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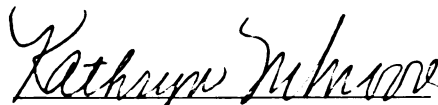
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**LISTENING TO THE VOICES OF STUDENTS: THE ROLE OF STUDENT-
TEACHER INTERACTION TO COURSE COMPLETION IN ON-LINE COURSES**

By

Jennifer Butler Wimbish

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ABSTRACT

LISTENING TO THE VOICES OF STUDENTS: THE ROLE OF STUDENT-TEACHER INTERACTIONS TO COURSE COMPLETION IN ON-LINE COURSES

By

Jennifer Butler Wimbish

Using qualitative methodologies that included interviews with 12 on-line writing students and examination of documents, this study examined the ways students and teachers interact in on-line courses from the perspective of the community college student who has successfully completed an on-line writing course. Interviews were also held with the instructors who taught the two on-line courses. A retention model based on academic and social integration served as the foundation for the conceptual framework for the study. Concepts related to responding to the learning needs of students including creating an environment where students feel comfortable in interactions with the instructor were also included in the conceptual framework. The research examined the content and timing of interactions that supported course completion. The guiding research question was from the perspective of the student, what interactions occur between a student and an instructor in an on-line course? Do the student-teacher interactions contribute to course completion? If so, what are the content and timing of the interactions that encourage course completion?

The findings of the study indicated that from the perspective of students in the study student-teacher interactions do contribute to course completion. The content of the interactions that assisted with course completion included conversations about the technology and the technology skills required for the course, and student-teacher interactions that allowed students to clarify assignments and discuss teacher feedback on graded assignments. Additionally, course completion is encouraged by student-teacher interactions that are individualized and that respond to the specific learning needs of each student. Moreover, student-teacher interactions that address the needs of students when they faced personal problems, including flexibility with upcoming assignments, created an environment supportive of course completion. Finally, student-teacher interactions about support services appropriate for each student contributed to course completion.

From the perspective of students in the study, especially helpful are those interactions that occurred before students begin assignments and those interactions that happened after instructors provided feedback on assignments. Responses to student questions delivered within a 24-48 hour period reassured students that their communications with the instructor were important and encouraged communication, thereby supporting course completion.

Interactions, where the instructors showed they respected and cared, and where the instructors shared who they were as individuals, assisted in creating an environment whereby the students said they felt comfortable in asking questions and discussing issues with the instructor; this type of environment supported course completion.

Dedicated to my husband Michael Wimbish and my son, Michael Wimbish, Jr.,
who have supported me during the journey toward accomplishment of the Ph.D.,
including completing the dissertation, and to my father, the late Louis Grant Butler, and
my mother, Jenell Butler, who have always shown me that they loved me and who
instilled in me a love for learning and for excellence in all that I do.

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CHAPTER 1

INTRODUCTION

Explanation of the Study

I conducted a qualitative study with 12 community college students who successfully completed an on-line college level writing course at two different community colleges. The purpose of this study was to understand, from the perspective of the student, what types of student-teacher interactions occur in an on-line environment. Also, from the student perspective, I wanted to determine if certain teacher-student interactions contributed to course completion. If so, what were the content and timing of the interactions that contributed to assisting the student with completing an on-line course with a 2.0 average or better? Throughout the paper, the term successful in completing or passing is used to mean students completing the course with a 2.0 (based on a 4.0 scale) grade point average (GPA) or better.

There were two major foci for this study. The first was a look at course completion in an on-line course. This was a study about persistence defined as course completion. I was interested in this study because a review of the literature revealed that the non-completion rate for distance education courses is high. The history of high non-completion rates in distance education, coupled with the high non-completion and drop-out rates in community colleges generally, makes it even more important for educators in such colleges to become engaged in research studies that seek to discover what makes the difference in students completing courses.

The second focus for the study was to examine, from the students' perspective, the contribution student-teacher interactions make to course completion. The major

focus was clearly on student-faculty interactions in the on-line environment. I was interested in learning more about how students describe the interactions between their instructors and themselves and the difference the instructors make in course completion in an on-line setting. The target population was community college students who were successful in completing a college level on-line writing course.

I elected to work with community college students because I am an administrator, responsible for overseeing various instructional units at Lansing Community College engaged in creating on-line courses. This study was meaningful for me for two major reasons. First, I believe both the literature review necessary for developing the research study and the information gained from the research itself are valuable to me as I continue to interact with students and instructors about ways we may work together to develop on-line courses that assist students in being successful in completing the courses.

Secondly, I have always believed that college administrators must remain joined to students and faculty in order to provide leadership that connects the college to the mission of providing quality learning experiences for students. Aside from seeking to learn more about student learning, administrators must have conversations with students to understand, from their perspective, what makes a difference in their success at the institution. It is equally important for administrators to discuss teaching and learning issues both with students and with faculty. I believe college administrators must seek to understand the faculty role and those aspects of the student-faculty relationship that are helpful to the student in achieving educational goals. Green (1990) shares a philosophy similar to mine when she notes that in order to improve teaching and learning for

students, administrators must affiliate with faculty and make teaching a top priority. Therefore, a research study allowing me to focus on the student perspective, and student-faculty interactions that support course completion allowed me to engage in research relating to an important value that I have tried to act upon in my role as a college administrator: conversation with students and faculty as a guide for administrative decisions germane to teaching and learning.

Statement of Problem

Changes in society are causing community colleges to expand the methods used to deliver courses. The change in the 1990's from the Industrial Age to the Information Age has brought with it the integration of new technologies into all aspects of society. In community colleges, like other sectors of society, the technology is revolutionizing the way we do business. Thus, for the first time, many community colleges are offering learning opportunities delivered by computer. On-line instruction is becoming a standard component of instructional delivery in higher education (Cintron & Dillion, 1997). The technology is used not only to provide greater access to students for a variety of learning experiences, but also to provide opportunities for students to learn to use the new technologies. In a document examining the use of computer and on-line courses in instruction in higher education, Brey (1991) notes a significant increase in the number of community colleges that are using and planning to use on-line courses as a method of instructional delivery. Cintron and Dillion (1997) mention data that show that it is anticipated more community colleges will be turning to distance education than in any other sector of higher education.

Community colleges are also being asked to develop training approaches to prepare workers to perform effectively in the newly emerging society and to provide educational experiences for adult learners. Dolence and Norris (1995) predict that by the year 2000 one seventh of the workers in the workforce will need training to function successfully in this developing workplace. Dolence and Norris (1995) also stress that the training will need to be offered at multiple times. Many individuals in the workforce have families and a variety of needs that will require classes to be offered on weekends, late at night, and early in the morning. Numerous community colleges prefer delivery of courses on-line because courses may be accessed by students regardless of time, space, and place as an answer to the newly identified needs of the workforce (Leach & Milliron, 1998). Moreover, community colleges serve a large adult learner population who also need courses convenient for family and work commitments. In its recent yearly update, the American Association of Community Colleges noted that 58% of the learners in community colleges in 1997 were adult learners (on-Line Update). The aforementioned societal demands are causing many community colleges to invest in on-line approaches to learning as a method for preparing students to function in a highly-technological society while creating learning opportunities convenient for adult learners and workers.

As institutions of higher education look to increase delivery of instruction by distance learning by adding new delivery methods such as on-line computer instruction, institutions must be concerned with course completion and persistence rates. From the period of correspondence courses to telecourses and two-way interactive television courses, the history of distance education has been plagued with high course drop-out

rates. Rekkedah (1983) states that the student drop-out rate in distance education classes constitutes the most significant area for decisions about improvements in distance education. Scanlon (1985) accents this fact when he indicates that the drop-out rate for telecourses was twice that of traditional courses. Kozma (1993) found that for distance learning courses in some colleges and universities the drop-out rate could be as much as 56%. Merisotis and Phillips (1999) note in a review of the research literature on distance education that one study found that students involved in on-line courses had higher drop out rates (32%) than in traditional on campus classes (4%). Merisotis and Phillips (1999, p. 33) further noted:

The issue of student persistence is troubling for distance education . . . if a major reason for providing distance education is to provide access to higher education for students who would normally not be able to participate, and if a substantial number of students fail to complete their courses, the notion of access becomes meaningless.

The problem of course completion of on-line students is further aggravated by the high attrition rates often found nationally in community colleges. National research suggests that 36% of those students who are enrolled in community or technical colleges and who have a plan to stay for two or more years leave by the end of the first year and do not return to any college for over a three year period (Berkner, Choy, Fitzgerald, Horn, and Hoachlander, 1994).

Need For Study

The interactions of students and teachers are important to a study of persistence because one of the most constant findings is that persistence is facilitated by student-teacher contacts. Astin (1975), Bean and Noel (1980), Lenning (1982), Pascarella (1980), and Pascarella and Terenzini (1980), conducted persistence studies in higher

education and all concluded that teacher-student relationships have a positive effect on student development and persistence. Additionally, various research studies conducted in a variety of distance education settings have concluded that faculty-student interactions is one of many variables that encourage persistence (Burnham, 1988; Crane, (1985); Dirr and Hegel, (1990). The findings of various research studies on persistence are consistent with the findings of Chickering and Gamson (1987) who, in reviewing 50 years of research on teaching and learning, found that one of the seven major principles of good practice is that quality learning experiences encourage contact between student and faculty. Tinto (1989) notes that over the past 15 years the most consistent finding has been that positive interactions between students and faculty have a direct bearing on whether students persist to earn a degree. Tinto goes on to state that the finding is the same, regardless of the type of institution or type of students. The more faculty members interact with and become engaged with students, the more likely the students are to stay in college.

Understanding that positive faculty interactions with students are important to student success, it is critical for us to understand what types of interactions between faculty and students in the on-line environment contribute positively to persistence and course completion. O'Banion (1997) notes that many critics of on-line learning stress that one of the weaknesses of the technology is that it has a dehumanizing effect and creates barriers to human interaction. Since more recently computers have been used to create new and unique communications and connections between human beings, O'Banion (1997) further notes the focus must be on discovering what types of on-line

communication build personal relationships and form communities critical to student success.

It has long been understood that the mission of the community college is to assist students from widely diverse student groups, often from at-risk, disadvantaged populations, to be successful in achieving their educational goals (Culp and Helfgot, 1995). Community college educators pride themselves in taking students “where they are” and providing opportunities that help them find a career direction while moving through the institution to accomplish their educational goals. Culp and Helfgot (1995) note that community colleges are organized around the principle of student success and are only successful in realizing their mission when students are successful in completing their educational goals. When student success and course completion are the goals of community colleges, and research has shown that faculty are critical to student success, we know that research is important in assisting community college educators in understanding what faculty can do to assist students in completing on-line courses. In discussing the role of research, Plater (1995) says that educators should be trained pedagogical researchers who collect information systematically from students and use the information to benefit students while they are learning. Plater further notes that faculty should use the information to improve their own abilities to stimulate success for future students. This goal of this study was just that: to learn from students those student-teacher interactions that assist the student in completing the course in order for the researcher to understand student-teacher interactions that assist students in on-line environments.

Figure 1

**Conceptual Model
Student-Teacher Interactions That Support Course Completion**

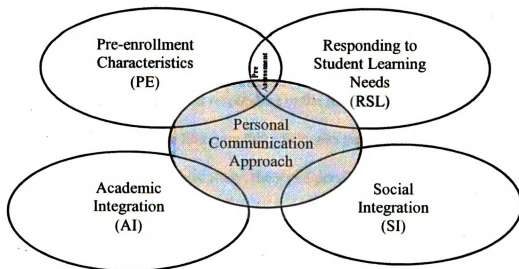
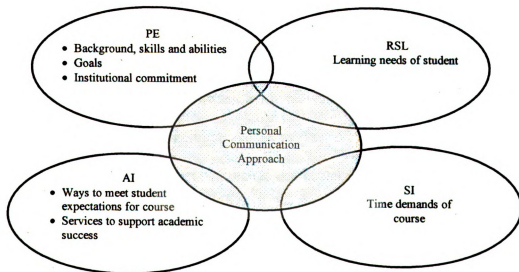


Figure 2

Interaction About



Conceptual Framework

A review of both the persistence literature and the literature of expert opinions of on-line educators revealed two major concepts consistent with my experiences in on-line courses and my beliefs about teaching and learning. Tinto's theory of academic and social integration and concepts responding to the learning needs of students are concepts which emerged in the literature that I have elected to embrace in my research study. First, the major focus of my study, theory of persistence in distance education, is discussed. It is based on student-teacher interactions directed to the academic (defined primarily as study needs) and social needs of students. Secondly, I borrow major concepts from a model of teaching and learning related to responding to the learning needs of students in a distance education environment. The teaching and learning model stresses the importance of interactions occurring in an environment where students are comfortable in communicating with the instructor.

I elected to combine the concepts from the persistence theory with principles focused on addressing the learning needs of students because my experience as a counselor, who was also a classroom teacher in a community college setting, has led me to believe that in order for the instructor to be successful in assisting students with course completion, attention must be given to the academic, social, and learning needs of students as well as the development of an environment where students feel comfortable in interacting with the instructor. As a counselor, I was trained in the affective and social domains of experiences and found this background helpful in assisting students with course completion. As a secondary education major, I was trained in identifying and responding to the learning needs of students, and I discovered

that this background was equally important to interacting with students in order to promote course completion. Consequently, the combination of the major variables in the two different concepts, which focus on academic, social, affective, and learning needs of the learner, are consistent with my philosophy of persistence and were used to guide this research study.

Academic and Social Integration

A review of the literature for a model of persistence revealed that one of the most often researched theories related to persistence has been the concept of academic and social integration. Spady (1970), Tinto (1975), and Kember (1990) argue for a model of student persistence in which college students are assisted in completing degree programs and courses by integration into the academic and social systems of the college. In the last twenty years, Tinto's model of persistence has been one of the most widely researched models of persistence (Bean, 1982). It has been validated, especially for traditional age students at four-year colleges and universities, by numerous studies (Pascarella and Chapman, 1983; Terenzini, Pascarella, Theophilides, and Lorang, 1985; Terenzini and Pascarella, 1991; and Voorhees, 1987). Kember modified Tinto's model of persistence for his research with distance education students. Because this study was conducted with on-line distance education students, Kember's model of student integration was used to guide the study. Although not clearly defining the role of the teacher, both Tinto and Kember conclude that the teacher is critical to persistence. Tinto's academic and social integration theory has its roots in the work of Durkheim who drew upon the social psychology field to suggest that suicide is more likely to occur when individuals are insufficiently integrated into the fabric of society (Tinto,

1975). Durkheim further theorized that suicide is likely to increase when sufficient moral integration and collective affiliation, described as association with people who create a feeling of belonging, do not occur.

Based on the work of Spady and Durkheim before him, Vincent Tinto theorized that students come into the college setting with background characteristics such as family background, academic skills and abilities, pre-college schooling, and career goals that interact with each other and influence a student's commitment to course completion and graduation from the college (Tinto, 1989). The pre-enrollment characteristics of students make the academic demands of college manageable or difficult. Tinto also stressed that students come to the college environment with goal commitments that influence their commitment to degree completion. In the academic integration portion of Tinto's model, goal commitment leads to higher grade performance and intellectual development, that in turn lead to academic integration. Goal commitment reduces the likelihood that a student will drop out.

In the social integration portion of the model, Tinto (1989) theorized that traditional age students must make a transition from high school to college. Often this transition includes leaving home and moving to a college campus. Tinto believed that relationships with other students, faculty, and college administrators would assist the student with remaining in the college setting. Integration into the college's social system is expected to result in participation in college clubs and other extra-curricular activities associated with the college environment that develop interactions with others in the college. Friendships are created and support systems are established. Moreover, affiliation with others in the college increases a student's commitment to the institution

that potentially reduces drop-out (Tinto, 1989). Tinto does note that barriers external to the college setting, such as financial problems, may impact persistence. He suggests that these barriers are minimized for students who are strongly committed to the goal of completing a college education, who are committed to a particular institution, and who have a support system which may assist them in dealing with barriers which emerge. Kember (1995) adopted Tinto's (1987) model of persistence, keeping Tinto's pre-enrollment components; however, Kember clarified that for distance education students the academic integration portion must include connecting the goals of the student to the course content. Furthermore, he noted that for distance education students, academic integration also includes all of the interactions the student makes with faculty and staff in the institution who support their success in a course or program of study. Interactions with college services that support academic success may include but are not limited to interactions with tutors, librarians, and administrators. The goal is to engage each student in interactions with college staff that are important to that individual student's academic success.

Kember (1995) significantly modified Tinto's (1987) definition of social integration. In defining social integration, Kember notes that most often distance education students are part-time adult students who study from home. He notes that distance students do not need to make a transition from home to college but instead make a transition from non-student to student status. Kember further explains that because many distance learners are working adults with families, they add the role of student to their already existing roles, which often include those of spouse, worker, and parent. Kember contends that the social system that is most likely to serve as a support

system for distance education students is that of family, friends, and co-workers. It is for this reason that Kember defines social integration in his model as the extent to which students find time for study and for the social systems that impact their lives outside of the college environment. Kember then argues that academic integration that results in students understanding the connection between the course and their educational goals, and in connecting to college resources necessary for academic success, and social integration that results in students developing time schedules that include adequate time for study, friends, and the social and personal needs of students, serve as intervening variables to other barriers students confront which increase their chances of persistence.

Kember (1995) concludes that faculty have a role to play in assisting students with academic and social integration. Kember believes that once the course begins, the integration process may be facilitated by the two elements of integration called collective affiliation and normative congruence. In the distance education environment, collective affiliations may be developed by communication between students and faculty or other college staff. These interactions connect students to the academic and social systems of the colleges. Normative congruence may be enhanced by instructional processes which connect student goals to the outcomes of the course. Furthermore, Kember (1995) suggests that student-faculty interactions, where students gain information and are assisted with strategies to discover ways to develop appropriate time schedules, also support persistence.

Tinto and Kember both stress that persistence studies should be tailored to the target population and/or environment of the research project. Because Kember's study did not include students engaged in on-line courses, the major focus of my research

study, and was not centered on the role of the teacher, I reviewed the literature on persistence and on-line courses to determine if variables, other than those identified by Kember, should be considered in this study. Finding few research studies related to on-line courses, a new instructional delivery method, the literature which presented the opinions of experts in the field was sought. A pattern emerged. Many of the experts writing about on-line courses suggested that in order for students to remain in on-line courses the instructor must respond to the learning needs of students while developing an environment where students feel comfortable in asking questions and in addressing issues. While there were many views on this topic, I elected to use the work of Clark and Verduin (1991) that summarizes many of the principles stated in the Guiding Principles for Distance Learning in a Learning Society established by the American Council of Education.

Responding to the Learning Needs of Students While Personalizing Communication

Clark and Verduin discuss an approach to teaching and learning that they have found effective in teaching distance education courses for adult learners. The two authors use an approach to teaching and learning that places student learning at the center of the process. Clark and Verduin (1991, p. 144) state, “Adults learn in response to their needs and perceptions, not necessarily to those of their instructors.” The authors (Clark & Verduin, 1991) also present a model for student-teacher interactions based on the development of communication interactions that are personalized, where each student feels valued, supported, and encouraged to learn.

Pre-assessment Interactions: In the beginning of the course, Clark and Verduin (1991) encourage the instructor to engage in pre-assessment communication activities

with the student that assist the instructor in understanding the academic background, educational goals, and belief systems of the student. Pre-assessment information is then used by the instructor to engage the student in future learning activities that meet his/her learning style and academic needs. Moreover, the pre-assessment information is used to assist the instructor in directing the student to learning experiences that make the course relevant for the student and consistent with his/her educational goals. Gibson (1998, p. 16) addresses the importance of pre-assessment activities when she emphasizes that those involved in teaching distance education courses should develop survey interviews and questionnaires that help the instructor understand each learner so that learning experiences are developed that are appropriate for each student. Gibson (1998, p. 139) further asks, “As we design learning experiences, we need to ask ourselves, are we enabling a variety of learning styles to coexist?”

Interactions About Learning: During the course, faculty are encouraged to engage the students in dialogue about what they are learning, and what difficulties they are experiencing with the course content. The purpose of the dialogue is to guide students to activities that aid them in overcoming barriers identified. Clark and Verduin (1991) note that instructors should use formative evaluation processes that give the student and teacher information about the student’s learning progress. If the desired outcomes for the instructional unit have not been achieved, then the instructor may modify the learning material or lead the student to study approaches that are more effective in assisting the student to obtain the objectives of the learning experience. In discussing the importance of classroom assessment, Angelo and Cross (1993) argue for a similar approach to address student learning needs. They suggest that teachers

observe students in the process of learning in order to understand how students learn and how students respond to particular teaching approaches. Information from the assessment of learning would then be used by the instructor to refocus the teaching techniques to help each student engage in learning activities that are successful in assisting the student in obtaining the objectives of the lesson. Angelo & Cross (1993) further note that at other times, observation of the learning process may lead the instructor to direct the student to different ways of thinking about a subject or new study techniques that assist the student in achieving the learning outcomes for the instructional unit.

Personal Interactions: Clark and Verduin (1991) also stress that instructors should enter into discussion with students in an environment where students feel free to share their opinions and to ask questions. In order for instructors to understand student learning, it is important that the student feel comfortable in entering into interchange with the instructors. In discussing the issue of communication further, Clark and Verduin (1991, p. 18) state:

Communication by definition is the process of sharing ideas, needs, and perceptions and can be used to build considerable unity and rapport between educational staff, students, and the institution. To be effective communication should be multidirectional and two-way in nature.

Thus, for communication to serve its purpose, Clark and Verduin (1991) explain the interchange should occur in an environment where all involved feel comfortable in expressing concerns, sharing opinions, and asking questions. In order for students to feel valued and comfortable in interacting with instructors, it is suggested that communication should be both personalized and individualized. Clark and Verduin

suggest that communication is personalized when the conversation is customized for a specific student and occurs based on knowledge that the instructor has about the background, history and values of the student. Clark and Verduin use the term individualized to refer to a type of instruction where the discussions are about and respond to the specific learning needs of each student.

Holmberg (1995), in discussing the importance of personalizing communication, states that a feeling of isolation, often associated with distance education and high drop-out rates, may be minimized by personalized approaches to communication. In discussing the issue of the value of humanizing communication in distance education, Borje Holmberg (1995) further notes that researchers for years have concluded that where a warm, friendly attitude is used by the instructor in communicating with students there are higher completion rates. The research work of Posz (1963) and Brady (1979) are examples of research studies that have demonstrated the positive impact of personal approaches on persistence in distance education. In explaining the concept of personalized communication further, Holmberg (1995) observes that when communication between teacher and student occurs only on the basis of assignments, and it becomes very matter-of-fact correction and without personalizing the communication for the student, the education experience can become one that is dehumanizing for students.

Mason (1994, p. 7) agrees with Clark and Verduin on the importance of creation of an open communication system when, in discussing the role of the teacher as moderator in distance education, he states:

Creating a friendly, social environment for learning is also seen as an essential moderation skill. Sending welcoming messages at the beginning and encouraging participation throughout are specific examples, but providing lots of feedback on students' inputs and using a friendly, personal tone are considered equally important.

Kember's Persistence Model Connected to Concepts From Clark & Verduin's Teaching and Learning Model

In describing the types of interactions that would occur based on the two major concepts selected, it is important to mention that the two models have some overlapping components. In the beginning of the course, a combination of the two models would encourage student-teacher interactions to be focused on understanding the pre-enrollment characteristics of the student. Student-teacher interactions would focus on understanding the intentions the student has for the course (Kember/Clark and Verduin) in order for the instructor to guide the student to learning experiences that make the course relevant for the student. Additionally, initial interactions would be centered on understanding the academic background of the student and assessing "academic readiness" for the course so that the instructor may incorporate into the course learning experiences that support the student in meeting the academic expectations of the course (Kember/Clark & Verduin). Moreover, interactions would also occur centered on assisting the student in assessing the academic support services he/she will need to be successful academically while helping the student to understand how to access the appropriate services (Kember). Finally, the instructor would further seek to aid the student in understanding the time requirements of the course in order to assist the student with developing a time schedule that accommodates study, personal, family, and social needs (Kember).

