific needs.

### Estimate of Participant's Time: 60 minutes.

**Confidentiality:** This study is completely voluntary. You have the right to refuse to participate and you are free to withdraw your participation at any time without penalty. Additionally, you may choose to not answer any questions. I will protect your privacy to the maximum extent allowable by law. The interview will be tape-recorded and I will also take notes. I will label the taped interviews using a numerical coding system. Your name and/ or any other confidential information will be omitted. I will keep all information in a locked cabinet. I will be the only person along with the dissertation chair with access to the interviews. In order to gain a deeper grasp of the participants, I am also requesting that you give us permission to view your personal Web page (if any). The choice to allow us to view your personal Web page or to participate in the study will not affect you in any way.

### **Contact Persons for Participants**

Dr. Ann E. Austin 417 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 355-6757 or aaustin@msu.edu

Liliana Mina 424 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 353-8768 ext. 1 or mina@msu.edu

For questions about the participants' rights as human subjects of research please contact Dr. Ashir Kumar, Chair, Michigan State University Committee on Research Involving Human Subjects at (517) 355-2180 or <u>ucrihs@msu.edu</u>.

Based on the information provided above, you agree to participate in the project " College Student Involvement in an Online Class" conducted by Liliana Mina and supervised by Dr. Ann E. Austin. Participation in this study involves an interview and viewing of your personal Web page (if any). Please note that the researcher (Liliana Mina) may contact you at a later time to clarify a question.

Please indicate: Audio Tape-recorded View Personal Web Page Printed Name of Participant:

yes\_\_\_no\_\_\_\_ yes\_\_\_no\_\_\_\_

(Please print)

I agree to participate

Signature

Date

# **APPENDIX C**

# Announcement to Online Students

College Student Involvement in an Online Class

**Purpose:** You are invited to participate in a study designed to obtain information about the experiences of traditional-aged college students enrolled in online courses.

**Criteria for Participation:** As a student you qualify for this study when you meet the following criteria: The student (a) has been admitted to Midwest University (MU) as a regular degree candidate, (b) is enrolled in a minimum of 12 credits, (c) is enrolled in at least one of the online courses, d) and is 18 years of age or older.

No financial remuneration accompanies this study.

# Time Commitment: 60 minutes.

If you have any questions, please contact Liliana Mina at <u>mina@msu.edu</u> or 353-8768 ext. 1 or 339-2397. I will be calling you within a few days to schedule your interview. I assure you that I will take every measure possible to protect your confidentiality (this will be explained more in-depth when we meet. Please note that you will be able to withdraw from the study at any point you desire to do so).

Thank you for your time and consideration.

Dr. Ann E. Austin 417 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 355-6757 or <u>aaustin@msu.edu</u> Liliana Mina 424 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 353-8768 ext. 1, 339 –2397 or mina@msu.edu

### **APPENDIX D**

### Letter to Individuals Selected to Participate in the Study

College Student Involvement in an Online Class

Thank you for agreeing to participate in a research study on how traditional-aged college students describe their experiences in online courses at Midwest University. The interview consists of questions about how you experience the online classroom. I am interested in your attitudes, beliefs, and overall experiences with online teaching and learning. Please note that all information provided is confidential.

If you decide to participate, your participation includes an interview that will be tape-recorded. Your time commitment will be about 60 minutes. This participation should pose little risk or harm to you because you have the right to choose and control the information that you share with me. Your privacy will be protected to the maximum extent allowable by law. When the results of the research are written, I will mask your identity as a means of protecting you. When we meet for the interview, I will review these promises to you. You are free to decide not to participate in this study or to withdraw at any time.

If, as you reflect upon your participation, you have any questions or concerns, please contact Liliana Mina at <u>mina@msu.edu</u> or 353-8768 ext. 1 or Dr. Ann E. Austin at <u>aaustin@msu.edur</u> or 355-6757. For questions about your rights as a human subject of research you may contact Ashir Kumar, MC at 517/355-2180.

Your participation will deepen understanding of online classes here at Midwest University.