As the student completes assignments, the instructor continually provides feedback that assists the student in understanding progress in the course. Student-teacher interactions would focus on improving the learning process for the student. When a student experiences difficulty, the instructor would modify the instruction or engage the student in conversation that would lead the student to new ways of thinking or studying to obtain the desired learning outcomes (Clark & Verduin). Further, interactions that continue to focus on support services available and needed by each student to support academic success would continue (Kember). Moreover, the instructor would seek to develop a communication approach for interchange where the student feels comfortable in interacting with the instructor about questions, issues, and concerns specific to the course (Clark & Verduin).

While Tinto (1987), Kember (1995), and many researchers document that increased student-teacher interactions encourage persistence, and a few studies note that conversations of an intellectual nature are connected to persistence, little research has focused on the content and timing of student-teacher interactions in an on-line environment in order to understand if certain student-teacher interactions encourage course completion. Additionally, there is a limited number of research studies existing related to course completion in an on-line environment in a community college setting. Merisotis and Phillips (1999) note the limited number of studies for the community college population when they mention that the vast majority of original persistence studies have been conducted at four-year colleges and universities.

Tinto (1979) has encouraged those interested in persistence studies to use his work as a framework for further research to build upon as we design research studies to

learn more about persistence in different settings for various populations. Intuitively, it appears a framework, combining the variables of Tinto's persistence theory with concepts of experts in on-line instruction, provides a context from which to gain an understanding of the student-teacher interactions that occur in an on-line environment to determine if certain interactions contribute to course completion. Concepts of academic and social integration, responding to the learning needs of students, and personal and individualized communication systems provide a focus not only for understanding the student-teacher interactions that occur but also for studying the content and timing used for interactions to determine if certain interactions contribute to course completion.

RESEARCH QUESTIONS

Primary Research Question

From the perspective of the student, what interactions occur between a student and an instructor in an on-line course? Do the student-teacher interactions contribute to course completion? If so, what are the content and timing of the interactions which encourage course completion?

Secondary Questions

Connections to Student Pre-enrollment Characteristics

From the student perspective, what are the pre-enrollment characteristics; family background, previous college, educational experiences and belief systems prior to course entry which assist or hinder course completion in an on-line course? Do student-teacher discussions about these pre-enrollment factors occur? If so, do these discussions contribute to course completion? If so, what are the content and timing of the interactions which encourage course completion?

From the student perspective, what are his/her academic skills and abilities before entry into the on-line environment? Do student and teacher discussion about these student skills and abilities occur? If so, does the discussion contribute to course completion? What are the content and timing of the interactions which encourage course completion?

From the student perspective, what are the goal and institutional commitments of the student before entry into the on-line course? Do student-teacher interactions occur where discussion focuses on these commitments? If so, do they contribute to course completion? If so, what are the content and timing of the interactions which encourage course completion?

Academic Integration

From the student perspective, do student and teacher interactions occur where the discussion is focused on the student's expectations for the course and ways for those expectations to be met? If so, do these conversations support course completion? If so, what are the content and timing of the interactions which facilitate course completion?

From the student perspective, do student and teacher discussions about the support services needed to support course completion occur? If so, from the student perspective, do these conversations support course completion? If so, what are the content and timing of the interactions which facilitate course completion?

Social Integration

From the student perspective, do student and teacher discussions about the time demands of the course in order to develop schedules which include time for study, family, and work occur? If so, from the student perspective, are these discussions

supportive of course completion? If so, what are the content and timing of the interactions which facilitate course completion?

Responding To Learning Needs

From the student perspective, do student-teacher interactions occur which focus on the learning needs of the student? If so, from the student perspective do these conversations support course completion? If so, what are the content, and timing used for delivery of these conversations?

Open Communication

How does the student describe the communication approaches used by student and teacher in an on-line course? Do these communication approaches support course completion? If so, what are the features of the communication approaches which contribute to course completion?

CHAPTER 2

LITERATURE REVIEW

Introduction

The literature review contains three primary areas. To establish a foundation for the study, in the first section of the review, I present a brief chronological view of distance education and discuss a definition of distance education which emerged during each period. In the second section of the review, I share research related to the persistence model used to guide the research study. In the third section of the review, I discuss the opinions of on-line educators who are experts in the field. In recent years, on-line experts have mentioned that they have begun to discover that many on-line and distance education courses incorporate traditional face-to-face interaction into distance education; therefore, I have also included in this section related research from the teacher effectiveness literature for traditional classes. Finally, the review is concluded with a summary.

History of Distance Education

Distance education began in higher education in the United States as early as 1890 with the initiation of correspondence courses by William Rainey Harper at the University of Chicago (Moore, 1990). Mainly, instruction was delivered by printed materials with opportunities for students to communicate with the instructor by mail and later by phone. Next, technology emerged whereby instruction could be delivered by radio, television, and video. Supplemental instruction was often available by telephone and then later by fax machines. During the period of time when distance education was delivered by correspondence, radio, television, and video, distance education continued

to be defined by instruction where student and teacher were normally separated geographically and in time.

A significant development in the field of distance education was the discovery of two-way interactive television which made two-way communication possible. Two-way interactive television is a live broadcast where an instructor and a group of students may communicate with another group of students who are in a different location. Students and instructors are able to communicate with one another in “real time.” Audio instruction, that presented chances for two-way communication, also emerged. Opportunities for two-way communication ushered in an age of distance education referenced as synchronous, a communication happening in “real-time,” live during the instructional session (Willis, 1994). During the period of two-way communication, the definition of distance education was modified to include the following three critical elements: 1. the majority of the communication is non-contiguous; 2. communication involves opportunities for two-way communication between and among students and the teachers; and 3. technology is used to mediate the communication (Simonson, 1993).

Next, teleconferencing media emerged, which includes audioconferencing, videoconferencing, and the relatively new medium of computer conferencing. On-line instruction, often referenced as Computer-mediated conferencing (CMC), the subject of my research, is considered to be teleconferencing. In the on-line course environment, students receive instructional materials, such as the syllabus, by computer. Lessons may be mailed, faxed, or sent via computer technology to the instructor. In terms of technology, on-line instruction refers to a type of networked mainframe software that

facilitates structured asynchronous communication (Eastmon, 1995). Typically, however, in on-line courses students have opportunities for two-way communication that may be asynchronous or synchronous.

The early approaches to on-line instruction were considered to be asynchronous. Asynchronous instruction occurs when two-way communication is delayed before or after the instructional session (Willis, 1994). The invention of chat rooms and multi-use objective-oriented environments (MMO's) introduced opportunities for on-line classes to include communication in "real time" synchronous communication. Discussions may be announced, and students and instructors may have written conversations about a given topic in "real time." On-line courses also provide occasions for individual and group communication. Moreover, in many on-line courses, audio and video supplemental instructional materials are available. In some settings, if desired, students also have opportunities for face-to-face tutoring, orientations, and study sessions.

During the period in which teleconferencing emerged, the definition of distance education remained basically the same as defined during the period of two-way communication. It is interesting to note, however, that definitions are emerging which present the students as learners engaged in learning. Furthermore, some are connecting definition statements with suggestions that organizations providing distance learning are accountable for ensuring quality experiences for learners. For example, in a document titled the "Guiding Principles for Distance Learning in a Learning Society, " distributed by the American Council on Education Distance (1999, p. 2), distance education is defined as follows:

Distance learning is a system and a process that connects learners with distributed learning resources. While distance learning takes a wide variety of forms, all distance learning is characterized by: 1. Separation of place and/or time between instructor and learner, among learners, and/or between learners and learning resources, 2. Interaction between the learner and the instructor, among learners, and/or between learners and learning resources conducted through one or more media; use of electronic media is not necessarily required. The learner is an individual or group that seeks a learning experience offered by a provider organization that creates and facilitates the learning opportunity. The provider approves and monitors the quality of the learning experience.

The literature written in the last half of the 1990's presents a great deal of discussion about what type of instruction is characterized as distance education and/or on-line instruction. While there is some agreement that distance learning is considered individual learning, some authors writing about on-line instruction are noting that there is a convergence between distance learning and tradition learning. Recently, Thompson (1999) stated that distance educators have come to realize that there has been a gradual "blurring of the distinction" between campus-bound and distance teaching and learning environments. The intermingling of traditional and distance learning has meant that within the distance education courses, aside from including instruction where students and teacher are separated, often it also includes opportunities for some of the students to have face-to-face interactions with teachers and other educators within the institution. In attempting to answer the question of what type of instruction is on-line and various other forms of distance instruction, Clark and Verduin share their opinions that if less than half of the instruction in a college course is completed through face-to-face instruction, the course is considered to be distance education instruction (Clark and Verduin, 1991).

Recently, in regard to learning and persistence, some researchers in the field of educational technology are suggesting that research studies be planned based on concepts related to cognitive efficiency. Research design would include elements focused on selecting the most appropriate media for instruction in a particular subject because of efficiencies gained in speed, ease, or effectiveness (Cobb, 1997). Cobb (1997) further suggests that distance learning research in the future will further clarify or refute the theory of cognitive efficiency.

Academic and Social Model of Persistence

Persistence is a complex phenomena which may encompass a number of variables and relationships. Bean (1982) notes that one of the important things a researcher must do when conducting studies related to persistence is to decide on the variables that will be used to guide the research study. He further suggests that researchers look for theories or models of persistence to guide their studies because models recognize the importance of relationships to persistence. Lenning (1982), in commenting on designing persistence studies, states that persistence is a complex issue and can relate to a multitude of variables that are too many to study. Lenning suggests that researchers identify carefully the variables they will study based on his or her theory of retention, knowledge of the literature, and knowledge of the situation being studied. Thus, guided by the thinking of Bean and Lenning, researchers who have been writing about persistence in education for many years, a model which concludes that student-teacher interactions are important to course completion was selected.

The review of literature led me to Tinto's Model of Persistence based on the concept of academic and social integration. Tinto's concept of academic and social

integration has been tested and validated many times for the traditional classroom setting. This concept of student integration has also been validated, to a limited extent, for both distance education settings and institutions of community colleges. A review of the literature showed that few qualitative persistence studies have been constructed based on the academic and social integration theory. Additionally, I discovered limited studies that connect the theory to on-line instruction, a fairly new approach to distance education instruction.

Briefly, Tinto argues that students entering college bring with them certain family backgrounds, pre-enrollment skills, and attributes that impact the expectations they have concerning the college environment. Commitment by the students to complete their educational goals and to remain at a particular institution changes during the course of the student's college experiences as a result of their interactions with the academic and social domains of the college. Tinto (1987) believes that the degree to which the students decide to stay in the college until they meet their educational goals is affected by the extent to which they become integrated into the academic and social systems of the college. The academic system of the college includes grades and intellectual development. The social system includes interactions with faculty, students, and college administrators. Further, Tinto shares that often social integration in a university also results in students participating in many of the extra-curricular activities of the college.

Researchers such as, Brown and Williams (1976), Smith, (1979), Pascarella and Terenzini, (1979), Kember, (1981), Thompson, (1984), Sweet, (1986), and Kember, (1984) have conducted research using Tinto's model and suggest that academic and

social integration increases persistence rates for college students. Based on the integrated model, two significant research studies found that student-teacher interactions are important to persistence. Pascarella and Terenzini (1979), in a study conducted with distance education students, found that students who had been academically and socially integrated into the college system, were more likely to persist than students who had not. Additionally, they discovered that when other variables were controlled, informal contact with instructors outside of class had a positive impact on persistence. The average scores of those students who persisted, on scales that measured contact with faculty, were almost one standard deviation higher than those students who dropped out (Pascarella & Terenzini, 1980). In discussing the subject of teacher-student interactions, the two researchers note that informal contact may be as important to students' institutional integration and, thereby, their likelihood of persisting in college, as the frequency with which such interactions occur. The researchers note that the interaction related to discussion on course content and intellectual conversation.

Kember and associates (1994), in a study with distance learners in Hong Kong at three different universities, conclude that communication between students and faculty has a positive impact on persistence. Because Kember's study was not designed specifically to gain an understanding of the nature of student-teacher interactions that supports persistence, he does not as a part of his research discover information about the nature of the conversations which support persistence. Kember did find that conversations that assist students in connecting the course to their educational goals and that assist students with understanding time requirements for the course, so that they may plan for their family and personal lives, are supportive of persistence.

These conversations, Kember (1994) contends, assist students with integration into the academic and social system which are critical to distance learning. It is important to note that Kember modifies Tinto's model, which was based on the transition he believes traditional age students make from high school to college, by redefining academic and social integration. Kember defines academic integration to include all interactions the student makes with individuals in the institution who assist the student with academic success. He also stresses that academic integration must include connecting the goals of the student to the course. Social integration for distance education learners is defined as the extent to which students are able to find time for study and time for the activities associated with their existing personal and social lives. In redefining social integration, Kember notes that many distance education learners are adults who must make a transition from student to non-student. Therefore, the social integration that is most needed to support their persistence in courses is one which allows them to continue their relationship with family and friends. Kember (1995), in the discussion portion of his research, notes that his study did not focus specifically on the topic of student-teacher interactions; therefore, he encourages researchers to study the topic further.

In addition to being used and validated for distance education, Tinto's model has also been used in some studies in community colleges, the type of institution in higher education that was used in my study. Peglow-Hock, Marcia and Walleri (1988), in a study with first-time enrolled developmental students at a community college, discovered that students who were academically and socially integrated in the college had as much as a 15 percent higher course completion rate than students who were not

integrated into the college environment. The researchers mention that students who persisted said that a relationship with at least one teacher was important to their success. Students also noted that they valued informal interactions with the instructor. Once again the content and timing of the interactions were not noted because those items were not the major focus of the study.

In a study with first generation Hispanic students in a private two-year college, Kraemer (1993) discovered that academic and social integration are related to persistence. However, Kraemer defined social integration as association of students with faculty, peers, and college administrators who were Hispanic. He notes that students believed that affiliation with faculty members was important to their successful completion of courses and degree programs. The findings of Kraemer are similar to the findings of Nora (1987) and Nora and Rendon (1990), who also conducted retention research with Hispanic students.

Pascarella and associates (1986), in a quantitative study with 825 community college students followed for a nine year period, found that academic and social integration were related to persistence. They learned that interactions with teachers were significant only for male students. The student-teacher relations did not surface as a significant feature for women students. For women, participation in leadership programs in high school was strongly correlated to persistence. It is essential to note that while the study mentioned the importance of a relationship with the instructor for male students, it did not comment on the nature of the conversations that support persistence.

Opinions of Experts of On-line Courses

Tinto (1987), whose original work was with traditional age students in four-year colleges, has stated that researchers designing studies based on his model of academic and social integration should design the study with the student population and learning environment in mind. The research literature did not present a significant number of research studies conducted with on-line courses or studies where research questions were focused on the relationship of the teacher to persistence. However, a review of the literature revealed that many experts in the field state that, in order to assist students with persistence, instructors should do the following: 1. respond to the learning needs of each student, and, 2. create a personalized approach to communication where students feel valued and feel free to ask questions and discuss issues.

Responding to the Learning Needs of Students: In developing on-line courses, various experts argue for a variety of instructional methods; however, they all stress that effective on-line instructors engage in interactions with students and provide instruction which responds to the learning needs of students. For the purpose of this literature review, the work of four well-known authorities in distance education are cited.

Marland Perc (1997, p. 67), in discussing the importance of dialogue, focused on student learning experiences stated:

Many acknowledge that relatively high attrition rates of students new to distance learning can be attributed to the sense of isolation they feel, the lack of stimulation from not being a part of a student discussion group, and the difficulty of obtaining regular feedback on problems as they arise.

Perc (1997) contends that communication between students and faculty is central to increased persistence rates, learning, and student satisfaction with on-line courses.

Perc suggests that one of the major factors related to high drop-out rates is students having difficulty in getting instructors to respond to their learning needs. Perc suggests that the drop-out rate may be lessened by student-teacher interactions focused on students and their learning experiences. Perc also suggests that the teacher begin the class by focusing on understanding the students and what they bring to the on-line environment. This information, Perc advises, should be used to direct the instructor to instructional materials and learning experiences that are appropriate for the individual student. During the on-going process of the course, Perc (1997) says that instructors should be engaged in proactive communication with students. Proactive communication means that the teacher continuously remains in contact with the student in order to encourage the student to talk openly about his/her learning, so the teacher is aware of potential difficulties with the course that may hinder course completion (Perc, 1997). The teacher uses the information to guide the student to experiences that assist the student in dealing with the identified problems. In discussing the on-going communication between the student and teacher, Perc notes that the instructor may use a variety of communication media, including telephone, written communication, and, when possible, face-to-face communication (Perc, 1977).

Willis (1992, p. 36), in exploring the topic of the importance of instructors responding to the learning needs of students, declared:

Effective teachers consciously and subconsciously adapt their course content, delivery methods, and pacing as the class progresses...thereby eliminating barriers to learning in a distance environment. Instructors must create dialogue with the students and go to extraordinary lengths to elicit feedback from students on the learning process.

Willis notes that he has found that in a distance-delivery context, in which technology is the primary link between teacher and student, this task is more difficult and time-consuming. Willis also remarks that instructors should define when they are available and by what communication mode, so that students are aware of how and when to gain access to the instructor.

Doug Shale (1990), in discussing the importance of dialogue which responds to the learning needs of students, states an argument that has been presented in education since the time of Socrates: education is a social process. Shale, like others who believe that education is a social process, notes that relationships and conversations between the teacher and student are the foundation of the educational process. He further believes that education is a social process where private knowledge that the student gains gets converted to public knowledge through the interactions with people who provide feedback and assist in clarifying learning. It is his belief that students and teachers should talk together to explore every problem on the horizon and to the depth that it can be explored (Shale, 1990, p. 55). In this way, it becomes important for the teacher to assess what the student knows and to help with deficiencies while directing the student to materials that will assist in acquiring the knowledge needed. Shale (1990, p. 56) closes his discussion by stating, “ Education is a process, not a product...process, based on dialogue between the teacher and student.”

Palloff and Pratt (1999), in arguing for instruction designed around the concept of learning communities, like the other authors mentioned in this section of the literature review, also stress the importance of student-teacher interactions focused on responding to the learning needs of students. However, these authors also state, from their

experiences, that they believe it is equally important for teachers to connect students to other students so that a sense of community is developed. In the community of learners concepts of Palloff and Pratt, students support one another in their learning needs as well as support and assist one another with other barriers they need to overcome in order to complete the course. Regarding responding to the learning needs of students, the thinking of experts in the field is compatible with research on good practice in teaching, in learning, and in numerous research studies in the traditional classrooms in higher education. One of the seven principles of good practice in teaching and learning states that effective teachers not only give feedback, but they also use it to modify instruction (Cross and Steadman, 1996). In discussing what the research in distance education has revealed, Merisotis and Phillips (1999) note that the research seems to indicate that good teaching methods, learner characteristics, student motivation, and the instructor are more important to student success than the technology used. They note that the research is consistent with the principles of good practice in Undergraduate Education adopted by the American Association of Higher Education (AAHE).

The research on teacher effectiveness in the traditional classroom also concludes that persistence is enhanced in classroom settings where the instructor responds to the learning needs of students. Easton (1984), and Easton and Guskey (1983), find that exemplary teachers understand students' needs, concerns, and interests and integrate them in their teaching. Helmke and Shrader (1991) find that classes in which students both learned the most and had the highest positive attitudes toward themselves and learning were in class settings where instructors were sensitive to the different learning abilities of students and adapted the instruction to the needs of the students. Berlinder

(1986), in a study to determine the characteristics of effective teachers, discovered that teachers need to be responsive to students' clues and adjust the instruction based on the needs of the students.

One significant qualitative research study supported the opinions of experts in the field concerning student-teacher conversations focused on students and learning. Dean Care (1995), in a study with nursing students who successfully completed an on-line course, found that from the students' perceptions, critical to their successful completion of the course were opportunities for them to have access to instructors to discuss assignments, receive feedback on assignments, and to discuss classroom materials.

Personal Interactions: While experts writing about on-line courses designed to encourage persistence argue for a variety of approaches to constructing courses, many experts stress that central to persistence is the creating of a warm friendly environment where students are free to engage into discussions with the instructor. Borje Holmberg (1995), who has worked in distance education since 1955 and has served as director of one of the largest distance education colleges in Sweden, in arguing to an approach to persistence based on "guided diadetic" conversation, states that warmth in human relations and feelings of rapport with educators strengthen and support study motivation as well as promote study pleasure. Holmberg stated several hypotheses about distance learning and stressed that student pleasure in learning is connected to persistence. Holmberg (1995) presents the concept that feelings of belonging motivate students to learn and have a positive impact on course completion.

The hypothesis of Holmberg is consistent with the thinking of Boaz who states that to encourage effective discussion and learning experiences in distance education courses it is important to build a setting in which learners feel free to talk with the instructor and where students feel respected. Boaz (1999, p. 42) suggests that one way to create a communication system where students are comfortable with interchange is by creating opportunities, via “chat rooms” and bulletin boards, for students to engage in informal talk with both the instructor and the students in the class.

Palloff and Pratt (1999), in arguing for creating learning communities in on-line courses, also discuss the value of developing a climate where students feel comfortable in interchange with the instructor. They state that it is important for the instructor to develop an environment where students and teacher interact in a friendly social environment where human relationships are affirming, and the interactions of all students are recognized. Honesty and openness are terms used to describe the type of communication exchange that should occur between students and teacher communities. It is important to note that a review of persistence in the distance education literature did present two significant research studies that validate the value of student-teacher interchange occurring in an environment where students are comfortable in interacting with instructors. Eastmon (1995, p. 23), in a qualitative research study on the learning strategies of students in distance learning, states that students often noted that “successful learning experiences are ones in which people are relaxed and human—free to be themselves.” Dean, Care (1995), in a qualitative study with nursing students enrolled in on-line college courses, found students stated that instructors who presented a caring, supportive attitude were important to their persistence. Care (1995) further

reported the students declared that when student and instructor are separated by space it is important for the instructor to offer support and encouragement in verbal exchange. Students also shared that an attitude of caring can be conveyed through technology and that this feeling of caring was important to course completion.

The teacher effectiveness research in the traditional classroom also supports the position that communication environments where students are comfortable in communicating with the instructor supports persistence. In discussing persistence, the teacher effectiveness literature connects persistence to student achievement and satisfaction with instruction because it is believed that students who are achieving and who are satisfied with the instructor are more likely to persist than those who are not. Flanders (1970), considered to be one of the first researchers to develop a systematic approach to studying teacher effectiveness, found that teachers in high-achieving classes were accepting of students. They encourage students to learn in an environment where students are free to express their opinions. A similar finding is cited in the research work of Myrick and Wittmer, who found that one of the top characteristics of teachers who have high achievement classes is their ability to establish an atmosphere where students feel a sense of belonging and worth (Myrick & Wittmer, 1980). Helmke and Shrader (1991) found that classes in which students both learned the most and had the highest positive attitudes toward themselves and learning had teachers characterized as patient and sensitive to students and their differing learning approaches. McComb (1997), in studying the relationship between student achievement and teachers' interpersonal sensitivity, found that student achievement levels were greatest with

teachers who see things from the student perspective and are genuinely interested in and concerned with students.

Summary of Literature Review

The review of the literature for a model of persistence to guide a study concerning student-teacher interactions which support on-line course completion revealed that the academic and social integration theory developed by Vincent Tinto has been documented to support student persistence. Tinto's student integration theory has been proven to support persistence for distance education and community college populations. While research studies based on the academic and social integration theory note that student-teacher interactions support persistence, the literature review did not discover a significant number of research studies that describe the types of student-teacher interactions that contribute to persistence. Further, there is a gap in the literature regarding the content and timing of student-teacher interactions in on-line courses that support persistence.

Finding a limited number of research studies related to on-line instruction and student-teacher interactions that support persistence, I turned to the expert opinions of educators involved in developing on-line courses. The literature review revealed that experts in the field agree that student-teacher interactions that respond to the learning needs of students and are created in an environment where students feel free to express opinions and ask questions are important to course completion. For this study, a model of persistence was developed that connects concepts related to responding to the learning needs of students with a theory of academic and social integration. I wanted to learn if student-teacher interactions based on the principles described in my combined

model, from the student perspective, supported course completion. I wanted to understand the content and timing of the interactions that support course completion. If the type of interactions suggested by the model of persistence that I have developed do not support persistence, I wanted to determine if other types of conversations support persistence. If other types of student-teacher interactions support persistence, I wanted to learn about the content and timing of the interactions which facilitate course completion.

The principles stated in the concepts of the model described include student-teacher interactions occurring in an environment where students feel free to interact with the instructor centered on the following topics:

- Pre-enrollment characteristics of students in order to identify areas that assist or hinder successful course completion.
- Student academic readiness for the course, in order to connect students to learning experiences that support their academic success.
- The pre-enrollment educational goals and institutional commitment in order to make the course and college experience relevant for the student.
- Academic and student support services required to support academic success in order to connect students to the appropriate college resources.
- Time demands of the course in order to provide the student with information needed to develop schedules, that include time for study, family, and work.

- The learning needs of students, in order to assist student with barriers and challenges, that may hinder course completion and to assist student with achieving the outcomes of the course.

My study was conducted from the viewpoint of successful students because I believe that the experience of successful students is important to informing and enlightening our understanding of student-teacher interactions, that are important to course completion in an on-line environment.

My study will lessen the gap in the literature on course completion and on-line instruction in community colleges by providing research which specifically addresses the issue of student-teacher interactions that assist students in course completion.

CHAPTER 3

RESEARCH METHODS

Purpose For The Study

The purpose of the study was to understand, from the perspective of students who completed successfully on-line courses, the student-teacher interactions that occur in an on-line environment in order to determine if certain student-teacher interactions support course completion. Further, if certain teacher-student interactions contribute to course completion, the goal of the research was to discover the content and timing of the interactions which make a difference in course completion.

On-line instruction is a fairly new instructional delivery method; therefore, there is not an abundance of data on the drop-out rate for specific types of institutions in higher education. However, studies have been conducted in various institutions in higher education that have found that the drop-out rate is sometime as high as 56% in some colleges and universities (Kozma, 1993). Merisotis and Phillips (1999), in a review of the research literature on distance education, found the non-completion rate for students in on-line courses was higher (32%) than for traditional classes (4%).

Research has consistently shown that in institutions of higher education student-teacher interactions encourage persistence (Dirr and Hegel, (1990). Knowing that the drop-out rate is normally high for distance learning courses, and understanding that student-teacher interactions support course completion, it is important for educators to learn more about the student-teacher interactions occurring in the on-line environment to determine if interactions support course completion. Moreover, if student-teacher

interactions do support persistence, it is also important to understand the content and timing of interactions which support course completion.

There are many retention studies which focus on the experiences of students who are not successful. This study has been deliberately framed around the experiences of successful students because I believe that in examining their experiences we will discover information that will assist instructors in designing on-line courses that focus on student retention.

Previously, in a course I taught as a community college instructor, I used a panel discussion activity to assist students in acquiring the study skills to be successful in college level courses. The panel was composed of students who had for several semesters maintained a 3.0 - 3.9 grade point average in a 4.0 grading system. The purpose of the panel was to share with at-risk and freshman college students techniques used by successful college students to obtain excellent grades in a variety of college courses. In evaluating the value of various class activities, the student panel-sharing activity was an approach that at-risk students noted was beneficial. In fact, of all of the classroom activities utilized, the student panel received one of the highest ratings. My experience with the student panel and other experiences as a classroom instructor led me to conclude that the voice of successful students was important. My study, therefore, is based on the experiences of successful students.

Review of the Research Questions

This research project investigated the student-teacher interactions that occurred in an on-line environment. Tinto's (1987) and Kember's (1995) social and academic integration theory was used as a foundation to guide the study. The primary research

question directing this study was: from the perspective of the student, what interactions occur between a student and an instructor in an on-line course? Do the student-teacher interactions contribute to course completion? If so, what are the content and timing of the interactions which encourage course completion?

Based on Tinto's and Kember's theory of academic and social integration a series of subsidiary questions were framed. These secondary research questions ask if student-teacher interactions occur that focus on the following: student pre-enrollment characteristics; student academic readiness for the course; student goal and institutional commitments; student connections to academic and support services; time demands of the course, and the learning needs of students. Moreover, a subordinate question asks if these interactions do occur, do these discussions contribute to course completion? Further, if these discussions contribute to course completion, what are the content and timing of the interactions that encourage course completion?

Last, a final subsidiary question inquired about the following: how does the student describe the communication approaches used by student and teacher in an on-line environment?

Rationale For A Qualitative Study

The study of the perceptions of students concerning the interactions between students and instructors that make a difference in course completion in on-line courses lends itself to qualitative methodologies. A qualitative approach is appropriate because it focuses on how people make sense of their situations, what they experience, and how they interpret these experiences (Merriam, 1989).

Furthermore, a qualitative design is compatible with my study that relates to persistence and course completion because persistence is a complex issue, and many researchers have noted that qualitative studies are appropriate for studying complex human issues. Epson (1988, p. 46) mentions this fact when he states that qualitative studies illuminate complex interactions...and help us to appreciate how other people construct meaning in their lives.

Finally, a qualitative study is appropriate for my work in distance education because many of the theories guiding course completion and distance education have been quantitative and have ended by stating that more information is needed to clarify what has been discovered. Stares and Carbon (1990) note that qualitative research is helpful when more detail is required than can be derived from quantitative methods.

Selecting the Students, Sites, and Instructors

The research questions guided the design of the study. Understanding that the study was framed from the perspective of successful on-line students, the investigation was conducted with students who had successfully completed a college level on-line course, in a community college setting, with a 2.0 or better grade point average. In keeping with Cobb's (1997) explanation of cognitive efficiency referred to earlier in my dissertation, on-line writing courses were selected because it is reasonable to expect that on-line writing instruction is an efficient medium for writing because it engages students in multiple writing activities.

In order to strengthen the findings, the study was conducted with students in two different on-line writing courses at two different community colleges. To ensure that I clearly understood the instructional design and the teaching and learning strategies used

to design on-line courses, the instructors who developed and taught the on-line courses were interviewed.

The on-line writing courses in this study met the definition of distance education instruction defined in the literature review as a course where at least one-half of the instruction involved a separation of student and instructor (Holmberg, 1995).

Moreover, these were courses in which computer-mediated instruction was the major instructional delivery method. Each instructor had taught on-line classes for more than one semester and was considered by his/her colleagues and students to be a good instructor.

Because of my past experiences with a pilot research project, this research study was conducted with teachers who had taught on-line for more than one semester. The pilot study with on-line students indicated that in some cases, during the first semester that a teacher provides instruction on-line, he/she may be unfamiliar with both the technology required and the teaching methods most appropriate for on-line instruction. This unfamiliarity with teaching on-line resulted, in some cases, in poor learning experiences for students. For this reason, I elected to include in my study courses taught by instructors who had taught on-line for more than one semester and who had received positive evaluations by students.

Selection of the Community Colleges: The colleges selected were accredited by the North Central Association of Colleges and Schools (NCACS), the accreditation agency for colleges and universities in the midwestern part of the United States.

Colleges and Universities accredited by the NCACS have been evaluated and found to be operating with standards that ensure quality learning experiences for students. The

handbook for the North Central Association of Colleges and Schools notes that the purpose of accreditation is to ensure quality assurance and institutional and program improvement (Commission or Institutions of Higher Education, 1991).

To find students who had participated in on-line writing courses consistent with the definition of distance learning presented, and with instructors who were experienced and evaluated to be good by students and colleagues, I first contacted the Director of the Michigan Virtual College (MVC). The MVC is a consortium of community colleges in Michigan who are working together to develop a Michigan on-line college; it is sponsored by the Michigan Association of Community Colleges (MACC). I contacted the Director of MVC to gain information about on-line instruction in community colleges in Michigan because I knew that in developing the MVC, he had previously collected a great deal of information about quality on-line instruction in Michigan. The Director of MVC provided me with a list of six schools that he felt provided quality on-line instruction. One of the schools identified was eliminated because it was the school where I had been Dean of Students; for ethical reasons, I decided I would not conduct the research at my institution.

Next, I contacted the research office of the five remaining schools to determine if they would grant permission for me to conduct research at their institution. All five of the schools granted a verbal agreement and, for further information, referred me to the Director of their Distance Learning program. In talking to the five Directors of Distance Learning programs, I discovered that only three of the programs continued to employ instructors who had taught on-line writing courses for more than one semester. These three distance learning offices provided me with the names of on-line instructors but

suggested that I also gain additional information about outstanding on-line instructors from the Chairs of the respective Communications Department who had more information about outstanding on-line writing instructors.

Each Communications Chair provided me with the names of one or two individuals who fit my definition. In talking to six instructors at the three community colleges, I found that only two of the instructors had taught on-line courses for more than one semester. I explained Holmberg's definition of on-line instructor. After hearing the definition of on-line instruction, the two instructors both agreed that the approach they used to provide on-line instruction was compatible with the definition of the referenced on-line instruction.

Further, to conduct research at the two colleges identified, I secured a letter of agreement from the appropriate college official. For the remainder of my dissertation, I will refer to the two identified colleges as Lincoln Community College and Central Community College. The two instructors meeting the criteria for my study will be referred to as Angela Jones and Michael Johnson.

Selecting the students: Two instructors were identified who taught on-line writing courses consistent with the definition of on-line used to guide my study and who agreed to an interview. I then worked with the appropriate office at each school to gain access to the students in the two instructors classes. At Lincoln Community College, in Angela Jones' on-line writing course for the fall 1999 semester, 17 students were identified who had completed the course with a 2.0 average or better. Originally, eighteen students were enrolled in the course; however, one student dropped the course before the end of the first week of class. The retention rate in Angela's course was 94%.

In keeping with Lincoln's interpretation of FERPA, the registrar's office mailed each of the identified students a packet of information that contained my letter of introduction to the research and a student consent form.

At Central Community College, the Distance Learning Office was authorized to identify the appropriate students for Michael Johnson's class, and a roster of 21 students in his class who had completed the course with a 2.0 average or better was sent to me. Twenty-four students started Michael Johnson's class; however, three students did not complete the course. The retention rate for Michael's class was 87.5%. The consent form and explanation of the project was mailed to the 21 students who completed the on-line writing course.

Approximately two weeks after the first mailing, a second mailing was sent to the identified students at both schools who had not responded to the first mailing. The second mailing was a flyer that contained a brief explanation of the project and an invitation to participate.

At Lincoln Community College, nine of the 17 students responded positively to my invitation to participate in the study. Of the students who agreed to participate in my study, I was able to schedule interviews with seven of the nine students. In conducting the interview, one student was eliminated because I discovered that she was not able to clearly remember the events and situations related to the on-line course. The six students participating in the study included six, female, Anglo students ranging in age from 20 - 49.

Students at Lincoln Community College were enrolled in the on-line writing course along with other traditional classroom courses. This is important to mention

because the students at Central Community College, on the other hand, were all a part of a 2 + 2 program where they will complete all of the courses for an Associate of General Business Degree and a Bachelor of International Business degree on-line. Central Community College has an articulated agreement with a four-year university such that the courses completed at Central will transfer to the four-year college. The students will then be able to complete all of the course work at the four-year college for a Bachelor of International Business Degree on-line.

At Central Community College seven of the 21 students agreed to participate in my study. I was able to schedule interviews with all seven of the students. In conducting the interviews, one student was eliminated because I learned that she was not able to recall pertinent information about the on-line writing course. The six students engaged in the study included four females and two males. Three of the four females from Central were African-American. One of the female students was Anglo. Both male students participating in the study were Anglo. The ages of the six students from Central ranged from 31 - 49.

Twelve students participated in the study, 10 female and 2 male students. Additionally, three of the 12 students were African-American students. The ages of the students involved in the study ranged from 20 to 49 years old.

Data Collection Methods

The study combined two research strategies: interviews and document collection.

Interviews with the students: Interviews were conducted with the students after they had successfully completed the on-line writing course. The students had finished

the on-line writing course during the fall (December 1999) semester and were interviewed during the months of April through June of 2000. A majority of the interviews occurred during the months of April and May. One lengthy face-to-face interview was conducted with each of the 12 students. The interview was approximately 75 minutes in length for each of 9 students and approximately 90 minutes in length for each of 3 students. As a research tool, interviews were used to gather descriptive data about student-teacher interactions in the on-line environment in the subject's own words in order to better understand how the students made meaning of their experiences. The interviews were used to probe deeply and to learn more about how students made meaning of experiences, "so that the researcher could develop insights on how subjects interpret some pieces of their world," (Bogdan and Sari, 1982). In order to clarify some specific questions that I had about the factual portions of the interview, I also communicated with six of the students by e-mail. Students had identified this as the best method to communicate with them, if additional information was needed from them. Because I also wanted to have a feel for how the students interacted by electronic mail with their instructors, I asked them to communicate with me using the same icons or other similar means they had used to communicate with their instructors.

Interviews with the instructors: In addition to interviews with students, the primary subjects of the study, I also interviewed the students' instructors. The purpose of the interviews with the instructors was to gain a clear understanding of the instructional design of each course and to discover the interactions intended to be a part of course activities. Interviews with each instructor were held before the interviews

with the students. I conducted one interview with each instructor. The interview was approximately 90 minutes long. Additionally, after interviewing all of the students in Michael Johnson class, I discovered that I had a number of questions about the instructional design of the class; therefore, I conducted a second interview. The second interview was approximately 90 minutes long. Moreover, in writing the findings of the study concerning communication approaches which support course completion, I discovered that I had questions that needed to be answered by the instructors. A third, 30-minute interview was conducted with Michael Johnson. A second 30-minute interview was held with Angela Jones.

I asked the instructors to guide me to other information that would be important to my research project. Both instructors shared with me the textbooks that they used for the course. Additionally, Michael Johnson gave me access to his on-line course, providing copies of the syllabus, assignments, and invitations to instruction activities. Angela Jones was not able to provide access to her on-line course because the college had recently changed to a new server. When the new system was put into place the information from the old system was destroyed.

With both students and instructors, the interview sessions were informal and semi-structured. All interviews were taped recorded and transcribed. For all interviews, detailed notes were taken at the time the interviews were conducted. Moreover, participants have been involved in member checks, where they have been asked to assist in clarifying details of the interviews and to discuss the meanings that I have drawn from the interviews.

Documents

Additional documents and artifacts were gathered throughout the project. These documents included catalog course descriptions and textbooks for both on-line writing courses. The course syllabi were secured for each course. Assignments, guided invitations to conversations, and graded assignments with examples of the feedback system were collected for Michael Johnson's course. E-mail transactions that document my interactions with students were kept. Finally, student transcripts, which include assessment scores, were gathered for each student.

Data Collection Method

In reviewing various research methods for analyzing qualitative data, I decided to use the "Chenail Qualitative Matrix" approach that pulls the ideas about research analysis and reporting into a simple conceptual framework (Cole, 1994). The information gained from interviews was evaluated for emerging patterns and themes. Emerging patterns were coded. The coded information was then organized in such a manner that central themes occurred. Information was further organized into central tendencies and ranges that described how the data fit into common categories. Range refers to the differences that occur within the theme areas. The matrix provides a picture for coding the data in an organized way. The data were then examined to determine whether the findings of the study confirmed the findings of other researchers or revealed unexpected results which departed from other research conclusions.

Limitations of the Study

The research study was based on a purposeful selection of successful students who completed on-line writing courses at two community colleges in Michigan.

Therefore, no attempt is made to claim to generalize the results to other on-line students with other community colleges. The conclusions of this study relate specifically to this study and should be subject to this same kind of study with other on-line writing students.

A limitation of the study could be the impact of the researcher on the participants in regard to the outcomes of the conversation. In other words, the data in this study may not reflect the true thoughts of the students because they may have sought to respond to questions in ways that they believed I would expect them to respond. I attempted to control for this matter by stating the same questions several ways to compare the answers of the students on similar questions.

Furthermore, because students were interviewed after they completed the on-line course and asked to recall past experiences, this research is also subject to the limitation of retrospective recall (Loftus & Loftus, 1980). However, this technique was especially beneficial in providing an opportunity for me to study complex human interactions. As a researcher, I found the interview to provide me with revealing information that I believe would not have been discovered in the more traditional quantitative research approach. In summary, in my opinion, qualitative methods were effective in exploring issues related to student success and course completion.

Because the students in one class enrolled only in on-line courses, and the students in the other class engaged in both on-line and traditional classes, the experiences of the students may have been different, thereby impacting the ability to draw conclusions across the total population. It is my belief, however, that the discovery

of the same theme from students' learning in two different on-line settings added more credibility to the findings.

The qualitative process proved to be useful in exploring the issue of course completion and student-teacher interactions. Some of the students indicated that the opportunity to reflect on their experiences to determine what student-teacher interactions happened was helpful because it forced them to think about techniques that they should consider using in other on-line courses. Useful insights about student-teacher interactions which may enhance course completion were gained that may be shared with on-line students, instructors, and administrators in other educational settings. In terms of my experience as a researcher, I found I learned a great deal from both the students and instructors which I believe will be helpful to me as an administrator in providing leadership for on-line instruction, a new instructional delivery method.

I believe when designing instructional delivery methods, instructors and administrators should always include the thoughts, opinions, and issues raised by students. Through the use of qualitative research, especially focused on the voice of students, an attempt has been made to ensure that the voices of students are heard on the issue of student-teacher interactions which contribute to course completion.

Ethical Standards

Many researchers have stressed that researchers have a responsibility to respect the rights of informants. Qualitative research is often intrusive, particularly when informants reveal personal information in the course of the interview. In order to

protect the rights of informants, the following information was completed prior to the beginning of the study:

- The research was approved by the Michigan State University Committee on Research Involving Human Subjects (UCRIHS).
- Informed consent was obtained from each participant. Prior to participating in the study all participants were provided with information that defined the objectives of the research and that clarified their role in the study. Each participant was notified verbally and in writing that he or she had the right to discontinue participation in the study at any time.
- Pseudonyms were used during and after the study to protect the participants or anyone else identified during the course of the study.
- Consent was secured from the participating community colleges.

Summary

A review of the literature revealed that there is a limited amount of research on the content and timing of student-teacher interactions which contribute to course completion. However, research does support the contention that student-teacher interactions contribute positively to course completion.

Using qualitative methodologies that included interviews and examination of documents, my study examined the ways students and teachers interact in on-line courses, from the perspective of community college students who have successfully completed an on-line course. The study was conducted to determine if certain student-teacher interactions contribute to course completion. The research also examined the

content and timing of interactions which supported course completion. The guiding research question was, from the perspective of the student, what interactions occur between a student and an instructor in an on-line course? Do the student-teacher interactions contribute to course completion? If so, what are the content and timing of the interactions which encourage course completion?

This qualitative research study was conducted April through June of 2000 with 12 students who successfully completed with a 2.0 average or better in an on-line writing course at a community college setting. One lengthy interview was conducted with the 12 students who participated in the study. Additionally, in order to clarify some questions, I also communicated on-line with six of the students interviewed. To better understand the design of the on-line delivery method used to construct the teaching and learning aspects of the course, the study also included interviews with the two instructors responsible for providing instruction. Before interviewing the students, one interview, approximately 90 minutes long, was held with each instructor. A second interview was conducted with Michael Johnson after I completed the interview with the six students from his class. This interview was necessary to better understand the instructional design of some of the assignments the students referred to in their interviews. At the time of the second interview, the instructor allowed me to access his on-line writing course so that I could actually examine some of the on-line assignments. Eventually, a third interview to better understand Michael Johnson's approach to communication was held. Two interviews were held with Angela Jones. Additionally, I communicated with her by e-mail to clarify questions. I was not able to access Angela's

on-line course materials because the school had changed to a new server for on-line courses, and her on-line courses, materials were destroyed.

Documents which added clarity to the design of the on-line courses were collected. These included the course description, schedule of courses, syllabi, and textbook for both courses. Furthermore, on-line assignments, invitations to conversation, and graded student papers were available and collected for one of the instructors. Documents gathered that provided more information about the students included student transcripts and assessment records.

The stories that emerged from the study reflect the distinct experience of each student. Therefore, while Chapter 3 describes the research method and the people involved in the study, Chapters 4 describes in greater detail and in their own voices the students engaged in the study. The voices of the instructors are added to the voices of the students on the topic of communication approach. Chapter 4 also presents the findings of the study connected to the literature and reported grouped according to the research questions based on the emerging themes. Chapter 5 presents the conclusions, and the implications of the research findings for practice and for research.

CHAPTER 4:

FINDINGS: THROUGH THE VOICES OF THE STUDENTS AND TEACHERS

Introduction

Both the interviews with students and instructors and the research literature have contributed to the findings of this study. Chapter 5 reflects on the findings of the study in relation to these two information sources.

The chapter on findings includes three major sections. The chapter begins with a review of the research questions followed by an introduction to the on-line instructors participating in the study. Because the philosophies of the instructors assist in understanding the experiences of the students, information from the instructor's interviews, in abbreviated form, are also included.

Findings relative to the research questions are given through the voice of each student participating in the study. As delineated in Chapter 3, although 38 students from two different on-line classes were invited to participate in the study, only 16 students agreed to participate in the study; it was possible to schedule interviews with only 14 of the 16 responding students. Finally, two students who were interviewed had to be eliminated from the study because they could not adequately recall circumstances related to the on-line writing course. Therefore, the study includes the perspective of 12 students. Student respondents who successfully completed instructor Angela Jones' on-line writing course are presented first. Second, student respondents from instructor Michael Johnson's class are presented.

Based on the research questions, findings include student comments grouped into the following categories: 1. Connections to Pre-enrollment Characteristics, 2.

Types and Timing of Interactions; 3. Role of Academic Integration, 4. Role of Social Integration, 5. Interactions Responding to Student Learning Needs, 6. Interactions (where appropriate) About Personal Problems, and 7. Communication Approach. Some topics have been grouped together. The section is excluded when students did not have discussions about a particular area.

The findings of the study are discussed in light of the conceptual framework and the research literature. Findings based on themes that emerged but were not a part of the conceptual framework are also presented. The chapter ends with a summary of the main points of the findings.

Review of the Research Questions

The interviews, conversations, and documents collected were analyzed in light of the research questions.

In review, the major research question is as follows:

From the perspective of the student, what interactions occur between a student and an instructor in an on-line course? Do the student-teacher interactions contribute to course completion? If so, what are the content and timing of the interactions which encourage course completion?

Secondary questions:

Connections to Student Pre-enrollment Characteristics:

From the student perspective, what are the pre-enrollment characteristics, family background, previous college and educational experiences, and belief systems prior to course entry which assist or hinder course completion in an on-line course? Do student-teacher discussions about these pre-enrollment factors occur? If so, do these discussions

contribute to course completion? If so, what are the content and timing of the interactions that encourage course completion?

From the student perspective, what were his/her academic skills and abilities before entry into the on-line environment? Do student and teacher discussion about these student skills and abilities occur? If so, does the discussion contribute to course completion? What are the content and timing of the interactions that encourage course completion?