Thank you so much for your cooperation.

Liliana Mina

# **APPENDIX E**

### **Student Consent Form**

College Student Involvement in an Online Class

**Purpose of Study**: Thank you for agreeing to participate in the research project: College Student Involvement in an Online Class. I am conducting this interview as part of an inquiry of what teaching and learning is like for traditional-aged college students and their instructors in online courses. The results of this study will be used to describe the experiences of the participants in the online classroom. As a participant, you will benefit from this study through helping to describe what occurs in the online teaching and learning environment. I believe this information can help to develop a better understanding of the needs of traditional-aged college students enrolled in online courses and thus attend to their specific needs.

Estimate of Participant's Time: 60 minutes.

**Confidentiality:** This study is completely voluntary. You have the right to refuse to participate and you are free to withdraw your participation at any time without penalty. Additionally, you may choose to not answer any questions. I will protect your privacy to the maximum extent allowable by law. The interview will be tape-recorded and I will also take notes. I will label the taped interviews using a numerical coding system. Your name and/ or any other confidential information will be omitted. I will keep all information in a locked cabinet. I will be the only person with access to the interviews. In order to gain a deeper grasp of the participants, I am also requesting that you give us permission to view your personal Web page (if any). The choice to allow us to view your personal Web page or to participate in the study will not affect you in any way.

**Contact Persons for Participants** 

Dr. Ann E. Austin 417 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 355-6757 or aaustin@msu.edu Liliana Mina 424 Erickson Hall Michigan State University East Lansing, MI 48824 (517) 353-8768 ext. 1 or mina@msu.edu

For questions about the participants' rights as human subjects of research please contact Dr. Ashir Kumar, Chair, Michigan State University Committee on Research Involving Human Subjects at (517) 355-2180 or <u>ucrihs@msu.edu</u>.

Based on the information provided above, you agree to participate in the project "College Student Involvement in an Online Class" conducted by Liliana Mina and supervised by Dr. Ann E. Austin. Participation in this study involves an interview and viewing of your personal Web page (if any). Please note that the researcher (Liliana Mina) may contact you at a later time to clarify a question.

Please indicate: Tape-recorded View Personal Web Page I am 18 years of age or older	yesno yesno vesno	
Printed Name of Participant:	(Please print)	
I agree to participate		

Signature

Date

# **APPENDIX F**

# **Student Background Information**

Conege Student involvement in an Onnie Class	College	Student	Involvement	in an	Online	Class
--	---------	---------	-------------	-------	--------	-------

Date: Participant Number:					
Gender: F M Age:Course:					
Credits Spring 2003 Status:					
<ul> <li>Ethnic/Racial Group: (Circle number) <ol> <li>African</li> <li>American Indian/Alaskan Native</li> <li>Asian/Pacific Islander</li> <li>Black/African American Non-Hispanic</li> <li>Chicano/Mexican American</li> <li>Hispanic</li> <li>White/Caucasian Non-Hispanic</li> <li>Multiracial</li> </ol> </li> </ul>					
Residence: (on-campus) or (off-ca	ampus)				
Are you currently working: Yes No					
If yes, how many hours per week?					
How many online class(s) are you currently taking?					
How many online courses have you completed?					
What is your major?					
About your computer skills					
How comfortable are you in working with computers?					
Very Comfortable Very uncomfortable 1 2 3 4 6 7					
Do you have your own computer at your current residence? Yes No					

Do you share a computer at your current residence with someone else? Yes No

Do you have your have access to a computer at work? Yes No

Where do you usually use a computer for this class? Home Work Campus Other

How are you connected to the University's computer system?

Did you have any online learning experience before you took this class?

Did you complete the University's online orientation?

What kinds of things do you use computers for?

Approximately how many hours per week that you do any of the following:

	Task	Approximate hours per week used
1.	Games	
2.	Word Processing	
3.	E-mail	
4.	Chat rooms, instant messaging	
5.	Browsing the Internet	
6.	File Sharing via the Internet	
7.	Web page design	
8.	Spread sheets & Databases	
9.	Programming	
10.	Desktop publishing	
11.	Data Search & Analysis	

### **APPENDIX G**

### **Student Protocol**

Date: Participant Number: Audio Tape-recorded: Yes\_\_\_\_ No \_\_\_\_.