From the student perspective, what is the goal and institutional commitments of the student before entry into the on-line course? Do student-teacher interactions occur where discussion focuses on these commitments? If so, do they contribute to course completion? If so, what are the content and timing of the interactions that encourage course completion?

Academic Integration

From the student perspective, do student and teacher interactions occur where the discussion is focused on the student's expectations for the course and ways for those expectations to be met? If so, do these conversations support course completion? If so, what are the content and timing of the interactions which facilitate course completion?

From the student perspective, do student and teacher discussions about the support services needed to support course completion occur? If so, from the student perspective, do these conversations support course completion? If so, what is the content and timing of the interactions that facilitate course completion?

Social Integration

From the student perspective, do student and teacher discussions about the time demands of the course in order to develop schedules which include time for study, family, and work occur? If so, from the student perspective, are these discussions supportive of course completion? If so, what are the content and timing of the interactions which facilitate course completion?

Responding To Learning Needs

From the student perspective, do student-teacher interactions occur which focus on the learning needs of the students? If so, from the student perspective do these conversations support course completion? If so what are the content and timing used for delivery of these conversations?

Open Communication

How does the student describe the communication approaches used by student and teacher in an on-line course? Do these communication approaches support course completion? If so, what are the features of the communication approaches which contribute to course completion?

Setting the Tone: Introducing the Instructors

Angela Jones

Angela Jones is an adjunct faculty at Lincoln Community College who has taught on-line courses for approximately 3 years. In interviewing Angela to understand the instructional design of the on-line writing course, several key concepts of her philosophy about teaching on-line were discovered that relate to the research. First, Angela believes that on-line is an effective way to teach writing because the medium

encourages the student to write as a primary method for communication. She believes the practice of writing improves writing.

In regard to content and type of interactions that students should encounter in the on-line writing environment, Angela explained that it was hard to detail all of the interactions that may occur; however, she believes two basic types of communication are important to teaching in the on-line environment. In discussing the two types of communication, Angela stressed that she believes that the instructor should engage the students in conversation about the reading materials and type of writing required for writing assignments. Angela often uses on-line group discussions to engage students in discussions about assignments and reading materials. Additionally, Angela stated that the other basic conversation that the instructor should have with the student, she believes, should be conversations guided by the students based on the individual needs of each student. In this way, the student is at the center of the learning experience. In discussing her philosophy of responding to the unique needs of each student, Angela explained her belief that to teach effectively on-line she must provide one-to-one instruction. Angela explained that to her one-to-one instruction means that the instruction is individualized for each student and includes learning activities that are designed to respond to the specific learning needs of each student. When compared to face-to-face writing classes, she believes that on-line instruction requires more individualized instructional approaches. It also requires that the teacher pay attention to every e-mail communication received from students in order to decide when she needs to assist students with instruction. For example, once a student used an angry tone to ask Angela by e-mail about an assignment. By e-mail Angela asked the student about

the tone of his e-mail message and she asked him about the reason for the tone. After receiving the student's response, she continued to be concerned that he might be experiencing some difficulty with the assignment. She decided to talk to the student by telephone. During the telephone conversation she was able to answer some questions for the student that she believes helped him to better understand the assignment.

Another example of the individualized approach that Angela uses is her decision that involves her to work with students, after grading their writing papers. She interacts with students who she feels have performed poorly on the assignment. She sends an e-mail message to each of these students and asks them if they had some difficulty with the assignment. She then engages each student in conversation by e-mail about the assignments and suggests ways to improve future assignments.

In further discussing her individualized approach, Angela explained that students who evaluated her class suggested that she engage them in more on-line group activities. While she believes that individualized instruction is important in on-line courses, she noted her inability to effectively construct group activities may have forced her to provide mostly one-to-one instruction.

Angela also explained that she believes that in the on-line environment, it is important for her to personalize her communication with students. According to Angela, communication is personalized when it is based on the knowledge that the instructor has about the background, history and values of the student. based Angela said that, different from the traditional classroom, on-line students and teachers are not able to see each other's facial expressions. For this reason, she believes that personalized communication between the student and teacher helps add a conversational

aspect to communication that creates understanding and further encourages communication.

Angela gave one example of her personalized approach to communication when she explained how she uses the first assignment, an autobiographical paper, to get to know students. Angela posts her own autobiography for students to read so they understand her life story. She also carefully reads each students' autobiography and uses the information about the student when communicating with him/her at other times during the course. For example, Angela has found the information about the student especially helpful when she has to give them negative feedback about their writing. She begins the negative comments with a comment about the student that is obtained from the autobiographical paper.

Angela Jones explained that her goal is for every student to complete her course. One of the strategies that she has found essential to course completion is allowing students the opportunity to rewrite a designated number of assignments when the grade is not satisfactory. Her objective is for students to learn and to complete the course. Angela also explained to me that often students entering writing courses are insecure about their writing. She believes the uncertainty has occurred often times because in the past others have been critical about mistakes made by students. Thus, when Angela grades papers, she combines positive feedback with constructive criticism.

Finally, Angela believes it is important for her to respond quickly to student communication. Because she is a housewife at home with her young baby much of the day, Angela checks her student e-mail and phone messages two to three times a day; therefore, she most often responds to student communication within two to three hours

of the time it is sent. She returns papers within two to three days from when she receives them.

The course completion rate for Angela Jones' course was 98%. Eighteen students started the course. One student dropped the class before the end of the first week. The remaining 17 students all completed the course by the end of the semester with a 2.0 average or better.

Michael Johnson

Michael Johnson is a full-time instructor at Central Community College. For 12 years, Michael has been involved in using the computer to teach writing. Within a given semester, he often teaches both traditional and on-line writing courses. Michael has taught on-line writing courses at Central Community College for 3 years.

When asked to describe his philosophy of teaching writing, Michael stated that he believes that students learn to write by writing. He believes that the on-line delivery method is an effective method for teaching writing because it forces students to participate in a variety of writing activities.

When discussing the content and type of student-teacher interactions that he believes are important to course completion, Michael explained that it is important to engage the students in conversations that assist them in deciding what to write about. He uses group on-line discussions to engage students in discussions about the reading material in ways that assist them in deciding the content for the upcoming writing assignments. This concept is central to Michael's approach to teaching writing because he believes that one of the most important things he has to do is to encourage students to think deeply about what they will write about. Then, they are able to focus on the how

of the writing. Additionally, Michael believes that in the on-line environment it is critical for him to individualize instruction. Michael explained that individualized instruction to him means that he must pay attention to the specific learning needs of each student and respond in ways that allow each student to learn. Michael Johnson also believes that, in the on-line environment, the teacher's role is not only to provide instruction but also to connect with students as human beings and to communicate with them enough to know when they are encountering experiences that may become barriers to course completion. Michael noted that, for some of the on-line students, he is the only contact they have with the college; therefore, it becomes important for them to discuss problems with him so that he is able to connect them to other resources available at the college. Consequently, when students are experiencing personal problems that could cause them to drop his course, he communicates with them and connects them to college resources that may assist in overcoming barriers identified. His goal is to allow the student space to deal with the crisis before returning to the writing course work.

In the on-line environment, Michael also believes that instructors have to establish a human presence and must connect to each student individually. For this reason, he shares a great deal about himself with students. He not only uses his own personal writing as examples of various writing styles but he also comments to students about who he is as an individual and what are the values, likes, dislikes, and events occurring in his life. Michael Johnson also shared with me that he engages in conversations that are customized for each student. He often has conversations with students that include things he has learned about what they enjoy doing, their values and the events occurring in their lives.

Finally, Michael Johnson believes that one of the most important things an on-line professor has to do is to respond, within 24 hours, to questions that students raise. He shared with me that he normally responds to electronic, phone, and fax communications within 4-5 hours. While Michael usually checks his e-mail and phone mail messages daily in order to respond daily, he also lets students know when he will be checking his e-mail for their questions. For example, for the students in the study, he told them that he would be checking for their e-mail messages on Mondays, Thursdays, and Saturdays. Michael asked students to call him and leave messages about time sensitive matters so that he is able to respond promptly. Michael has a practice of returning graded assignments within 2-3 days. He believes that it is important for his feedback to include both positive comments about the strengths of the student writing and constructive criticism designed to assist the student in improving their writing. The course completion rate for the on-line writing course taught by Michael Johnson's was 82 %. Twenty-one students began the course and 17 students completed the course at the end of the semester with a 2.0 average or better.

Table 1 Respondants from Angela Jones Class

	Ann Johnson	Hazel Griffin	Lynn Elliott	Norma Seattlewhite	Renee Schoffield	Teresa Waro
Age	20	47	48	20	31	32
Marital Status/ Family	Single parent	Married, older children	Married, 2 children	Single	Married, 3 children	Married, 2 children
Gender	Female	Female	Female	Female	Female	Female
Ethnicity	Anglo	Anglo	Anglo	Anglo	Anglo	Anglo
GPA	3.5 (repeat course)	4.0	4.0	4.0	4.0	3.0

	Ann Johnson	Hazel Griffin	Lynn Elliott	Norma Seattlewhite	Renee Schoffield	Teresa Waro
Personal Problems				X	X	X
Attended Orientation	Yes		Yes	Yes		
Technology Helpful	Yes		No	Yes		
Type of Interactions L=limited communication	O	L	L	O	O	O
O = communicated often	M	M	(mainly e-mail)	M	M	M
M = used multiple technologies						
Participated in Group On-Line Discussions			Yes (not helpful)	Yes (helpful)	Yes (not helpful)	
Communication Approach	Personalized	Personalized	Personalized	Personalized	Personalized	Personalized
Connection to Support Services	X	X		X		

The Student Respondents From Angela Jones' Class

Seventeen students who completed Angela Jones' course with a 2.0 average or higher were invited to participate in this study. Eight students responded. Seven students were available for interview. Although interviews were conducted with seven students, one student was eliminated from the study because she was unable to recall adequately information about the on-line writing course. Six students from Angela Jones' class were a part of the study. Information from student interviews is highlighted by student quotes.

Ann Johnson

Ann Johnson, a 20-year-old Anglo female, full-time employed, single parent, completed the on-line writing course with a 3.5 grade point average. Ann was repeating the course, having been unsuccessful in passing it previously. Ann stated that she had many interactions with the instructor. Ann was positive about her interactions with Angela Jones. Many times during the interview she mentioned that Angela was a special instructor who cared about her as an individual and who somehow knew how to help her learn.

Types and Timing of Interactions: In discussing the types of student-teacher interactions occurring in the on-line course, Ann stated that she had a variety of interactions with the instructor. She attended an on-campus orientation and participated in face-to-face student-teacher interactions. Ann Johnson recalled one other time that she went on campus to talk to the instructor face-to-face about an aspect of an assignment that she did not understand. Ann often e-mailed the instructor to discuss assignments and reading materials. During the first few weeks of the course, Ann used the telephone to inquire about expectations for assignments. She noted that the first two weeks of class she interacted with the instructor often through e-mail because she wanted to be sure that she understood the assignments and the teacher expectations. Ann also explained that she liked to interact with the instructor both before assignments were worked on to be sure that she understood what was expected of her and after she received her graded paper in order to know how to improve the upcoming assignment. In addition, Ann stated that the opportunity to interact with the instructor during the first two weeks of the course was important because it allowed her to begin the course

understanding what the teacher expected from her for the remainder of the semester. In talking with Ann about her interactions with the instructor, she said:

My first interaction with the instructor was during orientation. It was helpful because it allowed me to meet the instructor and to put a face with a name. During the first week of course, I e-mailed the instructor several times about the assignment because I was not sure what she wanted. I also talked to Angela by phone. I was able to understand what she wanted me to do. She was good about responding to me. The conversations helped me know what to do.

Connections to Pre-enrollment Characteristics: When first asked about conversations about pre-enrollment background belief, characteristics, skills, and abilities, Ann always responded, “We didn’t have conversations about that.” However, when asked about discussions concerning prerequisite skills needed for the class, she talked about the discussions at Orientation which included interactions about the computer skills necessary for the on-line writing course. Ann recalled that the Orientation also provided an opportunity for her to practice some of the computer skills necessary for the on-line course. Ann stressed that it was important for her to begin the on-line course with an understanding of and practice on using the skills she would be using in the course. This helped her begin the class with a level of relaxation and comfort about how she would learn and work in the on-line course. In talking to me about activities related to assessment of pre-enrollment computer skills and opportunities to practice certain computer skills at Orientation Ann said:

Yep! Oh Yes! I do now recall that one of the other things that was important at Orientation was that they showed me how to get on-line and introduced me to Empernet; the server used for the program. We were taught how to access our class on-line. I remember, that was helpful.

Role of Academic Integration: In reviewing interview notes to determine if Ann talked about conversations relative to academic integration, student-teacher discussions about the student's expectations for the course, and support services to sustain course completion, it was discovered that Ann Johnson said the following, "No, the teacher and I never talked about what I expected or needed from the course." On the other hand, during the course of the conversation, Ann mentioned that she appreciated Angela Jones' suggestion that the students consider using a new Creative Lab (Writing Center) that had recently opened on campus. Students could send their papers through the internet to the writing center, and writing consultants would return the paper by e-mail, with suggestions for improvement. Ann used the writing center and found helpful the services it offered. In discussing the center, she said:

Once our instructor said, "Guess what guys? A new writing center just opened up that is cool and sometimes, I don't have enough time to answer all of the specific things you ask about your papers. If you would like you can send your papers to the writing center, and they will send it back in two days." It was nice of the teacher to have information like this that came from her and that she shared with us. I used the lab. I would e-mail my paper, and people in the lab would tell me what they thought I needed to do to improve the paper. Their feedback on the paper was helpful to me.

Responding to Learning Needs: Ann recalled one specific time when interactions with the instructor about an assignment was important to understanding and completing the assignment. The assignment required her to describe herself through the eyes of someone else. It was difficult for Ann to think of herself in this way. She asked the instructor again and again how to describe herself from another person's point of view. Ann Johnson recalled that finally Angela's specific comments about how to approach the assignment and positive statements about Ann's past work helped her

move forward to complete the assignment. In describing interactions with Angela on this difficult assignment, Ann said:

I believe that I interacted with Angela nearly every day. I sent questions by e-mail. She finally e-mailed me and said, “you are thinking way too much on this assignment. You just need to relax. You have done very well on other assignments. Ask your family about how they see you.” Her statements made me feel relaxed and comfortable with who I am and what I am doing. It is important for me to feel that I am getting approval.

In discussing interactions with the instructor which responded to her learning needs, Ann mentioned that the on-line group chats, initiated by the instructor around a specific type of writing, were useful because they allowed her to feel connected to other students in the course and the chats helped her understand the type of writing required for the upcoming assignments.

Ann explained that one of the most important things the instructor did for her was to provide feedback on papers that included positive comments about what Angela liked about Ann’s writing and which gave specific suggestions about what Ann could do to improve her writing. Ann mentioned several times that the positive comments on the papers gave her confidence that she could pass the course. Confidence in herself is important to Ann because academically she was a poor student in high school. She needed to feel that she could do college level work. Specific instructions about how to improve were critical to Ann because she could understand what to do to improve her writing. Ann liked Angela’s approach to feedback. Graded papers were returned by e-mail with comments in the text of the paper about what was good and what was needed to improve it. In summarizing her thoughts about the usefulness of feedback on graded papers, Ann said:

Feedback on papers is more interesting in the on-line class because the teacher can highlight areas where she has concerns, and this makes it easier to understand the problem areas. When I was in high school, the teacher wrote tiny statements on the side of the paper. Angela actually put her comments in the text of the paper, and that was helpful. Also, it was helpful that she gave me specific suggestions about what to do on my paper. For example, one time she said, “ your sentences in this section are too long. Get right to the point.” Also, she often said good things about what I wrote, and that was very important to me.

Communication Approach: Ann Johnson ended the interview by stating, “I have a great deal of respect for this teacher. She knows what she wants from students and she is more than willing to help us get there.” In reflecting on this subject and probing deeper concerning Ann’s respect for Angela Jones as a teacher, Ann shared that she always felt that she could communicate with the teacher. She stressed that the teacher created an environment where Ann felt comfortable in interacting with her and where she felt positive about learning because the teacher respected her as a person by always responding quickly to her questions. This let Ann know that the instructor valued communicating with her. Also, Angela allowed Ann to understand who Angela was as an individual. Angela Jones shared her writing with the students and often shared with them her plans for the weekend. Ann Johnson felt Angela’s willingness to let them know who she was as a person helped Ann to feel the instructor was someone that she wanted to talk to. Their conversations allowed Ann to ask questions and gain information that she needed to complete the assignments. When asked how did this comfort level with the teacher occur, Ann said simply, “She let me into her life.”

Hazel Griffin

Hazel, a 47-year-old Anglo mother and grandmother who values family, completed the on-line writing course with a 4.0 grade point average.

Types and Timing of Interactions: Hazel engaged in limited interactions with the instructor. She interacted with the instructor mainly by e-mail. Hazel stated however that because the assignments were clear and the textbook material was easy to understand, she did not have to interact very often with Angela about instruction and learning. She did sometimes initiate electronic discussions to learn more about the instructor as a person and to think with her on a variety of subjects.

When asked about the times she most liked to interact with the instructor, Hazel responded, “Whenever I had something that I wanted to discuss with the instructor.”

Role of Academic Integration: Hazel did not have discussions with the instructor about the time required to prepare for the course. However, in discussing academic support services which were available, Hazel mentioned that one service, the writing center, was helpful and was recommended by Angela via e-mail. Hazel used the writing center. She sent papers to the center through the internet and found their comments about ways to improve her writing were, in most cases, useful in completing her papers. In discussing the Writing Center, Hazel said:

I used the Writing Center often. The people in the center gave good insight on what I could do to improve. On the first paper I sent to them, they said something that I didn’t agree with and I didn’t listen; however, on the second paper the young woman gave me a lot to think about that helped me improve the paper.

Interactions About Learning Needs: In discussing her interactions with Angela about various learning experiences, Hazel’s first response was that she did not have interactions with the instructor that were necessary for her to be successful in completing the course. She said she was always a good writer, and the expectations for

assignments and the class work were clear. Hazel said, "I knew what to do, and I did it."

In talking more about her learning needs and those things in the course which assisted her in learning, Hazel talked about the value of Angela's on-line mini-lectures. The first mini-lecture which explained the components of a paper thesis, details and explanations of the introduction, body, and conclusion assisted Hazel. She said, however, that what was most beneficial to her was the opportunity to discuss writing assignments with the instructor and the other students on-line. She participated in group chats that made the on-line class interesting.

In asking Hazel to explain the group chats, she recalled a specific time. Before a paper was due that required descriptive writing, Angela put a picture on-line for the students to describe. Students engaged in an on-line group conversation. Hazel was the fourth person to describe the painting. Students before her who described the painting said much of what Hazel wanted to say, so she had to ponder and come up with different things to say about the painting. Hazel especially liked this type of chat with the students and instructor because they challenged her to think. Consistent with Hazel's earlier comments that her goal in education was to grow and think critically about a variety of subjects, she mentioned that she enjoyed thinking critically with the students and the instructor in the on-line environment. In summarizing her on-line experience, Hazel said, "I was successful in the on-line writing course because it was easy for me. Other classes on-line might be harder for me, and I may need more interactions with the instructor."

Communication Approach: Hazel said that she felt comfortable in discussing issues and talking to Angela on-line about a variety of subject matters. Hazel explained that her comfort level in communications with Angela allowed her to ask questions on-line about her writing which assisted her in finishing assignments. In asking what had occurred to create this comfort level Hazel recalled that the first week of the course she wanted to get to know Angela better. She sent Angela a poem by e-mail about the 77 misspelled words or the wrong use of words. Angela sent Hazel a note of thanks for sending the poem; Angela further commented that the poem helped make her day special. Angela's response to Hazel's poem helped Hazel see Angela as a real person with whom she could ask questions and discuss issues. About this interaction with Angela, Hazel said, "Angela's response to the poem . . . something like, you really made my day helped me to realize that teachers are just like us; they are not above us. I thought; this teacher is really neat." This experience along with others that Hazel told about made her believe that she could talk on-line to Angela and that she could relate to her as a person.

Lynn Elliott

Lynn Elliott, a married Anglo woman with two children, gave brief answers to interview questions. Lynn completed the on-line writing course with a 4.0 grade point average. Lynn was one of three students in the study who said that she did not communicate very often with the instructor because expectations and assignments were clear, and she believed that she entered the on-line writing course with good writing and computer skills that resulted in her needing little assistance from the instructor. Lynn noted that the software, Emernet, that the college used, she felt was student friendly,

thereby making it easy for her to use the computer for learning. During the interview, Lynn said, however, that she had taken other on-line courses that were difficult for her, and these courses required her to interact often with the instructor.

Types and Timing of Interactions and Responses to Learning Needs: Lynn first interacted face-to-face with the instructor at the Orientation session for on-line writing students. The opportunity to become better acquainted with the instructor, Lynn felt, was important because it allowed her to understand the instructor and what she expected from students on their assignments. However, Lynn stressed that overall the Orientation was not beneficial to her because the major purpose of the session was to introduce students to computer functions necessary for the on-line class that she already knew how to perform.

Lynn communicated with the instructor only by e-mail, which she stressed was her preferred method for communication with the instructor and others. She chuckled when she said, "I like on-line and e-mail communication." Moreover, Lynn said that when she did interact with the instructor it was to clarify comments written by the instructor when graded papers were returned. In fact, Lynn credited the feedback from Angela and Lynn's use of those comments as things that most helped Lynn improve her writing. In discussing the feedback Lynn said:

Sometimes I asked for clarification about what the instructor wrote. I progressed through the class, and my writing got better, and I needed her (the instructor's feedback) for that to happen. Her feedback was important because without it I would have continued to make the same mistakes, and my writing would not have improved.

Lynn noted that she also participated in 2-3 threaded discussions. The on-line discussions allowed students to engage in a group discussion with the instructor about a

particular subject. In discussing the value of the threaded discussions, Lynn explained that the threaded discussions were somewhat helpful because they assisted her in understanding the writing assignments. However, from Lynn's perspective, the threaded discussions were more valuable because they allowed her an opportunity to get to know some of the other students in the class. While Lynn enjoyed getting to know the other students, she stated that connections to other students were not necessary for her to complete the course.

Asked when was the most important time for her to interact with the instructor Lynn replied, "After I received feedback on my assignments." Lynn also said that even though she did not often need to interact with the instructor before assignments, it was important for the instructor to be available near the time when assignments were due so that if Lynn had questions she could receive an immediate response. Lynn also declared that it was helpful for the instructor to respond to e-mail and to return papers in a timely manner. When asked what was considered timely, Lynn said messages answered within 24 hours and papers returned within two to three days were appropriate and allowed her to finish assignments within the time she had available to prepare for the on-line course.

Open Communication: Lynn explained that it was important, in the on-line class, for her to feel that she could ask questions of the instructor so that she could complete assignments and learn ways to improve her writing from the instructor's feedback suggestions. In investigating reasons for Lynn's ease in communicating with Angela, Lynn listed several reasons. First, the opportunity to become acquainted with the instructor at orientation helped create an environment where Lynn felt she knew the teacher enough to ask questions. Second, her daughter had both taken a course and had

a good experience with this instructor and found her to be someone who was interested in students. Lynn said that this made her believe that she could communicate with the instructor about questions. Third, the instructor's comments, throughout the course about her personal life and her willingness to share some of her personal writings, Lynn felt, further allowed her to understand who the teacher was, and this assisted her in feeling comfortable in communicating with the instructor. Finally, the teacher's frequent statement, "If you have questions, contact me" also let Lynn know that she could contact the instructor when she needed to. In talking about her comfort in interacting with the instructor, Lynn said, "The instructor was friendly and wanted to be helpful. She seemed very available. I also felt I could ask her questions because she shared who she was."