College Student Involvement in an Online Class

The purpose of this project is to conduct a field study of how traditional-aged college students describe their experiences in online courses at Midwest University. The interview consists of questions about how you experience the online classroom. More specifically, I want to chat with you about your experiences in the online classroom, as a student. I am interested in your attitudes, beliefs, and overall experiences with online learning. Please note that all information provided is confidential.

There are no right or wrong answers. You are free to stop the interview at any time. The interview will be audio taped and I will take notes. This interview will take approximately 60 minutes. Results from this study will be presented at educational conferences and submitted for publication. I appreciate your time and valuable input.

Do you have any questions before we begin?

## **LEARNING ONLINE**

- 1. I would like to start by having you describe your experiences thus far in \_\_\_\_(Course).
- 2. Tell me about your decision to enroll in an online class.
- 3. Did you have an online learning orientation?
- 4. How well prepared were you for your first online course?
- 5. And when you first started the course, what happened?
- 6. How do you feel about online courses?
- 7. Tell me how you feel about learning \_\_\_\_\_\_online. (Subject)

8. In what ways, if any, has your feelings about learning changed since you began

(Course)

9. In what ways, if any, have your feelings about learning \_\_\_\_\_\_ changed since the beginning of the semester? (Subject)

# **LEARNING ACTIVITIES**

- 1. Describe a typical online class session.
- 2. What kinds of learning activities do you prefer?
- 3. How are the learning activities structured in \_\_\_\_\_(Course)?
- 4. Do you have projects or discussions in \_\_\_\_\_? (Course)
- 5. How are students assigned to projects or discussion boards?
- 6. Describe for me a project or discussion that you have been involved in?
- 7. Describe for me the process of examinations and other online course requirements.
- 8. How do you share ideas with your online professor?
- 9. How do you share ideas with your online classmates?
- 10. How do you receive feedback from your online professor?
- 11. Describe the teaching strategies that have been most effective for you in \_\_\_\_\_(Course).

Which teaching strategies have you found to be least effective?

Tell me why you think they have not been effective?

- 12. What challenges, problems or obstacles do you face in the online classroom as compared to the face-to-face classroom?
- 13. In what ways has online learning changed the way you do things?

14. What are your main concerns in online learning?

# COMMUNICATION

- 1. How would you describe your communication with your online instructor?
- 2. How would you describe your online instructor's availability and accessibility?
- 3. How do you feel about sharing something about yourself online?
- 4. How would you describe communication between you and your online classmates?
- 5. Describe the types of discussion you have with your online classmates.
- 6. How has participation occurred?
- 7. Have your participation levels increased or decreased?

Why do you think that is?

- 8. When your professor poses a question as part of the course discussion, do you participate?
- 9. Do you feel comfortable posting a question or an opinion to a class listserv or chat-room?
- 10. Do you feel comfortable asking for clarification online? If yes, why do you feel comfortable asking for clarification online?

If no, why do you not feel comfortable asking for clarification online?

11. When you ask a question to the professor online, do you feel he/she knows who you are?

How do you know?

12. Do you feel more comfortable asking questions face-to-face or online?

Why?

13. How do you feel about using e-mail to discuss course work or grades with your professor?

- 14. How much time do you spend in the course's chat-room, discussion board, listserv or answering e-mail pertaining to the course?
- 15. Describe for me any changes you noticed about yourself since the beginning of the online course?
- 16. Who do you contact for help with computer and network problems?

How does this contact occur?

### **EXPECTATIONS**

- 1. What were your expectations when you decided to take an online course?
- 2. How have these expectations changed?
- 3. What do you think the strongest aspects of the online course have been? Why do you say this?
- 4. How would you describe your competency in online learning?
- 5. In what ways has taking a course online impacted your college experience?
- 6. If you were asked to design this online course in the future, what would you do differently?
- 7. Describe your best learning experience.
- 8. Describe for me your ideal online course.
- 9. Is there any other information or other aspects of online learning that you think would be useful for me to know?