Norma Settlewhite

Norma Settlewhite, a 20 year old, Anglo, female, student, majoring in theater and history, completed the on-line writing course with a 4.0 grade point average.

Types and Timing of Interactions: Norma stated that she likes to communicate with people using a variety of communication mediums. Other than the face-to-face interaction that she had with Angela during Orientation, Norma communicated only with Angela by e-mail. Norma also participated in the on-line threaded group discussion activities initiated by Angela Jones. The threaded on-line group discussions were group chats initiated by the instructor for students she believed, after her assessment of the initial on-line group chat, were having difficulty understanding the reading material or writing type required for an assignment.

Norma, like other students in the study, sometimes communicated with Angela to ask questions about the assignments both before they were due and after she received feedback on graded papers. However, she did not often need to communicate with the instructor because she understood the assignments. This meant that for Norma, like other students in the course, the time the instructor needed to be available for her e-mail communications was immediately prior to assignment due dates and immediately after graded papers were distributed. Norma also said that it was important for the instructor to respond to her questions within 24 hours and further noted that Angela was good about response time to her communications as she often responded to Norma's communications within two to three hours. In discussing the easy access she had to Angela, Norma said, "I love on-line courses. The ability to get with the instructor on-line is so easy when I have questions; and on-line instruction is flexible and it fits my busy schedule."

Connections to Pre-enrollment Characteristics: Norma, like other students in the study, did not have conversations with Angela Jones about her background, skills or abilities prior to enrollment in the course. However, she attended Orientation and participated in discussions with the instructor about the computer skills required for the on-line course. The Orientation session allowed Norma to practice some of the computer functions needed for the course. Though Norma had good computer skills, the computer lab portion of the Orientation was beneficial. Norma said, "If I were advising the school about Orientation, I would say that it is something that they need to keep. It was helpful to me because I learned how to do some of the things like log on,

and cut and paste that were needed for the on-line course.” Norma used skills learned at Orientation to complete assignments.

Academic Integration: Norma explained that discussions about her expectations for the course or her commitment to the college did not occur because the instructor did not engage her in conversation about this topic. Norma did, however, have discussions with Angela about academic support services available at the college. Norma used the college’s writing center because Angela referred her to the center. Once when Norma asked Angela if she should send Angela her papers by e-mail to be edited before they were due, Angela responded, “ No.” Angela did however inform Norma that the college had a writing center which provided this type of service on-line. Norma, in talking about her experience with the writing center said, “I used the writing center a lot. It was very helpful.”

Interactions About Personal Problems: At the very beginning of the course, Norma was recovering from wrist surgery that caused her to have difficulty performing the computer functions required to complete assignments. Norma discussed the problem with Angela at Orientation, and Angela suggested that Norma complete future assignments when she was able to do so. Angela also asked Norma to keep her updated on her recovery process.

Norma recalled another time when she was participating in auditions for an important play that required her to travel out of state, meaning that she might not finish an assignment when it was due. Norma presented the problem to Angela and was told once again, “I understand; no problem. Get the assignment done when you can.” Because the assignments and lectures were on-line Norma was able to complete the

assignment. Though she turned in one assignment after the due date, she was able to complete future assignments by the scheduled deadlines. Angela's willingness to adjust deadlines for assignments because of personal things occurring in Norma's life made Norma feel that the instructor was supportive of her success in the writing course. Additionally, the flexibility with due dates, Norma explained, allowed her to proceed with the course according to a time schedule that suited her lifestyle and permitted Norma to be successful in the on-line course because she could go to school while doing other things that were important to her. Norma valued Angela's understanding attitude about her situation.

Responding to Learning Needs: Norma sometimes e-mailed Angela before working on her assignments with questions. Most often Norma's questions were about the specific details of what the instructor wanted from her; for example, once she asked about the length of the paper.

Norma is one of the students in Angela's class who participated in the group class threaded discussion. Norma especially enjoyed the threaded discussion because she felt they made the on-line course interesting. When discussing the threaded discussion connected with the descriptive writing assignment, she said: "I love the discussion about descriptive writing because I love descriptive writing. The threaded discussion allowed me to learn more about descriptive writing using a new method; on-line group discussions. It was fun to do something a little different."

It is important to note that Norma found the feedback interactions beneficial. Angela's comments on her papers, when they were returned by e-mail, helped Norma understand ways to improve her writing on future assignments. Norma also explained

that it was through studying the feedback segment on her papers that she came to understand what Angela expected from her writing. Norma liked the direct approach Angela took to making suggestions for improvement saying, “ I would advise on-line instructors to talk to students and not beat around the bush. Say what you need them to do. Tell them what is wrong and how to fix problems.”

Communication Approach: Norma often said that because on-line students do not meet with the instructor face-to-face, it is crucial for the students to feel that they can communicate with the instructor about a number of issues. In explaining the reasons for her ease in communicating with Angela, Norma made statements similar to those of other students. Norma talked about the ease in communication with Angela flowing from knowing who Angela was as a person. Angela’s sharing of personal information on-line, like the fact that she was married and had a baby helped make Angela a real person to Norma. Norma also liked the fact that Angela asked her about her personal life, creating a reason for them to talk on-line to one another. Norma summarized her thoughts about the value of the on-line instructor having a human presence when she said, “Angela makes me feel she is a real person. She is not some person floating out in cyberspace. That is important to communication.”

Renee Schoffield

Renee Schoffield is a 31-year-old, Anglo, female student who is married and has 3 boys completed the on-line writing course with a 4.0 grade point average. She works full-time and is pursuing an associate’s degree in business administration.

Types and timing of interactions: Renee interacted with the instructor primarily through e-mail. Previously, she had taken an on-line class and attended an orientation

for that class; therefore, she was not required to attend another session. When asked when she interacted with the instructor, Renee said “no specific” time. However, Renee usually interacted with Angela immediately following the receipt of feedback on assignments. Renee was also one of three students in Angela’s course who participated in the on-line threaded group chat sessions; however, she did not find these sessions helpful to understanding the writing material. She viewed the discussion as an opportunity to become better acquainted with other students in the class; but often she did not have time to interact with other students. About the group chats, Renee said: The threaded discussions were meant to give different views on a subject so we as students could think together. I didn’t find them helpful. I saw them more as a time to socialize; but I really sometimes didn’t have the time, so I wanted to stick with the “nuts and bolts,” the things required to complete class assignments.

In talking about the on-line class, Renee mentioned that on-line allowed her to go to college at a time when she had 3 children, including a 7 month old baby, because she could do her assignments at 10: 00 p.m. and 6:00 a.m., times when her children were asleep. Because the assignments and lectures were on-line, and additional examples of the writing desired were accessible and connected to resources through the internet, she could study and participate in the on-line class at times that were suitable for the schedule of a working mother. Writing in the traditional classroom setting would have required her to wait to engage in discussions at specific scheduled times that may not have fit her schedule.

Responding to Learning Needs: Renee had many interactions with the instructor about her learning needs. Renee recalled her interactions with Angela about a difficult

writing assignment. She first e-mailed the instructor to say the assignment was hard for her and that she was having to think a great deal about what to write. Angela responded on-line by giving Renee some specific suggestions about how to approach the assignment and encouraged her to continue to work on the paper. In asking Renee what really assisted her in completing the paper, the expectation was for her to say the specific suggestions about how to complete the assignment. She responded instead:

While the specific suggestions were helpful, what really encouraged me to complete the assignment was the fact that she gave me positive reinforcement, and I think it was being able to say to her, "This assignment is difficult." She created a relationship with me early in the semester, and I knew I could talk to her. Talking on-line to her was important to me.

Renee also said that the interactions that most assisted her both in understanding what the instructor expected from her on assignments and which assisted her in improving her writing were her on-line conversations with the instructor about the instructor's feedback on graded papers. However, Renee explained that she did not engage in a large number of discussions with the instructor about the feedback itself because it was clear. It was critical for her to understand the feedback because Angela allowed her to rewrite, if she chose, some of the papers where she received below a 2.0 grade. Renee liked Angela's on-line feedback approach that included highlighted comments written in a color of ink different from hers and which included specific recommendations on ways she could improve her writing. Renee also liked the fact that in the on-line environment she was able to store all of her papers in a file and could easily access them later if she needed to refer to them to assist her with future writing

assignments. In discussing the importance of the clear constructive feedback and its importance to course completion Renee said:

I was creating something, so the feedback was important. If my paper wasn't clear, she would pick up key areas and say, "This didn't give a good example of what you wanted it to say. You may want to give examples to make this clearer." She would have comments right in the paper about how to improve. She didn't send back the paper and say; "Improve this." She sent back the paper and gave comments about each paragraph which helped me know what to do. Also, I was looking at the paper that I have stored on-line, and when I asked myself, "Do I know what she is talking about?" I had the paper stored right there with her comments, and I may use the suggestions at other times.

Interactions About Personal Problems: Renee was successful in completing the on-line writing course with a 4.0 average grade point average, even though several stressful events occurred in her life. Within a two week period, she had a baby and lost her father. Renee recalled several weeks when she was not able to think about school work. She was emotionally and physically drained and decided to focus her energy on her family. Renee considered dropping the English course but did not, she felt, because she was allowed to turn in missed assignment after the deadline. Also, she shared that she continued the course because the instructor showed her that it was important for individuals to be concerned about one another. Renee stated:

When my father died, I was out of it for two weeks. Angela, my instructor, showed sympathy and understanding, and at no point did she say anything to mistrust me. Actually, I was at the point where I was going to drop the course because all of my assignments were due. Angela's response was to "get the assignment to me when you can, and I am so sorry." Angela's extended deadlines for course work and her reassurance and caring attitude got me through the class. She modeled that it is important for us to care for one another.

In reflecting thoughtfully on her ability to complete the course, in spite of personal problems which were a significant barrier, Renee declared that if she had been

enrolled in a traditional class, her required absence from her class would have resulted in much absence from instruction resulting in difficulty in completing assignments and the course. In the on-line class, she had the instructor's lecture, assignments, and reference materials accessible on-line allowing her to access the resources she needed to complete all assignments.

Communication Approach: The interview ended with a question to Renee about her advice to on-line instructors interested in assisting students with completing on-line courses. Renee concluded that it is critical for instructors to create a situation where students are clear that they can talk to the instructor about a number of subjects including assignments and personal problems. She stressed that it was important for instructors to be clear about assignments and their expectations for the course. In expressing the significance of an environment where students are comfortable in interacting with the instructor, Renee said:

The instructor has to right away do something to let the students know they can talk to her (the instructor), if they need to. There must be a comfort level there. I needed to know that when things weren't clear, or if I had a problem, I could talk to the instructor. I have taken two on-line courses. My first two went well because I had the comfort level with the instructor, and the assignments were clear. I would love to take my entire program on-line.

The interview led to discussions with Renee about what the on-line writing instructor did to create an environment where she felt comfortable in interacting with the instructor. After some thought, Renee explained she felt that Angela respected her as a person. Also, Renee commented that early in the semester, Angela, told the students that she was married and had a baby; that made Renee feel she could talk to

Angela. Renee seemed to struggle with explaining, what happened to cause her to feel comfortable with the instructor; however, she summarized her comments by saying:

In the beginning of the class, Angela let us know she was a parent. I could relate to her because I am a parent. She let us know who she was. Also, the actual act of her saying she wanted us to talk to her also helped me feel comfortable communicating with her.”

Teresa Waro

Teresa is a 32-year-old, Anglo female nursing student who is married and has two children. She completed the on-line writing course with a 3.0 grade point average.

Types and Timing of Interactions: Teresa said that she interacted by e-mail with the instructor during the first two weeks about assignments in order to clearly understand the instructor’s expectations for the assignments. The assignments were understandable, so she did not e-mail Angela about that but rather asked questions about aspects of the course such as the grading system. Teresa, in the beginning of the course, e-mailed questions to the instructor about the feedback Angela gave her on graded papers. Teresa recalled that she did not do very well on the first writing assignment, so she e-mailed the instructor with questions about her feedback comments in order to be sure that she understood Angela’s statements about ways to improve the paper.

Sometimes Teresa also talked to Angela by telephone. If she did not understand something after e-mailing Angela, she would then talk to her by phone to gain additional information. Teresa also once talked to Angela by phone to explain a problem. Teresa, like others in the class, participated in the group on-line discussions that were initiated by the instructor. She, like other students, did not find these discussions very helpful.

During the interview, questions focused on the best time for Teresa to interact with the instructor. Teresa stressed that it is important, she feels, for the instructor to be available during the first few weeks of the course and that she believes that on-line instructors should respond to student communications within 48 hours, at the most, from the time the student communicates with them. In explaining the reason for the 48-hour response time Teresa said:

I have taken three on-line courses, and I have learned that if I have an instructor who does not get right back with me it is a problem. For example, if I e-mail the instructor and it takes the instructor three days to respond that messes me up because it takes longer for me to complete the assignment because I don't know if I have the right information to do the assignment.

Teresa found it helpful for the instructor to be available a few days after returning her graded papers so that there was an opportunity to talk on-line to the instructor about feedback comments. In talking about the availability of the instructor for communication, Teresa noted that, ideally, it would be good for the instructor to be available all of the time; however, she knows that is not practical because instructors have other things to do beside communicate with students. She finally concluded that the most important thing was for instructors to respond within 48 hours of hearing from a student, regardless of the communication medium.

Interactions About Personal Problems: Almost mid-way through the semester, Teresa had difficulty completing assignments because of a computer virus on her home computer. Teresa called Angela to let her know that she would possibly be late with the upcoming few assignments because she would need to locate a computer to do her assignments. Leaving home to do homework meant that Teresa would have to find

someone to keep her children. She would need time to make these arrangements.

Angela advised Teresa to turn in the paper as soon as possible but asked her not to worry about being late with the assignments. Because the assignment, lecture and examples of the writing required were on-line, easily accessible to Teresa, she was able to finish the assignment. She sent the paper to Angela after the deadline; however, she was able to complete future assignments on the original due date and she completed the course by the end of the semester. Teresa noted that it was so good to know that she had an instructor who responded in supportive ways when she encountered a problem, noting:

The one comment that Angela always made was, “Don’t hesitate to call me when something comes up.” She was great in this area. I think my assignments were late because of the computer problem, and she understood. It meant a lot to me for her to be understanding and to be O.K. with my assignments being late. This let me know that she really wanted me to be successful in the course.

Communication Approach: Teresa had taken both an on-line and traditional classroom writing course with Angela as the instructor. In both cases she found Angela to be an instructor with whom it was easy to communicate with. Teresa believes that it is important to be able to communicate with an instructor whether in an on-line or traditional classroom setting because that is the only way she can understand what the teacher expects and thus be successful in completing assignments while improving her writing skills. When asked how an atmosphere where she felt free to interact with the instructor occurred on-line, Teresa responded: “She actually said, ‘Don’t hesitate to contact me if you need me.’ Then she followed this statement by giving me her e-mail

address, home phone number, and home fax number. You can't get much more open than that."

Teresa said that she somehow knew that Angela really wanted her to be successful, and that made Teresa know that she could interact with Angela. In describing Angela, Teresa said, "I did well in both classes (on-line and traditional classroom) with Angela because she is so understanding. She is just a good teacher. She was good in both settings. She lets you know what to expect and that she wants you to be successful in her class. "

Table 2 Respondants from Michael Johnson's Class

	Albert Bentley	Bonnie Fluker	Sharlene Hudgins	Tammy Smith	Vincent Lang	Yonella Simpson
Age		31	49		25	37
Marital Status/ Family	Married, 2 children	Married, 5 children	Children not at home	Married, 1 child (17 years-old)	Married, no children	Married, 3 children
Gender	Male	Female	Female	Female	Male	Female
Ethnicity	Anglo	African American	African American	Anglo	Anglo	African American
GPA	3.7	4.0	4.0	4.0	3.0	3.2

	Albert Bentley	Bonnie Fluker	Sharlene Hudgins	Tammy Smith	Vincent Lang	Yonella Simpson
Personal Problems		X			X	X
Attended Orientation	Yes		Yes	Yes	Yes	Yes
Technology Helpful			Yes	Yes	Yes	Yes
Type of Interactions L=limited communication O = communicated often M = used multiple technologies	L (materials were clear)	O M	O M	L (mainly e-mail) (materials were clear)	O M	O M
Participated in Group On-Line Discussions	Yes	Yes	Yes	Yes	Yes	Yes
Communication Approach		Personalized	Personalized	Personalized	Personalized	Personalized
Connection to Support Services		Yes				

The Student Respondents From Michael Johnson's Class

Twenty one students who completed, by the end of the semester, Michael Johnson's course with a 2.0 average or higher were invited to join the study. Nine students responded to the invitation. Interviews were scheduled with seven students but one student was excluded from the research because she could not adequately recall the events of the on-line writing course.

Albert Bentley

Albert is an Anglo, adult, male student. Albert completed the on-line writing course with a 3.7 grade point average. He is married and has two children who are 16 and 18 years old.

Types and Timing of Interactions and Interactions About Learning Needs:

Albert is one of three students in the study who said that he interacted very little with the instructor. He commented that he completed the course mainly because course materials and writing expectations were clear and assignments were easy for him to finish. Even though Albert had limited interactions with Michael Johnson, he did interact with him face-to-face at Orientation. The few times that he interacted with the instructor by e-mail were to discuss the feedback from assignments and to get the instructor's ideas about various topics. In talking about communicating in the on-line writing environment, Albert said, "I like to debate issues with instructors. I need to know how they think. Sometimes I communicated with Michael on-line just to get his view on something."

In order to schedule appropriate time for the on-line writing course, Albert reviewed all of his assignments before the course. When he discovered an assignment

in which he had questions about the writing requirements, he asked Michael on-line about the assignment during the first week of the course. For this reason, he felt that the first week of class is a time that instructors should be available to communicate frequently with students. Also, because Albert sometimes had questions about assignments while he was completing them and after he received the instructor's feedback, he suggested that the instructor be accessible to students immediately before assignment due dates and close to the time graded papers were distributed. In discussing the importance of interactions with the instructor concerning feedback, Albert said, "Michael gives good information in his feedback comments; these helped me to improve. How do I know how to improve if I don't know how I am doing?" Albert said that it is especially important in an on-line course for the instructor to be clear about assignments and what he/she expects. He further added:

Mr. Johnson is good about that. He gives me enough information so I know what he expects. In fact, sometime his assignments were written so that they gave too much explanation; however, I know that others in the class probably needed that much explanation.

Communication Approach: Albert was not one of the few students in the class who said that he had no need to feel that the instructor cared about him as an individual, nor did he need to know about the personal life of the instructor in order to feel comfortable in communicating with the instructor. Instead, what he needed was an opportunity to think and debate issues with the instructor. Albert did, however, say that it is crucial for on-line students to feel that they can interact with the instructor, and when asked, Albert said, "Yes, I can interact with my instructor Michael Johnson." When asked to explain how this occurred, he said, "For me it is important for an

instructor to be open, firm and comfortable in expressing his/her point of view. Michael Johnson was good with conflict and with discussing issues on-line; therefore, he encouraged me to communicate with him.”

Bonnie Fluker

Bonnie Fluker is a 31-year-old, female, African-American student who is married and has five children. Bonnie completed the on-line writing course with a 4.0 grade point average.

Types and Timing of Interactions: Bonnie interacted often with Michael Johnson. The first interaction occurred face-to-face at Orientation. Bonnie also recalled talking to Michael by phone about a group assignment that was not going very well. Bonnie said about the phone conversation, “I talked to Michael by phone because I had much to tell him. I thought it would be better to talk to him by phone rather than to e-mail him.” Bonnie not only e-mailed Michael to clarify assignments, she also chatted with him on-line about problems, or when she simply wanted to discuss an issue with him.

In discussing when students need to interact with on-line instructors, Bonnie said, “Constantly.” She said that she often talked to Michael on-line before assignments were due to make sure she understood his expectations. She also communicated by e-mail with him when she received his feedback to make sure that she understood his suggestions. However, Bonnie said that students need to talk to the instructor about a number of different subjects. For example, once she talked to Michael about her amazement that he had given them an assignment that caused her to do so much work. She said that she e-mailed him to discuss the assignment because she hoped that he

would change his mind about the requirements for the assignment. Michael did not change the assignment; however, he continued to encourage her to complete it.

Bonnie was the only student in the study who said that she used various icons to illustrate her feelings when she communicated by e-mail. Bonnie sent the icons to her teacher and on-line classmates and tried to get them to use them when they communicated with one another. She was not successful in getting the other students to use the icons. However, Michael did sometimes use icons when he communicated with her. In explaining how she liked to use icon, Bonnie said:

I once asked Michael to remove my worst grade. I wanted to be direct when asking him to consider this request; however, I also wanted to be upbeat with the request, so I ended the request with the icon of a “smiling face.” I have used e-mail a great deal, and my experience is that people cannot read your face and tone, so I use icons to let people know the tone of what I am trying to say.

Discussions About Personal Problems: Bonnie had interactions with Michael Johnson about personal problems that were causing her to consider dropping all of her courses. These discussions with Michael led to conversations about services that are available on campus to support the student’s academic success.

Bonnie considered dropping Michael Johnson’s on-line course and two other on-line courses because she was one week late in starting her courses because she had a new baby. Moreover, during the first few weeks of the course, Bonnie noticed that her seven-year old daughter was having problems with school and that there was a great deal of tension in her home. The addition of three new foster children to the home added further stress to her family life and made it difficult to attend college. Bonnie contacted Michael by e-mail and explained the problem. He inquired, by e-mail, about

the problem and discovered that there were a number of issues that were becoming barriers to Bonnie's success in the English course. He not only suggested new deadlines for assignments, but he also referred Bonnie to other sources for assistance with other family problems. With encouragement from the instructor, Bonnie decided to remain in the class. Bonnie said:

I started the course one week late, but I work well under pressure. It was good that the instructor was helpful and encouraging. If I had a problem, he would respond; "I am sorry to hear that; tell me more." Once he knew the problem, he would refer me to other sources. He always supported me and that was very important.

Bonnie noted that the support she received from Michael also encouraged her to remain in her other courses. She completed the on-line writing course and her other course on time.

Responding to Learning Needs: Bonnie explained to me that she sometimes e-mailed Michael to ask questions about assignments and to get his feedback comments. Though his assignments and feedback comments were clear, she still sometimes wanted to talk to him on-line about what he expected because she wanted to discuss with him her thoughts about what she was going to write. Bonnie explained the several ways that Michael detailed his assignments. She mentioned that his assignments included outlines detailing what he wanted and examples of the writing expected. Bonnie said that if she needed more clarification, Michael's assignments included websites with additional examples.

Bonnie said discussions with Michael about his feedback comments were critical to her course completion. For each writing assignment, Professor Johnson e-mailed something positive in his overall comments, and Bonnie said that these positive

comments encouraged her to do her best on upcoming assignments. She liked that he was specific about things that she could do to correct certain portions of her papers. Papers were returned by electronic means, and Bonnie liked that Michael Johnson embedded his comments and suggestions in the text of the e-mail. Explaining the value of her interactions with Michael about assignments, Bonnie said, “Michael is firm and direct about what he wants me to do with his assignment; however, he’s not discouraging.”

Communication Approach: Bonnie found it easy to interact with Michael whether it was about assignments, personal problems, or informal conversation designed for her to get to become better acquainted with the instructor. When Bonnie was asked what caused her to be so comfortable in her interactions with Michael, she responded, “In the beginning of the course, he sent me, by e-mail, a personal note and said, “ I’m expecting your assignment on this date; I have not heard from you. How are things going?” Bonnie stressed that even though she didn’t see her instructor, she believed that he cared about her as an individual. Bonnie explained that this is one thing that let her know she could talk to Michael, she said:

He does a number of other things that help to create a comfortable environment. For example, Michael used words to express a tone that is encouraging. He does not make negative comments in his e-mail communications. That helps me to feel comfortable in communicating with him.