Thank you for your cooperation. I really appreciate it.

### **APPENDIX H**

### **Faculty/Teaching Assistant Protocol**

Date: Participant Number: Ethnicity: Gender: Course: Tape-recorded: Yes No .

College Student Involvement in an Online Class

The purpose of this project is to conduct a field study of how traditional-aged college students describe their experiences in online courses at Midwest University. The interview consists of questions about how you experience the online classroom. More specifically, I want to chat with you about your experiences in the online classroom, as an instructor. I am interested in your attitudes, beliefs, and overall experiences with online teaching. Please note that all information provided is confidential.

There are no right or wrong answers. You are free to stop the interview at any time. This interview will take approximately 60 minutes. Results from this study will be presented at educational conferences and submitted for publication. I appreciate your time and valuable input.

Do you have any questions before we begin?

- 1. What is it like to be a faculty member at MU?
- 2. How long have you taught at MU?

### **TEACHING ONLINE**

1. I would like to start by having you describe your experiences thus far with teaching \_\_\_\_\_.

(Course)

- 2. Tell me about your decision to teach this class online.
- 3. Did you have any online instructor training?
- 4. How well prepared were you to teach your first online course?
- 5. And when you first started teaching the course, what happened?
- 6. How do you feel about online courses?
- 7. Tell me how you feel about teaching \_\_\_\_\_online. (Subject)
- 8. How many semesters have you taught online?
- 9. In what ways, if any, has your feelings about teaching \_\_\_\_\_\_ changed since you began teaching online? (Subject)
- 10. In what ways, if any, have your feelings about teaching this online course changed since the beginning of the semester?

## **INSTRUCTIONAL ACTIVITIES**

Describe a typical online class session.

- 1. What kinds of teaching activities do you prefer?
- 2. How are instructional activities structured in your online course?
- 3. Do you have projects or discussions in your online course?
- 4. How are students assigned to projects or discussion boards?
- 5. Describe for me the process of examinations and other online course requirements.
- 6. How do you share ideas with your online students?
- 7. How do you give feedback to your online students?
- Describe the teaching strategies that have been most effective in teaching
   <u>(Subject)</u>.

- 9. Which teaching strategies have you found to be least effective? Tell me why you think they have not been effective?
- 10. What challenges, problems or obstacles do you face in attempting to incorporate your teaching knowledge and skills from the face-to-face classroom to the online classroom?
- 11. In what ways has online teaching changed the way you do things?
- 12. What are your main concerns in teaching \_\_\_\_\_(Subject) online?

# COMMUNICATION

- 1. How would you describe students' communication with you in your online course?
- 2. How would you describe your availability to students taking your online course?
- 3. How do you feel about sharing something about yourself online?
- 4. How would you describe communication between students in your online course? How has participation occurred?
- 5. Describe the types of discussion you have with students enrolled in \_\_\_\_\_.

(Course)

- 6. How much time do you spend in the course's chat-room, discussion board, listserv or answering e-mail pertaining to the course?
- 7. Who do your students contact for help with computer and network problems? How does this contact occur?

### **EXPECTATIONS**

1. What are your expectations of the students taking your online course?

How have these expectations changed?

2. What do you think the strongest aspects of the online course have been?

Why do you say this?

- 3. How would you describe your students' competency in online learning?
- 4. Are you aware of any challenges students have had with the online course?

How have you attempted to minimize the challenges?

5. Describe for me any changes you noticed in your students since the beginning of the online course?

Have their participation levels increased or decreased?

How do you know that?

Why do you think that is?

If you were designing this online course in the future, what would you do differently?

- 6. Describe for me your ideal online course.
- 7. Is there any other information or other aspects of online teaching that you think would be useful for me to know?

Thank you for your assistance. I really appreciate all of your help.
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