Bonnie also said that she could talk to Michael because he shared who he was and also let her share who she was. She replied, “There were two individuals talking on-line who knew one another.”

Bonnie ended the interview with statements that summarized the importance she placed on communicating with her instructor. She said:

I think that we are all designed to have some interaction with people. It was important for the instructor to communicate with me because I needed someone to understand what I was experiencing in the on-line environment and in my personal life. That made a difference. For me, Michael Johnson, along with my husband and mother, was always there.

Bonnie was clear that she felt that Professor Johnson listened and cared about her as an individual. She said that there were times when she considered dropping the course, but she didn't because she knew that he would assist her to deal with the difficult times as well as to celebrate the good ones.

Sharlene Hudgins

Sharlene, a 49-year-old, African-American woman, who is married and is employed full-time, interacted with Michael many times in a variety of ways. Sharlene completed the on-line writing course with a 4.0 grade point average.

Types and Timing of Interactions: Sharlene interacted with Michael Johnson face-to-face during the Orientation for on-line students and frequently interacted with him on-line. Sharlene noted that she also engaged in on-line chat conversations with Michael and other students in the class about reading materials and writing assignments. Moreover, Sharlene remembers talking to Michael by phone on one or two occasions to get clarification on a group assignment.

In discussing the best times to interact with the instructor, Sharlene explained that there was no best time, but she "appreciated the opportunity to communicate with Michael Johnson throughout the course." Because she was working, sometimes she was tired and did not feel like studying, yet when she logged in on-line to her e-mail and

found a note from Michael asking her how she was doing with assignments, Sharlene said that the comments from the instructor motivated her to keep going and complete the assignment. She said:

I needed that extra push. Especially when I was working, I need someone to push because I don't have your instructor face-to-face in the classroom to push me. Often, when I logged-on in the on-line class I had Michael, he had some words to say, and I knew that he was available if I just needed to vent. Some other on-line instructors are silent. Michael was not.

Connections to Pre-enrollment Characteristics: Sharlene did not have conversations with the instructor about her prior background, skills or abilities in order to determine characteristics which could hinder or support course completion in the on-line environment. Moreover, Sharlene and Michael Johnson did not have discussions about her educational and career goals nor her commitment to the institution. She did, however, have discussions about the computer skills required for the course. Sharlene stated that she was introduced to the computer skills needed for the on-line writing course at an on-campus Orientation session. She found helpful those conversations about the computer skills required for the course, and opportunities to practice some of the computer functions that she would be performing during the course. Though Sharlene had good computer skills, the computer practice sessions, she said, were useful because they allowed her to understand the ways specific computer skills would be used in the on-line environment to study and learn.

Responding to Learning Needs: Sharlene explained that when she did not understand an assignment, she would ask questions of Michael by e-mail and he would respond through e-mail. Sometimes he also answered questions by engaging her

classmates in on-line chat discussions. Sharlene said that after the chat she understood what she needed to do to complete her assignments. In discussing the on-line learning experience, Sharlene mentioned that Michael was flexible with assignment deadlines which, from Sharlene's perspective, was helpful because there was an abundance of work to do; working full-time meant for her that it was sometimes difficult for her to have the necessary time to complete her assignments. Sharlene stated that though Michael was flexible with deadlines, he was insistent that they do all of the work. Sharlene found Professor Johnson's feedback approach beneficial because he put his comments in the body of the paper and returned it electronically. Also, his specific comments about different ways to improve the writing were helpful. In discussing the feedback approach Sharlene said:

In Michael's class feedback is helpful because he has used inserts with extra notes with extra information about what I have written. I am able to put my pointer on the area, and additional information about my writing appears. He provides information that will help me be a better writer.

Sharlene stressed that Michael assisted her in learning in the on-line course because he provided her with clear examples of what he expected, provided her with examples from his writing, and gave her a number of website resources that provided other examples of good writing. In discussing how she learned in the on-line environment Sharlene said:

Michael does a lot to let me know what he expects. He tells me the style he wants, and he outlines what he expects. He also gives me a lot of resources so I can see what he wants. When he returns my papers I have all of his thoughts, so he tells me what he expected me to do.

Communication Approach: In explaining on-line conversations, Sharlene further explained:

I was always able to communicate with Michael. From the very beginning of the course, I talked to him on-line. Michael was always on-line writing by e-mail to me. If I am not setting in class, I have to get feedback some kind of way. I think the main things is that if my instructor is on-line and responds, I am able to continue. That is important.

In talking more about the communication with the instructor Sharlene explained that she always felt comfortable in talking to Michael whether it was face-to-face, by phone, or on-line because he was the same in all cases. In sharing more about her communications with the instructor, Sharlene said that “when all was said and done, “ she believed that she felt free to ask questions and express her opinions with Michael because he sent her personal e-mail messages, always responded immediately to her e-mail messages, and always showed her that he cared. She said that Michael was the kind of person that she felt she knew as a person because he told her about his family, what he was doing on weekends, shared his writing with her, and talked to her about individual things occurring in her life. In Sharlene’s view Michael became a real person, someone she felt she understood, and this assisted her in feeling that she could communicate with him.

Tammy Smith

Tammy Smith is an Anglo, female, married student who completed the on-line writing course with a 4.0 grade point average. She works full-time and has one 17-year-old daughter. Tammy was quiet and gave brief, direct answers to the interview questions.

Types and Timing of Interactions and Responding to Learning Needs: Tammy stated that she had limited interactions with the instructor. In fact, at the beginning of

the interview, she suggested that she did not interact with the instructor. After responding to a series of questions, she realized that she did interact with the instructor, primarily on-line. Tammy said, "I prefer to communicate on-line because it is more convenient for me. Also, I don't expect the teacher to be available in other ways." As the interview progressed, Tammy also recalled that she met Michael Johnson and talked to him face-to-face during an Orientation session scheduled for on-line writing students. Tammy reported that she participated regularly in weekly on-line chat group discussions organized by Michael Johnson.

Tammy, like other students in the course identified the critical times for her to interact with the instructor were "pre-assignment" and once she received feedback comments from the instructor on graded papers. Tammy emphasized that the weekly group discussions along with the examples of each type of assigned writing, assisted her in understanding each assignment. Moreover, she noted that because assignments were clearly written with outlines that explained what Michael Johnson expected, she always felt that she understood each assignment. Finally, Tammy believed that the feedback on the papers lead to a better understanding of what she could do to improve both her writing and her grade on the upcoming paper. Tammy said that she liked the textbook selected for the writing course and the fact that the writing assignments were about her personal life experiences. These two factors also helped her enjoy and have a good learning experience.

Tammy was positive that Michael's immediate response to her e-mail messages and the prompt return of papers were important to her. When it was difficult for Tammy

to define promptly; she concluded that, for her, promptly meant within 24 to 48 hours after Michael received her communication.

Connections to Pre-enrollment Characteristics and Role of Academic and Social Integration: Tammy indicated that she did not have discussions with the instructor about her pre-enrollment background, skills nor abilities. Like other students in the study, she did have discussions with the instructor at the on-campus Orientation session about the computer skills required for the on-line course. She said these discussions were helpful to her because the information assisted her in becoming more knowledgeable with on-line coursework.

Tammy did not have discussions with the instructor about the time requirements for the course. However, at Orientation a group of on-line students who had successfully completed an on-line writing course concluded that the on-line courses require the student to plan to set specific time each week, sometimes as many as 15 hours to keep up with assignments. Tammy said she listened to this advice, “took it to heart” and worked to not only keep up with assignments but to stay ahead.

Communication Approach: In discussing her interactions with Professor Johnson, Tammy established that she communicated easily with him. She responded that two things facilitated her discussions with Michael. First, he always responded quickly to her questions, so she believed that he was listening to her and wanted to talk to her about the on-line writing course. In explaining the importance of the instructor listening and responding to students’ questions and comments, Tammy compared the on-line writing course to another on-line course when she said, “I am in an on-line course now that is difficult because I am not getting the feedback (response to

comments) from that instructor. That didn't happen with Michael. He always gave feedback quickly." Second, Tammy shared that Michael Johnson responded to her questions on-line in a writing style that made her feel that she was "talking" to him in person. Tammy ended the interview by saying, "When Michael makes comments on my papers or writes to me, it is like I can see his smiling face. Now I've met Michael 3 times, and, you know, that is also how he is. He loves his students and on-line instruction." Besides meeting Michael Johnson at Orientation, Tammy has also interacted face-to-face with Professor Johnson two other times. Both interactions occurred when she made a trip to the college campus, during Michael Johnson's office hours to ask him questions about assignments.

Vincent Lang

Vincent Lang is a 25-year-old, Anglo, male, married student. He is employed full-time as an automotive electronics technician. Vincent reported passing the on-line writing course with a 3.0 grade point average. The researcher was unable to confirm his grade because he did not give permission for the researcher to review his academic records. In interviewing Vincent, it was apparent that he had great respect and admiration for Michael Johnson. He stated often, "This instructor is a great, great instructor. I owe him a lot." Vincent also had a great deal to say about his experience in the on-line writing course.

Types and Timing of Interactions: Vincent first interacted face-to-face with Professor Johnson at the Orientation session. At the break, between the first and second hour, he had an opportunity to talk informally with Michael and learned that they both enjoyed fishing. Vincent explained that he left the Orientation class feeling that

Michael Johnson was a people person and was someone that he would be able to talk to on-line. Vincent interacted face-to-face with Michael one other time when he went to campus to discuss a personal problem with Michael. Vincent also interacted numerous times with Michael both on the telephone and on-line. Vincent usually participated in the weekly on-line group chat conversations initiated by Professor Johnson, and interacted with Professor Johnson on-line about his feedback statements on graded papers.

When asked when was the best time for him to interact with Michael, Vincent explained that it was important for him to interact with the instructor whenever he had a question, and that could be at anytime. He said what was important was for the instructor to structure times when he would be on-line to answer questions. Vincent also said that it was important for the instructor to respond to his questions within 24 hours. Vincent explained that an immediate response was critical because it helped him keep to the task of completing his assignments. In discussing the subject of timely responses to questions, Vincent said:

I knew that Michael checked his e-mail twice a day; therefore, it was easy for me to get a response to my questions. This was important because it's easy to get sidetracked. I need the answers to my questions while my train of thought is there on the subject.

Responding to Learning Needs: In talking about his on-line learning experience Vincent explained that he communicated with Michael Johnson many times. It was interesting to hear Vincent explain that he sometimes had difficulty selecting a subject for his writing papers. He would communicate on-line with Michael to present the problem, and Michael would ask him a question that “stimulated his brain” and helped

him identify a topic. Vincent said, “It was like Michael was coaching me on-line by asking questions which helped me decide on a topic.”

Vincent felt that the weekly on-line group discussions were a way for Michael Johnson to “engage him in active learning.” During each weekly group session, Michael Johnson asked a question to which students responded. These group discussions and other on-line interactions somehow created excitement and an interest in writing for Vincent. From Vincent’s perspective, the important fact about the group discussions was that Michael guided the discussion. In explaining the guided approach to discussion, Vincent said:

Michael joined the group discussions. He would guide the discussion. If someone gave the wrong answer to something, he did not say, “That is the wrong answer.” He would instead ask a question that helped us all see the correct answer to the question.

Vincent also said that the writing examples that Michael shared from his own writing were interesting. These were significant to Vincent because they allowed him to enjoy the writing course. Michael’s writing was also important because it allowed Vincent to see what “good” writing looked like. In discussing the importance of the excitement created in Michael Johnson’s on-line course, Vincent said, “My interest in the writing subject was critical to my completing the course. When I was in high school, I did not like writing. I liked the math and science courses more. For me to enjoy writing and find pleasure in it made it easier for me to actually do the work.” The feedback that Michael provided for Vincent which was embedded in papers returned by e-mail assisted him with future assignments. Vincent noted that because the feedback comments were clear and to the point, he was more sure about expectations for

future assignments, and he knew specifically what he could do to improve his writing. For example, Vincent explained that he often had grammar errors in his paper. Michael Johnson's comments were useful, both his explanations of ways to correct the errors and his references to a specific section of a text that provided more information. Vincent said about the feedback suggestions, "It was hard work to use the feedback. However, Michael explained things in such a way that I knew how to use his comments." Vincent also shared that Michael ended his feedback with general comments, but he especially liked Michael's positive statements about what Vincent did correctly. He said, "Michael's positive statements made me open to listening to his suggestions. When someone starts by having confidence in what I had done right, it makes me feel good and then I look for the remaining statements about what I can do to improve."

Role of Academic Integration: Vincent did not have discussion with Michael Johnson about his background, skills, and abilities prior to enrolling in the course. He did state, however, that the Orientation discussion with Michael about the computer skills needed for on-line writing course was good information to have before beginning to study in the on-line environment.

Interactions About Personal Problem: Vincent recalled a time during the semester that he encountered a personal problem that could have resulted in his doing poorly in the course. His wife's grandfather passed away, and he was involved with her and her family in matters that caused him to be unable to meet critical deadlines for assignments. He e-mailed Michael a letter and informed him of the situation, and requested additional time to complete assignments. Michael asked when Vincent would be able to complete the assignments and adjusted the deadline based on Vincent's

assessment of the situation. Vincent explained that Michael Johnson was very good about adjusting deadlines and then holding the student accountable to the new deadline. Michael's flexibility with due dates allowed Vincent to deal with something that was important to him while continuing in the on-line writing course. When discussing Michael's response to a personal problem that could have interfered with course completion, Vincent declared:

Michael understands that people have lives outside of school, so he is flexible when things in life occur. This makes me want to do even better for him. Some teachers have hard and fast rules that they will not change. They need to realize that a policy of no exceptions often has a negative impact on attendance and completion of classes.

Communication Approach: Vincent said, from his perspective, it was important for his learning and completing assignments for him to feel that he could talk to the instructor both on-line and in person. He further explained that he said he could talk to Michael Johnson about his assignments and a variety of other subjects.

When asked how he came to feel he could communicate with the instructor about a wide selection of topics, Vincent gave many reasons. First, Vincent mentioned that at Orientation session, Michael was friendly, approachable, and said, "Call me if you need me." Second, Michael was personable with his on-line and face-to-face conversations, and informal conversations with Michael facilitated communication. Finally, Vincent felt that Michael showed that he cared about him as a person, and this made Vincent comfortable in communicating with Michael.

Vincent said many times. "I always knew that Michael cared about me as a human being and that he wanted me to be successful." Vincent declared that he always

wanted to do his best in the on-line writing course because he knew he had in Michael Johnson someone who was committed to his success in the course and in college

Yonella Simpson

Yonella Simpson is a 37-year-old African-American, female student who is married and has three children. Yonella reported that she completed the on-line writing course with a 3.2 average. The researcher was unable to confirm the grade because permission was not granted to review her academic records. Yonella's long-term goal is to graduate with a Master's of Business Administration. Yonella's interview made it apparent that the relationship she established with the instructor was instrumental in assisting her in completing the on-line course. For example, in responding to a question about her reason for successfully completing the on-line course, Yonella responded:

I was afraid when the on-line writing class began. I was returning to college after having been away from school for many years . . . this was scary. I ended the course happy about my writing skills and comfortable with on-line instruction. The instructor made a difference. In the very beginning at the Orientation session, I connected with him; he was genuine, and I sensed that he cared about me as a person. He provided great support for me during the course of the course.

Types and Timing of Interactions: Yonella interacted with Michael Johnson face-to-face at the on campus Orientation session for on-line students, and communicated with Michael by telephone and e-mail. Moreover, Yonella participated in the on-line weekly group discussion initiated by Michael Johnson, and, found them useful.

Yonella communicated often with Michael Johnson during the on-line course but was not comfortable in defining a best time to communicate with him.

Connections to Pre-enrollment Characteristics: Though Yonella did not have discussions with Michael Johnson about her pre-enrollment characteristics to determine her unique needs for the course, she did find helpful Michael's comments about the computer skills required for the course. Yonella felt the opportunity was beneficial to practice computer functions that she would be using in the on-line course because it eliminated much of her anxiety about learning on-line.

Responding to Learning Needs: Yonella recalled e-mailing Michael Johnson sometimes because she had questions about what he had assigned her to do in several of the writing assignments. His immediate and direct responses to her questions helped her to begin the assignments with a good understanding of what was required. Yonella said that Michael Johnson interacted with her in several ways that were very supportive of her learning and completion of the on-line writing course. Yonella liked Michael's communications before assignments to her and to other students in the course which sometimes said, "Are you there? Is everything O.K.?" His invitation to conversation encouraged her to get busy with the assignment and to ask questions if she had them. Yonella also said Michael's feedback comments were very constructive and helped her to improve her writing while assisting her in being more sure about what she needed to do to improve her grade on the upcoming assignment. Finally, Yonella felt the weekly discussion group chats with other students in the class and with the instructor were beneficial because they helped her become more clear about appropriate topics for writing assignments and for the expected style of writing.

Interactions About Personal Problems: Toward the end of the course, with two assignments remaining, Yonella's baby became sick and was hospitalized. She was not

able to notify Michael immediately of the situation because she was spending so much time at the hospital. When she finally could communicate with Michael Johnson, she left him both a voice mail message on the telephone and sent him an e-mail message asking him for an extension on the due date for the last two assignments. Yonella said:

I knew I could complete the course. Michael's response calmed me down. When Michael responded, "No problem. Yonella, I understand the situation. You have a critical situation, and you are working. I will give you an extension. Please don't worry. Get the papers to me when you can."

Even though Yonella was late with the two assignments, she was able to complete the course on time by the end of the semester

Communication Approach: From the beginning of the class to the end, Yonella felt she communicated with Michael Johnson with ease. Her comfort in interacting with Michael, she believes, began at Orientation when Michael Johnson said to her and to other students present, "Don't hesitate to contact me if you have questions. Here is my e-mail address, office and home phone numbers, and my fax number." His availability along with his demonstrated willingness to communicate with her made her feel she could communicate with the instructor.

Yonella recalled that Michael shared things about his family and what he liked and disliked, and this gave her some sense that he was a person to whom she could relate. Because Michael shared examples of his writing with students, Yonella felt she knew something about who he was as a person, and this made him feel like a human being with whom she wanted to talk. While some students in the study struggled to explain how they were made to feel comfortable when communication with the

instructor, Yonella did not. When asked what allowed her to interact easily with Michael Johnson, she said the following:

He cared about me as a student and a person, and I knew it. I knew he wanted me to be successful. He treated me like an adult. He respected, me and I knew that there were no questions that I could ask that Michael would consider stupid.

Caring Attitude Connected to Communication: Student and Instructor Voices

After reviewing the students' comments about the communication approaches that supported course completion, I felt more information was needed to further clarify student comments about communication and the connection some students made to the respect and the caring attitude of the instructor. I felt that I had a good understanding of the other concepts emerging from the research.

Communication in the on-line environment is a complex issue; however, it is an important issue for researchers to understand. Terry O'Banion (1997) alluded to this when he stated that many critics of on-line learning emphasize that one of the weaknesses of the technology is that it has a dehumanizing effect and creates barriers to human interaction. O'Banion (1997) then challenged on-line researchers to study the new and unique communication created by computers to determine the types of on-line communication that build personal relationships and form communities critical to student success.

In order to better understand the students' statements about communication in general, the researcher analyzed the interviews of both instructors. This analysis made the researcher decide to further investigate the topics of respect and a caring attitude related to communication. Consequently, I conducted a second interview with the

instructors. In addition, I talked to several of the students who presented the concepts of a caring attitude and respect in connection with the communication approach that supported course completion. In analyzing the new information gained from a second interview with instructors and students, I found that often the communication which, according to the students, showed that the instructor respected and/or cared included comments that were personalized for a particular student.

Renee Schoffield, one of the students in Angela Jones' course, stated that Angela showed that she cared about her, and this attitude assisted her in feeling comfortable in her interactions with Angela. In discussing this topic a second time, Renee mentioned that when her father became ill and died, Renee felt Angela showed that she cared about her as an individual when she adjusted her assignment deadlines. However, in discussing this topic further, Renee also stated that when Angela made statements like "I am sorry to hear about your father's death. How are you doing?" These personal conversations with her about the situation also showed that Angela cared and respected her as an individual.

After concluding the interview with Renee and in then discussing this topic with the instructor, Angela Jones stated that she is deliberate in having on-line discussions with each student that are personalized and are about the experiences of each student. She further stated her belief: "Because, in the on-line environment, there is not a great deal of face-to-face contact between instructor and students, conversations that are personalized for each student assist in encouraging communication." She further returned to a conversation that she had with me previously and mentioned that she always wanted students to view her first as a human being. For Angela Jones,

personalized conversations, conversations based on knowledge of the student's background, history and values, assisted in allowing on-line students to interact with her as an individual and helped make on-line instruction a conversation between two individuals relating to one another about their experiences as human beings.

Angela Jones, in discussing how she personalizes communication by making sure that her conversations with students reflect the background and values of each student, once again mentioned her use of the autobiography assignment as a tool for personalizing conversations. The autobiography is the first writing homework that Angela Jones assigns. She is very deliberate in scheduling this assignment first so that she is able to use the information to personalize future conversations with her students. In deliberating on the topic of care and respect in the on-line environment with Michael Johnson and several students in his class, I realized that he also used information about his students to personalize his conversation with the students. Bonnie Fluker, one of the students in Michael Johnson's class, indicated that she knew that Michael cared about her as an individual. In discussing this topic further with Bonnie, I realized that in conversations with Bonnie, Michael Johnson sometimes asked Bonnie about her family. Michael Johnson's attention to Bonnie and her family made her feel that he cared about her as an individual. In talking to Michael Johnson, I learned that he, like Angela Johnson, was very deliberate in engaging students in conversations about who they were as individuals and events occurring in their lives. I discovered that it was this personalized approach to communication, conversations customized for each student, that the students were describing when they said the instructor expressed an attitude of care and respect. In talking to Michael I discovered a theme that I also learned about

from Angela. He like Angela engaged students in conversations that were based on his awareness of the values and events taking place in the lives of the students.

In summary, I discovered that personalized communication, developed by the instructor built on an appreciation of the life experiences of each individual student, supported course completion by creating an environment where students felt comfortable in interacting with the instructor.

Discussion of the Findings in Relation to the Conceptual

Framework and Research Literature

The findings of the study, based on the research questions, have been presented through a summary of the interviews and highlighted by quotes from each students respondent. Information from the instructors interviews have been added to the student voices on the research question about communication approach. In this section, the findings are connected to the research questions and discussed in relation to the conceptual framework and the research literature. The section will begin with brief comments about the type and timing of the interactions students experienced in the on-line environment. Next, findings about the content of the student-teacher interactions which supported course completion will be presented. Content areas, theorized in the conceptual framework but not discovered in the study will also be shared. Finally, conclusions will be given concerning the communication approaches which appeared to contribute to the student's course completion.

Type and Timing of Interactions

All 12 of the students in the study reported having interactions with the instructor. Eight of the 12 students interacted with the instructors face-to-face primarily

through participation in an on campus Orientation session designed for on-line students. Four of the students also made visits on campus to discuss various issues with the instructors. Additionally, all of the students in the study communicated with the instructors by e-mail to discuss a wide range of subjects. Moreover, five of the participants also communicated with the instructors by telephone to discuss various subjects.

The majority of the students in the study felt that the most critical times for them to communicate with instructors were before they started assignments and after they received written feedback on graded assignments. Also, a majority of the students in the study stressed that when responses to their communication came from the instructor within 24-48 hours from the time they sent the initial communication, they felt reassured that their communications were important to the instructor. This feeling that their work mattered to the instructor supported their effort to complete the course.

Content of Interactions which Respondents Felt Contributed to Course Completion

The interactions which students believed supported course completion, are grouped according to the research questions and presented in the following categories:

1. Student-teacher interactions about student's pre-enrollment characteristics, 2. Student-teacher interactions related to academic and social integration, 3. Interactions responding to the learning needs of students. Area three is further subdivided into student-teacher interactions to clarify assignments, teacher initiated interactions and student initiated interactions; and, 4. Conversations about personal problems, a subject that emerged but was not a part of the original conceptual framework.

Interactions about Student Pre-enrollment Characteristics

Background, academic skills and goal and institutional commitment: None of the students in the study cited interactions with instructors about their pre-enrollment characteristics such as family backgrounds, previous college, educational experiences or belief systems prior to course entry. In addition, none of the students had conversations with instructors about their goals or commitment to the institution. However, seven of the eight respondents who attended Orientation did report having student-teacher interactions about the technology requirement for the course which they felt were supportive of course completion.

Seven of the 8 students stated that information concerning both the technology, the types of software and hardware, and the computer skills required for the course were critical to their completion of the on-line writing course. One student, Lynn Elliott, mentioned, however, that the computer practice was not helpful because it reviewed skills that were very familiar to her. In discussing the Orientation, she said, "I don't think Orientation helped me because it was more for computer learning, and I was pretty computer literate. I could figure out the computer functions by myself." Seven students shared that it was beneficial for them to have an opportunity to practice the technology skills demanded by the course. Students at Lincoln Community College mentioned that they were required to take an on-line computer course along with the on-line writing course, and the skills learned in the computer course assisted them in the writing class. Hazel, one of the students in Angela's class, described an important aspect of the Orientation that focused on computer skills when she said:

The orientation class was definitely critical. I went through getting into the system. This was so important for me, even though I had good computer experience. It helped me also later in the class when I had some frustration with the internet provider. There were things that they told me at the orientation that was helpful for dealing with these and other problems.

Renee Schoffield, a student in Angela's class, emphasized the importance of connections to other college employees in the institutions when she said:

Orientation was key. The instructor told me about the skills needed for the course; however, more important were things like getting logged on and how to do it. It was good also that I knew the people face-to-face in the college who could assist me when I had technology problems.

Academic and Social Integration

Kember's (1994) research with on-line students implied that student-teacher interactions, which connect students' goals to course objectives as a means of making the course relevant for students, encourage persistence. However, my research did not discover evidence that student-teacher interactions occurred which connected students' goals to course objectives. In discussing this topic with the 12 students in my study, none of the students recalled having conversations with the instructor about the relationship of the English course to their major. However, it is important to note that for one group of students who were enrolled in an on-line program designed for students with a major in International Business, reading materials and writing assignments were selected that were appropriate for business majors; thus, conversations connecting the course to the student goals may not have been necessary.

Kember's (1994) academic integration theory further suggests that student-teacher interactions would occur about student services that may assist students with course completion. While a majority of the students in the study did not recall having

conversations with their instructors about academic support services, one student, Bonnie Fluker, mentioned that the instructor referred her to various support services on campus to assist her with family problems. Bonnie used some of the services and found them useful. Also, four of the six students in Angela's class stressed the importance of communications with the instructor about the college Creative Writing Center.

Four students in Angela Jones's course, at her suggestion, used the writing center. The students had positive learning experiences and explained that the services of the center assisted them in improving their writing. In discussing how they used the writing center, the students said that the writing center gave them access to individuals with good writing skills. The writers served as reviewers who read their papers and made suggestions on ways they could amend their writing. Papers with suggestions for enhancements were usually returned to the students electronically. In discussing the value of the writing center Hazel Griffin said:

Angela introduced me to the college writing center. I used it a lot because the readers gave good insight on what I could do to improve my papers. One time the reader told me something that I did not agree with; however, the other times the individuals working with me gave me a lot to think about and suggested improvements that were helpful.

Moreover, Kember (1994) suggested that student-teacher interactions regarding the time required for study support course completion. Once again, students in my research study did not remember having discussions with the instructor about the time requirements for study for the 16-week course. Three students, however, mentioned that at the Orientation a student panel told them about the amount of time that would be required for preparing for the on-line course. These students shared that this

information was very helpful in assisting them in knowing how much time they needed to schedule each week for the course.

Interactions Responding to the Learning Needs of Students

All 12 of the students in the study discussed student-teacher interactions about learning which contributed to course completion. Three themes emerged. Throughout the course, student-teacher interactions which facilitated learning were primarily those that clarified assignments, helped students gain insight into course content or materials, and that discussed feedback on written, graded assignments. These findings are consistent with Care's (1995) research with on-line nursing students. Care (1995), discovered that based on the students' perceptions, their successful completion of the course depended upon opportunities for them to have access to instructors to discuss assignments, receive feedback on assignments, and to discuss classroom materials.

Interactions to Clarify Assignments and to Prepare for Writing

Pascarella and Terenzini (1979) found that student-teacher interactions related to course content and intellectual conversation increased persistence. A similar finding in my study was that students felt that conversations about coursework supported course completion. There were primarily two types of student-teacher interactions related to preparation for completion of assignments that students considered helpful. The first interaction were those initiated by the instructor prior to assignments. The purpose of these interactions were to assist students with understanding expectations for the upcoming writing assignments. The second type of interaction was initiated by the student; primarily they asked questions to clarify expectations for assignment and/or gain a better understanding of the content of the reading material.

Teacher Initiated Interactions

Although both teachers initiated conversations on-line to assist students with assignments, in interviewing the instructors I discovered that the purpose of the conversations were different. Angela initiated conversation which focused primarily on the writing style required for assignments, and Michael focused mainly on the content needed for writing assignments.

Angela used what she called a “funneling” activity to assist students with understanding assignments. Prior to each written assignment, Angela posted on-line several questions about the type of writing required. Often she asked students to answer the questions using the writing style required for the upcoming assignment. Each week students were involved in an on-line group discussion where they shared their answers to the questions with Angela. Students who had difficulty answering the first set of questions were required to participate in a second on-line conversation with the instructor called a threaded discussion. An activity was posted, and students were grouped and asked to engage in a discussion with the instructor which required them to respond to one another using the writing form for the upcoming assignments. The instructor commented on each student’s writing.

Students who continued to have difficulty with the assignment were invited to an on-line chat with the instructor where they were asked to pose any questions they continued to have about the assignment. All of the students in Angela’s course stated that the first set of questions were meaningful and helped them understand requirements for writing assignments. Three students interviewed participated in the threaded

discussion, and they all said that these discussions were also helpful. None of the students interviewed discussed Angela's chat conversations.

Teresa Waro, a student in Angela's class said: "The discussion question conversations were very helpful because I understood what the teacher was looking for. It was nice to see what she would say about what I wrote. This helped me to understand what she was looking for in my writing."

Norma Settlewhite, one of three students participating in threaded discussions, said, "I love descriptive writing. The threaded discussions allowed me an opportunity to practice descriptive writing in ways that were helpful."

All six of the students in Michael's class found his invitation to participate in an on-line conversation, which he used to introduce a new type of writing assignment, beneficial for understanding and completing assignments. In discussing this activity, Michael Johnson stated time and time again that the main purpose for the exercise was not to engage students in discussion about the writing style but to have students think about a subject in ways that assisted in defining the content for the writing assignment. Before each writing assignment, Michael also shared a short writing sample that he wrote. His writing sample was in the style stipulated for the upcoming assignment. The conversation ended with a question about the content of the sample writing. Students in the class were invited to answer the question, comment on the subject discussed in the writing sample, and/or pose new questions. The entire class would then engage in conversation, through an electronic "chat room" about the content of what was written and about the writing style.

Michael guided the student discussions. Although it was expected that all of the students would participate in the weekly discussions, Michael noted that sometimes several of the students did not participate; however, a large percentage of the students did actively engage in the invited conversations. Students stressed that Michael never answered the questions raised in the invited conversations but instead lead the students to seek answers from one another.

In discussing the invited conversations Vincent Lane said:

The invited conversations were an active way to learn. They were especially helpful to me because I loved thinking with the instructor and the other students. Michael was very good about guiding discussions. He did not give the answers to the questions. We answered the questions. If someone answered wrong, then he would direct us to another reading in the book or ask us a question which made us think. The conversations helped me know how to write the next assignment and also assisted me in thinking about what I wanted to write.

Expounding on the invited conversations, Tammy said:

Michael's assignments are clear. Also, the examples of his writing and the weekly discussions are helpful. Each week he puts questions out there for us to answer. This gives us an opportunity to ask questions and to have them clarified. One time I replied to something . . . I asked, "Is this the type of thing that you are expecting us to write about?" He (the instructor) asked others to respond, and he made comments. That was helpful.

Student Initiated Interactions

Nine of the students in the study said opportunities to ask questions about assignments and reading materials were essential. The three students who did not stress the significance of student initiated interactions used to clarify assignments stated they seldom interacted with the instructor to ask questions because, for both instructors, expectations for assignments and the instructional materials were clear.

Students of both instructors mentioned that the following interactions contributed to clarity with assignments: web-sites references which gave samples of writing style desired, writing samples written by the instructor, detailed explanation of assignments, and textbooks that were both clearly written and had writing examples. No further comments on techniques which assisted with clarity of assignments are discussed because this is not the focus of this research study. However, agreeing with the research of Mohan (1975), it is important to note that all of the students in the study stressed that course material and assignments which were easy to understand encouraged successful course completion.

Norma Settlewhite and Vincent Lane recalled asking Mr. Johnson about the length of one of the papers they had to write. His immediate response helped them complete the first assignment appropriately.

On the other hand, Ann Johnson, a student in Angela's class, remembered being very nervous about the first assignment and e-mailed the instructor a number of times. She said:

I was not sure what she (the instructor) was looking for in the first few assignments. I had just started back to college again, and I had to retake several courses. I wanted to be sure that I knew what was expected this time . . . because I wanted to do good. I e-mailed the instructor and talked to her by phone and eventually went in to see her and asked her to explain to me the type of writing that she wanted. Her willingness to answer my questions was important. I understood what to do and made a good grade on the first assignment. My grades improved with each assignment.

Discussions Related to Feedback on Assignments

Compatible with the research on teacher effectiveness by Cross and Steadman (1996) and the findings of Dean (1995), I discovered that the students in the study felt

timely feedback on assignments was essential to course completion. All of the students in the study reiterated that the feedback on assignments and the opportunity to discuss comments made by the instructor were critical to successful course completion. When I asked students what interactions with the instructors were the most valuable to them, often the response was feedback provided on graded writing assignments. These students also noted that attention to and implementation of suggestions in the feedback assisted them in improving their writing.

Both instructors used similar principles for providing feedback on writing papers. In most cases, papers were returned to students by e-mail. Teacher comments were typed in a color of type different from the one used by the students. Their comments were embedded in the body of the paper.

Students described the following feedback principles used by both instructors as significant in understanding writing errors and in providing instruction which assisted them to improve their writing in upcoming assignments: 1. Positive comments about sentences and portions of the writing the instructor thought were well written appeared in the text of the paper, 2. General comments at the end of the paper provided an overall evaluation of the paper. Both instructors used a chart which outlined key concepts used to grade the paper and the points awarded for each. Students were able to save their papers in an electronic file so they could review them at a later date; and 3. Instructors provided specific details about grammar errors and about portions of the writing that needed to be improved were embedded in the text of the student's papers. Students could place their cursor on a portion of the paper and read the instructors suggestions about ways to improve the writing.

Students often stressed that the on-line instructor's use of specific suggestions about ways to improve their writing was an approach that helped them understand problems with their writing. When discussing the value of this concept, five students compared their on-line writing instructor's approach to their experience with former writing instructors. When giving an example to explain the difference, one student said, "In other courses, the teacher might say simply, "This sentence is too long." My on-line instructor would say, "This sentence is too long. You might consider developing two sentences which make the same point." The instructor would also refer me to writing examples demonstrating the principles suggested.

Students in both classes also stressed that instructors returned papers, on-line, quickly, often within two to three days from the date they were sent to the instructor. The timely response was important because the feedback could then be examined and used to refine the next paper.

Ann Johnson, a student in Angela's course, commented on the positive statement included in the feedback:

She comments on the good and bad in my papers. She would say, "Excellent observation, or I like the way you structured this sentence." This made me feel good about my writing, and that was very important to me. Her criticisms on ways to improve were direct and helpful. For example, she said, there is not enough structure here. You may want to add examples to clarify your thesis statement. Also, the instructor highlighted areas that she had concerns about, and this was really better. It made the writing a lot more interesting. I always knew what she wanted. I have classes where I never understand what the teacher wants. I always knew what she wanted me to do.

Teresa Waro from Angela's class said the feedback was like having a conversation with the instructor. In explaining the communication, Teresa said:

She would talk to me just like she was talking to me in person. She would say things like, “Could you be a little more clear on his portion of the paper?” You may consider doing ... and she would list some things to try. The detailed notes were a plus because I had another teacher who did not do that but wrote comments at the end of the paper and that was really difficult because I didn’t know what the teacher wanted. I always wanted more information. I always understood what Angela wanted.

Students in Michael Johnson’s class also appreciated his feedback method which included detailed comments combined with summary statements. Albert Bentley said simply, “Michael’s feedback on papers helped me to improve. How do I know how to improve if I don’t know how I am doing?”

Tammy, on the other hand, had a great deal to say about Michael’s feedback system. She explained the positive aspects of the approach when she said:

When I received the feedback was a critical time for me to interact with the instructor . . . to make sure that I was on the right course. Also, it was important to me that when he commented about something that was not proper with the paper, he always started by stating something positive, about what I did right. Also, his general comments at the end, such as, “The paper was well written. Continue to work on writing statements that clearly explain what you mean” were great! Whenever he wrote to me. It was almost like I could see his smiling face.

Bonnie Fluker, another student in Michael’s class, explained the importance of the feedback when she said:

He used the notes feature. I could put the cursor on and would see the problem and what he would have done about it. The key is that Michael shares with me what I could have done about the problem. Sometime, because I did not do a good job of editing my paper, I had grammatical errors. He corrected the errors and directed me to more reading material about the errors...that was also helpful. He used a general summary at the end that was very helpful. Also, when I print the paper I am looking at positive things; that makes a difference psychologically to the person trying to do a good job. The positive comments are encouraging to the person who wants to do better in his class. He also ends his comments with a chart to tell me about the major aspects of the paper. He says, for

example, “You got 5 out of 7 points for this or that. He puts a chart in to show me how he graded each section, and this is also helpful.

I believe the overall thoughts of the students concerning the feedback system used by these two instructors are summarized by Vincent Lane, when he referred to Michael’s feedback system:

I was always self conscious about my writing. In fact, previously I really didn’t enjoy writing courses. However, in Michael’s class I learned to love writing. The on-line feedback system he used really helped me learn. His great comments about what I did right, his direct suggestion about improvement, and his general comments at the end made me feel like I was having a personal conversation with Michael. This personal touch made me want to work harder. I always wanted his approval. He respected me. I wanted to do good for me and for him.

Conversations about Personal Problems

One important finding emerged in this study which was not revealed in the literature. Six students, mentioned previously in the first section of the chapter, who experienced various personal problems, identified interactions with instructors during those critical life experiences as essential to successful course completion. These students explained that the instructor’s caring responses, coupled with interactions denoting flexibility with due dates for assignments, encouraged them to continue with the on-line writing course.

Also, these students commented that they were able to complete assignments and continue with the course and complete it by the end of the semester because assignments, lectures and other materials needed to complete assignments were easily accessible on-line. Several of the students further suggested that they would not have been able to continue the course in a traditional classroom setting because missing

classroom lecturers and discussions would have made it difficult for them to complete their assignments and continue with the course.

Five of the students faced critical life experiences related to death or illness in their families. The significant problem for one of the students related to computer technical problems.

The remaining six students in the study did not encounter personal problems which hindered class progress.

Communication Approach: Development of an Environment Where the Student Feels

Free to Interact

Consistent with the expert opinion of Paulsen (1995), all of the students in the study stressed that learning in an on-line environment where they were comfortable in asking questions and discussing issues encouraged course completion. Holmberg (1995) pointed to a feeling of rapport and a special relationship with instructors which supports on-line students when he suggested that warmth in human relations and feelings of rapport with instructors strengthen and support study motivation as well as promote study pleasure.

In interviewing the 12 students in this study, it was apparent that all of the students felt comfortable in interacting with their instructor on-line, face-to-face, or by telephone. Students commented often that their conversations with instructors were the same, whether it was on-line or face-to-face. For example, Teresa Waro said in discussing her comfort in communicating with Angela Jones by e-mail said, "When I didn't understand something it was easy to talk (on-line) to Angela. I also talked to her by phone, and the communication was the same." As this theme emerged, students were

asked to tell more about what interactions contributed to this real “ease” and, in many cases, “fondness” when communicating with the instructor.

From the perspectives of the students in the study the following types of interactions with their instructors assisted the students in feeling comfortable in interactions with the instructors: 1. The instructors sharing who they were as individuals, their likes, dislikes and values, and creating conversations with students which allowed the students to share who they were as individuals. Instructors sharing their writing also seemed to assist in creating a situation where students felt comfortable in interacting with the instructor; 2. The instructors’ prompt responses to student communications within 24-48 hours; 3. The instructors stating that they wanted the students to contact them if they had questions or needed to discuss any subject with them; and 4. The instructors showing that they cared and respected the students. One student in the study said that opportunities to think critically with the instructor helped to create an environment where he felt comfortable in interacting with the instructor. Consistent with Dean’s research (1995), I discovered that student-teacher interactions which allow the students to begin to know the instructor as an individual supported course completion. All eight of the students who attended orientation emphasized that the face-to-face interaction with the instructor was helpful because it allowed them to begin to understand the instructor, what they valued and, what they expected from them as students.

Most of the students in the study commented that they were comfortable interacting with the instructor because they felt that they knew the instructor. Because both instructors were comfortable in discussing their lives and what they liked, disliked

and valued, the students believed they knew the instructors as individuals. Ann Johnson expressed this viewpoint when she said:

Angela has let me into her life. For example, once when she went to a funeral she told me about that. She didn't have to explain that she would not be available that particular weekend because she would be attending a funeral. I feel like I know this instructor and that makes me feel comfortable in talking to her.

Sharlene Hudgins also felt comfortable in communicating with Michael Johnson because she felt she knew who he was an individual. In discussing her fondness of communicating with Michael Johnson she said, "You get a feel for Michael's lifestyle. He will tell you about his family, what he is doing on the weekend. So you feel close to this person. You feel that you know him. This makes it easier to communicate with him."

Many of the students in the study noted that the instructor's attention and prompt response to communication created an environment which encouraged communication. When talking about what made it possible for her to communicate with the instructor so freely, Teresa Waro commented on the prompt response of the instructor to her communication. In discussing the topic Teresa said, "If I was writing to someone, and it takes them a long time to respond, I feel that I am not that important; however, if they respond quickly it feels like I am a priority."

Most of the students, in both courses, indicated that early in the course the instructors made them feel they could communicate with them by encouraging them to ask questions and to discuss problems and issues. Statements such as, "Don't hesitate to ask me questions," combined with genuine and timely responses to questions, issues, and concerns resulted in student-teacher interactions in which students felt comfortable

interacting with the instructor. When discussing the environment in which communication transpired, Lynn Elliott said, “ I knew I could always ask the instructor questions because at the beginning of the class she said, ‘If you have questions, call me.’ She gave us her home phone number, e-mail address and fax number. This made her accessible to me.”

Tammy Waro, a student in Michael Johnson’s class made a similar observation when in discussing the on-campus orientation said, “I knew that I could call him---or if I needed him I knew he would respond.” When asked to explain how she knew she could contact the instructor Tammy further expounded, “ He said that. At Orientation, he said, ‘contact me if you need me.’ Also, you learned that on-line instruction and the college was important to him and that he would do all that he could to help you. He expected you to work hard; however, he was available to help.”

Finally, some of the students in the study said they felt free to communicate with the instructor because the instructor showed the students that he/she cared about them as individuals. In analyzing this topic in light of student and instructor comments, I learned that conversations, personalized for each student, made students feel the instructor cared about them as individuals and aided in developing an environment in which students felt free to interact with the instructors.

It is critical to state that one student, Albert Bentley, in discussing communication approaches which assisted him in feeling free to communicate with the instructor, said that the opportunity to gain information about what the instructor expected from him as a student and the opportunity to think critically with the instructor was important in assisting him to communicate with the instructor. Unlike other

students in the study, it was not the friendly approach to communication or the caring attitude that was important to this student.

Summary of Main Points of Findings

In concluding the chapter, let me present six general findings of the research.

First, I found that, from the perspective of the 12 students in the study, student-teacher interactions did occur. Furthermore, consistent with the findings of Pascarella and Terenzini (1979), Tinto (1987), Kember and associates (1994), Kramer (1994), and others, I discovered that, from the perspective of the 12 students in the study, student-teacher interactions occurred which contributed to course completion. It is important to note, however, that while most of the students in the study felt their interactions with the instructor contributed to their course completion, three of the students in the study explained that they communicated very little with the instructor. These students said they had few interactions with the instructors because expectations for the course and assignments were clear and the assignments were easy to complete.

Second, consistent with the expert opinions of authorities in the on-line instructional area, the researcher also discovered that, from the student perspective, student-teacher interactions which responded to the learning needs of students, were fundamental to course completion. One of the purposes of the study was to discover whether or not student-teacher interactions contribute to course completion; if so, what are the content of the interactions which students find helpful. I learned, from the perspective of the students in the study, that student-teacher interactions which related to clarifying and providing feedback on assignments are important to course completion.

In regard to the content of student-teacher interactions, a new theme emerged which was not revealed in the literature review. Some students in the study said that if they faced personal problems, which hindered course progress, it was important for student-teacher interactions to occur which responded to their problems.

Third, another purpose of the research was to discover, from the student perspective, the timing of interactions which encouraged course completion. Students shared that the most critical times for them to communicate with instructors was before they start assignments and after they receive written feedback on graded assignments. A majority of the students in the study stressed that when responses to their communications came from the instructor within 24 to 48 hours, they felt reassured that their communications were important to the instructor. This feeling that their work mattered to the instructor supported their efforts to complete the course.

Fourth, based on Tinto's (1987) retention model, the students were asked a series of questions to determine if student-teacher interactions occurred which were about the student's goals and background experiences prior to enrollment in the course. The purpose of such interactions would be to assist students early in the course with acquiring the skills needed for successful completion of the course. From the perspective of the students in this study, conversations about these subjects, other than about computer skills required for the course, did not happen. Eight of the 12 students engaged in interactions with the instructors about the technology and the technology skills required for the course at Orientation and that these conversations supported course completion. It is important to note however that students did have conversations

with me that were about their goals and experiences prior to enrollment in the on-line course.

Fifth, as noted previously, my research is based on the retention model of Vincent Tinto and Kember and associates. Because Kember's research was with on-line students, his definitions of academic and social integration was used to develop a beginning framework for inquiring about the content of student-teacher interactions, which may assist course completion. The research was designed to discover if student-teacher interactions, based on the implications from Kember's definition of academic and social integration, were important to students. Interactions based on Kember's definition of academic integration would include discussions about student's goals and the connection of student's goals to the objectives of the course. Interactions connected to Kember's premises of social integration would include communications about time requirements for the course, in order to assist students with developing time schedules, which include adequate time for study and the personal lives of students. This study discovered that, generally, discussions which connected the course to student's goals and conversations about the time requirement for preparation for the course did not occur. It is key to note, however, that both instructors mentioned conversations about connections of the course to student educational goals may have occurred with advisors/counselors prior to the students enrolling in the course.

Also, based upon another aspect of Kember's (1995) definition of academic integration, students were asked questions to determine if student-teacher conversations happened which focused on the services needed to support course completion. Generally, student-teacher conversations about student services to aid course

completion did not occur. However, one student, Bonnie Fluker, mentioned that the instructor referred her to various student support services on campus to assist her with family problems. Bonnie stressed that she was thankful for the teacher's referrals and that the use of some of these services assisted her in remaining in the on-line writing course. Also, three of the six students in Angela Jones' course, based on her suggestion for them to use the campus writing center, which provided on-line writing services, used the services and found them supportive of course completion.

Finally, the research was designed to understand how students would describe the communication approaches used in the on-line environment to determine if there were certain features of the communication approach which contributed to course completion. Consistent with the research and expert opinions of Holmberg (1995), Paulsen and Rekkedah (1990), and Myrick & Wittmer (1980), student-teacher interactions that make students feel comfortable in communicating with the instructor appeared to support course completion. Moreover, student-teacher interactions that were personalized for each student, and which occurred based on knowledge that the instructor had about the values and experiences of students, also encouraged course completion.

From the perspective of many of the students in the study, various communication approaches initiated by the instructors created an environment where students felt free to communicate with the instructors. Students stressed that it was important for instructors to communicate in ways that let students see the human side of the instructor, their values, experiences, and opinions about a variety of subjects. Also, some students stated that instructors responding promptly to communications; within

24–48 hours, and instructors stating that they wanted the students to contact them if they had questions, were actions which aided in creating an environment where students felt comfortable in interacting with the instructors.

In addition, for some of the students in the study, instructor actions which showed that they respected and cared about the students contributed to creating an environment where students were encouraged to interact with instructors. In investigating the areas of respect and care connected to communication (based upon the comments of students and instructors), the researcher found that the conversations that contributed to course completion were a.) based on the instructor having an understanding of the values and experiences of the students, and b.) were then personalized for each of the students. Most of the students in the study believed that communications which occurred from a friendly perspective were beneficial. One student said that he valued open, honest communication but that the communication did not need to be conveyed in a caring manner.

CHAPTER 5

CONCLUSIONS, IMPLICATIONS OF RESEARCH, FURTHER RESEARCH SUGGESTED

Introduction

As community colleges increase delivery of instruction by adding on-line computer instruction, institutions must be concerned with course completion and persistence. From the period of correspondence courses to telecourses and two-way interactive television courses, the history of distance education has been troubled by high drop-out rates. In a review of the research literature on distance education, Merisotis and Phillips (1999) found in one study that students involved in on-line courses had higher drop out rates (32%) than in traditional on campus classes (4%). Because one of the most constant findings in many institutions of higher education has been that persistence is facilitated by student-teacher contacts, it is important for educators to understand the content and timing of interactions which support course completion.

The purpose of this research study was to understand the types of student-teacher interactions that occur in an on-line writing course from the perspective of students who successfully completed an on-line course with a 2.0 grade point average or better. Further, from the student perspective, the study was constructed to discover if certain student-teacher interactions encouraged course completion. If so, what are the content and timing of the interactions that assist the student to complete an on-line writing course with a 2.0 average or better.

This research was based on the academic and social integration theory of Vincent Tinto as adopted for adult on-line students by Kember and associates.

Findings, Conclusions, and Implications for Practice

In this portion of the chapter, the major findings of the research study are discussed and implications for practice and conclusions of the findings are presented. An overarching finding of the research is, similar to the research of many others, such as Astin (1975), Terenzini and Pascarella (1980), Tinto (1989), and Kember (1995), namely, that positive student-teacher interactions contribute to course completion.

1. This study revealed that course completion is supported when instructors individualize instruction for each student. Individualized instruction may be defined as instruction that includes learning activities that are designed for each student and that responds to the specific learning needs of each student. Feedback on graded assignments in which instructors' comments were customized for the individual and about the specific learning needs of each student were important to students and encouraged their course completion. Conversations near to the time that instructors returned graded papers aided students with future assignments and contributed to course completion. The instructor's feedback comments on graded papers individualized for the learning experience of each student contributed to course completion in the on-line writing course.

Implications for Practice: Instructors teaching on-line courses may want to consider developing strategies for delivering individualized instruction for on-line students. On-line instructors may need to consider finding ways to individualize instruction by providing feedback on graded papers to give specific information to each

student that assists the student in understanding what to do to improve his/her writing. Students and instructors may also need to schedule time to discuss the instructor's feedback on graded papers near the time that graded papers are returned.

Conclusion: In this study, these findings emphasize the importance of individualized on-line instruction. The conclusions may be drawn that in the on-line environment teacher interactions that are both individualized for each student and that place the student at the center of the learning experience support course completion.

2. The study found that student-teacher interactions that assist in clarifying assignments supported course completion. It was also found that for most of the students in the study student-teacher interactions to clarify assignments occurred near assignment completion dates. Also, prompt responses to student's questions, delivered within 24-48 hours, assisted the student in having the information necessary to complete assignments according to the student's time schedules. Though not the topic of this study, it was also discovered that students believed that assignments and reading materials that are easy to understand were important to course completion. It is important to note that these findings are consistent with findings in the teacher effectiveness literature for the traditional classroom.

Implications For Practice: These findings suggest that students and instructors may need to schedule time for interactions to clarify assignments close to the time that assignments are due. Instructors that teach on-line writing courses may need to develop schedules for responding to student communications within 24-48 hours. Similar to the approach of Michael Johnson, instructors may want to schedule specific times to

respond to student communications so that students are able to coordinate their study schedule with teacher availability.

Conclusions: These findings suggest that certain teaching techniques that are considered part of effective teaching and that support course completion in traditional classrooms may support student success and course completion in the on-line environment. Additional research is needed on the topic, as I did not study all of the practices often found in the reference literature (Chickering & Gamson, 1987). Also, more research is needed about how to determine whether instructional materials are clear. Discussions about these topic are included in the implications for research portion of the study.

3. This study revealed that, from the perspective of some of the students in the study, interactions at the beginning of the on-line course about the technology and the technology skills required for the course were helpful. Moreover, the opportunity for some of the students to practice the technology skills required for the on-line writing course at an on-campus orientation program was beneficial.

Implications for Practice: Instructors may want to consider providing opportunities for on-line students to learn about the technology and technology skills required for the course at the beginning of the course. For some students an on campus Orientation, which provided an opportunity for students to practice the skills required for the course, was helpful. On-line instructors may want to provide opportunities for students to participate in face-to-face Orientation programs and encourage or require all students to attend.

Conclusion: This finding suggests that at the beginning of on-line courses, information about the technology and the skills required for on-line courses is important for some students. Opportunities need to be available for students to learn about the specific technology requirements and skills required for specific on-line courses.

4. Some of the students in the study found use of the campus writing center was beneficial and supported course completion. One student found discussions with the instructor about personal problems and referral to campus student support services which she used helpful and supportive of course completion.

Implications for Practice: Instructors may need to be aware of the various student support services available on their campus in order to connect students to the services at the appropriate times. Students may need to inquire about what college support services are available in order to access them at the right times.

Conclusion: The conclusion may be drawn that on-line instructors should be aware of the needs of their students for academic support services and make every effort to connect the students to the appropriate services.

5. For most of the students in the course, course completion is supported by the instructor who allows students to get to know her/him as an individual and who shows a caring attitude. Conversations that are personalized, customized for the student based on knowledge of the background, history and values of the student, further contribute to creating conversations which support course completion. The instructor's personalized conversations and responses to the student's personal problems supported persistence to course completion; these responses included, where necessary, providing flexibility with assignment deadlines. Instructors who state that they are available for students when

they have questions also support completion. Finally, as mentioned previously, timely responses to student communications support course completion.

Implications for Practice: Students and instructors may want to participate in conversations that allow both to become acquainted with one another as individuals sharing their likes, dislikes, and values. When instructors are aware of the personal problems of students, they may need to respond in ways that addresses the individual needs of each student including, where appropriate, flexibility with future assignment due dates. Instructors may want to consider making students aware of their availability for student communication by stating the times that they are available for communication.

Conclusions: These findings conclude that in the on-line environment the development of relationships between students and instructors support course completion.

Implications For Future Research

The literature review for this research indicates that while there is a large body of research maintaining that student-teacher interactions support course completion, few research projects were discovered concerning the content and timing of those interactions. In order for on-line teachers to have a better understanding of the type and timing of interactions that support course completion, more research on the specific topic of content and timing is suggested.

Both instructors and most of the students in this study mentioned that on-line was an effective method for both teaching and learning writing. The two instructors interviewed mentioned that on-line instruction assists students in improving their

writing because it encourages writing. In other courses the on-line delivery method may not be as appropriate for learning; the experiences of on-line students in those disciplines may be different from the students in this study; thus, it is suggested that more research is needed about course completion and student-teacher interactions that support course completion for other types of courses. It would be important to compare and contrast the experiences of students in various courses so that more is learned about student-teacher interactions supportive of course completion.

During this research, students often said that in the on-line environment it is important for assignments and reading materials to be clear and easy to read; clarity in instructional materials is critical to course completion. This researcher asks the following questions: what is clarity and how is it achieved? What are the features of reading materials and assignments that are easy to read and understand in the on-line environment? More research is needed about what makes on-line instructional materials clear and easy for students to understand.

Some of the conclusions reached from the research, included positive student-teacher interactions, prompt and specific feedback personalized for each student, and student-teacher interactions that respond to the learning needs of students, help all students to persist to successful course completion in an on-line environment. It is interesting that these findings are consistent with the teacher effectiveness literature for traditional classroom instruction (Chickering & Gamson (1987), Berlinder (1986), and Easton, (1984). This finding raises the following questions for the researcher: Are the same strategies that research has found to be effective in the traditional classroom setting equally useful and effective in the on-line environment? In other words, is good

teaching the same in both the traditional classroom and the on-line environment?

Because of the differences between the traditional classroom setting and the on-line setting, an additional question is asked: Are different instructional strategies required to support course completion for the on-line environment than are necessary for the traditional classroom? It is important to note that the two instructors interviewed in this research observed that they used many of the same teaching strategies in both their traditional and on-line courses. However, would this be the experience of other instructors who teach both traditional and on-line courses? These implications suggest that comparative research is needed about the instructional methods that support course completion in the on-line environment versus traditional classrooms.

One of the instructors in the study noted that she may have used individualized instruction in the on-line writing course because she had not learned how to effectively use on-line group activities to support course completion. More research may be needed about group on-line activities that are effective teaching strategies. Further research is suggested to understand the student-teacher interactions that occur between on-line students and advisors/counselors and their contribution to course completion. Kember (1994), in his research with on-line students, found that conversations concerning skills required for on-line courses and that connect courses to students' goals are supportive of course completion. His findings, coupled with the comments from the instructors in the study, suggest that more research about student interactions with advisors and counselors may be helpful. Studies designed to understand the types of interactions that occur with advisors and counselors and their contribution to course completion would be important.

Finally, in reviewing data on the students in the study, it was revealed that most of the students in the study completed the course with a 3.0 grade point average or higher. It should be noted, however, that one instructor had a grading system which allowed students to rewrite several papers in order to improve their overall grade point average. This practice may have allowed students to end the course with grade point averages in the 3.0 or higher range; therefore, some of the students in the study may have experiences similar to students who would have had a 2.0 grade point average in another on-line course.

Only two male students were included in the study. When discussing preferred communication approaches for on-line courses, one male noted that he needed an opportunity to think with the instructor. Most of the female students in the study preferred a personal, caring approach to communication. Questions unanswered by this study pertain to potential gender differences. Moreover, research about the traditional classroom has documented that often the experiences of females are different from those of males, (Belenky, Clinchy, Goldberger and Tarule (1986), Gilligan (1982), Gaskell and Willinsky (1995), Mac Keracher (1996) and Tanner (1990). To examine this issue further, it is suggested that additional research should include a larger population of male students.

Anticipating that the on-line experience may be different for students who passed the on-line writing course within the 2.0 - 2.9 grade point average when compared to the 3.0 or higher grade point average, further research with students within the 2.0 -2.9 grade point average would add to the body of research on student-teacher interactions and course completion.

Final Comments

Leach and Milliron (1998) identified the use of on-line instruction as a way to increase access to education for learners who need instruction at times that are compatible with their family and work schedules as one of the key issues that community colleges will have to address in the future. In order for on-line instruction to expand access to a college education, however, on-line instructors must rise to the challenge of constructing courses that encourage students to complete the courses. Moreover, as noted by Leach and Milliron (1998), in order to develop retention focused on-line courses, on-line educators must address the human side of technology by learning more about the student-teacher interactions that contribute to course completion.

A review of the research literature revealed that little research exists on course completion for on-line courses, and fewer studies are available on student-teacher interactions that contribute to course completion in the on-line environment. This research, by focusing on the content and timing of student-teacher interactions that contribute to course completion, assisted in helping us to understand the types and timing of interactions which encourage course completion.

What did my research findings say about student-teacher interactions and course completion? In reflecting on my research study, I have concluded that the findings may be summarized in the words “student centered learning that is both individualized and personalized.” From the perspective of the 12 on-line students involved in my study, I learned that critical to successful completion of the on-line course were student-teacher

interactions that focused on each student's individual learning needs and that included communication that was customized for each student.

Both of the instructors in this study embraced a philosophy of individualized instruction. Individualized instruction may be defined as learning activities that are designed for each student and that respond to the specific learning needs of each student. The instructors engaged students in conversations designed to understand what students were learning and then involved them in instruction and conversations that responded to each student's issues and concerns. Interactions about technology, assignments, instructor feedback comments, and student services to support instruction were all based on the distinct needs of each student.

The instructors in the study also valued personalizing conversations with students. Personalized refers to a communication approach that is customized for a specific student and occurs based on knowledge that the instructor has about the background, history, and values of the student. Both instructors developed ways to engage students in conversations that were about the student's values, likes and dislikes, and the events occurring in the lives of each student. In addition, the instructors shared the same types of information about themselves. These conversations about the personal aspects of both student and instructor assisted in creating an environment where students felt comfortable in asking questions and discussing issues. It was this freedom to discuss issues that encouraged students to discuss personal problems that could have hindered course completion. The instructor's caring attitude coupled with the instructor's willingness to adjust assignment deadlines assisted some of the students in the study with course completion. It was the environment of free exchange of

conversations and interactions that all of the students in the study felt assisted them in completing the course. They completed assignments and eventually the course because they were able to ask questions, raise issues, and find solutions to problems. Moreover, the practice of the instructors of responding to communication initiated by students within a 24-48 hour time frame meant that the student's time schedule guided the time for interactions that further personalized the communication.

This research study has demonstrated that on-line instructors and students may learn a great deal about the content and timing of on-line interactions that support course completion by listening to the voices of students. For this reason, community college educators who are serious about course completion for on-line courses should have systems in place to hear the voices of students on the subject of course completion and student-teacher interactions that contribute to course completion. One of the students in the study made this point when she said:

One of the reasons that I was successful in Michael's on-line course was because I always knew that he was listening to me. When I made suggestions about things that could help me in the course, he included my suggestions in future assignments.

One of the students in Angela's course made a similar point when she said:

Teachers need to realize that students are people that should be listened to. We have much to say about our learning and what we need to be successful. Angela was one instructor who really listened to what I had to say. For example, she ended the class by asking us what could be done to improve the course. Many of us said we thought more on-line group activities would help. Her response was, 'I will work on that for future classes.' I believe it is important for instructors to improve courses by including the thoughts of the students on the matter.

APPENDICES

APPENDIX A

Interview Protocol For Students

I. Interview Data

Student Interviewed:

Sex:	GPA:	Ethnicity
Status:	Returning Adult	Recent High School Graduate
Date/time of Interview		Location:
Course Taken on-line When:		Number of courses taken on-line

II. Review of Research Project

Review of Purpose of Interview:

Verification that consent form has been signed? If not ask student to sign one.

Consent to tape interview? Yes _____ No _____

III. Questions:

Please tell me about yourself? I would like to know about things you feel are important to me understanding your career goal (s) and the reason (s) you decided to take an on-line course... in this particular institution.

Share with me how prepared you were for the on-line course before enrolling. Did you have prior skills that were important to your successful completion of the course? If so, please share with me those skills that were beneficial to your successful completion of the on-line course? Were there other skills, that you did not have, that you now believe would have been beneficial to course completion? If so, please share information about those skills with me.

Did you have certain attitudes, beliefs, and habits prior to taking the on-line course that were helpful to your completing the on-line course? If so, describe those attributes and share how they contributed to successful completion of the course.

Describe as completely as possible the interactions and conversations, both written and verbal, that you had with your instructor before the on-line class began/during the first week of the course. (content, timing, media used).

In reflecting on these interactions, please discuss with me those interactions that were helpful. Please describe for me interactions that were not supportive of course completion. What relationship, if any, did these interactions have to your successful completion of the course.

As the class progressed, describe the written and verbal interactions you had with your

instructor. (content, timing, media used). Which interactions, if any, were helpful and supportive of course completion? Which interactions, if any, were not supportive of course completion?

During the last few weeks of the course, describe the kind of interactions you had with your instructor? (content/media/when). When did they occur? Which interactions, if any, were helpful and supportive of course completion? Which interactions, if any, were not supportive of course completion?

Describe as completely as possible interactions, and for conversations, both written and verbal, that you had with your instructor about your learning needs and experiences? (For example, discussions about difficult assignments, interest in course content, displeasure with course content, information that was confusing, assignments that were stimulating and encouraged learning, etc.) Discuss fully the content of these conversations? When did the interactions occur? What media were used? Which interactions, if any, were helpful and supportive of course completion? Which interactions, if any were not supportive of course completion?

How comfortable were you in interacting with the instructor through verbal or written communication? In asking questions. In discussing controversial issues. In taking a view opposite the teacher. What caused the comfort or discomfort?

If you were asked to write a paper to other students about your interactions with your on-line instructor and the significance of these interactions to course completion, what would your paper note? What main points would you make in the paper?

If you were writing notes to instructors about things they could do to help students taking on-line courses, what would you tell them?

Is there anything else you would like to share with me that would be valuable in assisting me in understanding your interactions with your instructor and the relationship these interactions had to successful course completion of the on-line course?

Interview Protocol for Instructors

I. Interview Data

Instructor Interviewed:

Sex:

Ethnicity:

College:

Course Taught

Number of time on-line courses have been taught:

Years of Teaching Experience

II. Review of Research Project

Verification that consent form has been signed? If not, ask for signed consent form

Consent to take interview? Yes _____ No _____

III. Questions:

Tell me about your on-line course? In your opinion, what makes the course an on-line course?

How do you provide instruction in the on-line setting? What methods and techniques do you use? What media do you use to deliver instruction?

Share with me the opportunities you provide for students to interact with you?

What opportunities, if any, do students have for face-to-face interactions with you and other students?

Describe the ways in (content, when, how) which you interact with your students.

Describe your grading system.

Generally, what is your philosophy about teaching? What is your philosophy about teaching in an on-line environment?

What are the most important things you have learned about student-teacher interactions in the on-line environment?

Describe the types of assignments and projects students in your on-line course are expected to complete.

How would students describe the environment in which student-teacher interactions occur in your on-line course? How would you describe it?

If you could write a letter to students generally about succeeding in an on-line course what would you say?

What other things would you like to share with me about your on-line course that would assist me in understanding the important aspects of the course?

Interview Protocol for Second Interview

I want to talk to you more about the approach you took to communicating with student in the on-line environment. You stated previously that you used a personalized approach to communication. Please share with me a definition of personalized approach to communication. What things did you do to personalize the communication?

Students interviewed who experienced personal problems mentioned to me that they always appreciated your responses to them when they shared that they had a personal problem? Please describe for me a time a student shared a personal problem and explain how you responded?

Some of the students in your on-line course mentioned that it was important to them that you respected them and that you cared about them as individuals? Do you believe that you communicated in ways that showed respect and care for students? If so, please describe a time that you showed a student that you respected them? Also, please describe a time that you showed a student that you cared?

If you were writing to on-line instructors about your thoughts on what is important in communicating with students in the on-line environment what would you tell them?

APPENDIX B
Student Consent Form

Jennifer Wimbish
6131 Horizon
East Lansing, Michigan 48823

Dear Student:

I am writing to request your participation in a research study conducted to better understand course completion and success in a computer mediated course. This is a study focused on student-teacher interactions which occur in an on-line environment in order to determine if certain interactions contribute to course completion. The study is composed of students who have completed and passed with a 2.0 grade point average (GPA) or better community college credit courses delivered on-line. I am conducting this research as a part of my doctoral program at Michigan State University.

The drop-out rate is high for credit courses delivered on-line. By gaining a better understanding of what assist students, who are successful in completing credit courses delivered on-line, community colleges will be better prepared to help more students be successful. In order to provide community colleges with the necessary information, I would like to interview community college students like yourself, who have been successful in completing and passing on-line courses.

Participation in this study is voluntary and would involve you in an in-depth face-to-face interview that will take approximately one hour. Additionally, a second follow-up interview, which would be approximately one hour, may be requested. You will receive a \$30.00 stipend for each interview that you participate in. I would like to have your permission to audio tape interview sessions. You may agree or disagree to the audio taping of sessions. Finally, I will request permission to review your community college academic records. All sessions and information gained from records will be confidential. You may choose to participate in parts or all of the study. Furthermore, you may elect to discontinue involvement in the study at any time without penalty. Should you decide to withdraw entirely from the study, all information provided by you, regardless of the form in which it is held, will be turned over to you.

All results will be treated with strict confidence. Your participation in this study will not be disclosed to anyone and you will not be identified in any report of research findings. If you so desire, the results of my study will be made available to you at the conclusion of the study.

I am sending you this letter and the attached form to explain my study and to ask you whether or not you will give your permission to participate in the study. Please indicate on the Consent Form for Students whether or not you give your permission to participate in the study.

Your participation in this research would be greatly appreciated. I would be willing to meet with you at a place and time that is convenient for you. If you have any questions about this study, please feel free to contact me at (517-483-9758) work or at (517-324-3376) home or be e-mail at . Thank you for considering involvement in the study, and for returning the enclosed forms promptly should you decide to participate in the study.

Sincerely,

Jennifer Wimbish

(Student Consent Form)
Mrs. Jennifer Wimbish
6131 Horizon
East Lansing, Michigan 48823
Date

Dear Mrs. Wimbish:

I have read the letter describing your research project and, having a reasonable understanding of the project's purposes and procedures, I agree to participate in the following part(s) of the study:

Place an X beside all that apply and circle your response

- In-depth face to face interview (1 hour) ____ yes ____ no
- audio taping of the interview ____ yes ____ no
- consent for review of my academic records on file at (name/college) ____yes ____ no

I understand that involvement is voluntary and that any information collected from me will be held in the strictest confidence. In any report on research findings, I understand that my name and anything that would identify me will not be mentioned; that every safeguard will be taken to ensure confidentiality; and that any information that could be used to identify me will be disguised. I further understand that all data collected from me will be destroyed at the conclusion of your study.

I also understand that I am free to withdraw from the study, or parts of it, at any time without penalty and that, if I choose to terminate my involvement entirely, all information collected will be turned over to me.

Signature of participant

Date

Name (please print):

Address:

City/State/Zip:

Daytime Telephone Number:

Evening:

Fax (if available):

E-mail (if appropriate):

If you have questions or concerns at any time during the study, please contact me, Jennifer Wimbish at (517) 483-9758 (work) or (517) 324-3376 (home) or by e-mail at jw1622@lois.lansing.cc.mi.us.

FOR YOUR CONVENIENCE A STAMPED ENVELOPE IS ENCLOSED

If you have additional questions you may contact Dr. David Wright, at Michigan State University, University Committee on Research Involving Human Subjects Office, (517) 355-2180, e-mail: ucribs@pilot.msu.edu, fax (517) 353-2976.

PLEASE READ!!!!!!!!!!!!!!!!!!!!!!!!PLEASE READ!!!!!!!!!!!!!!!!!!!!

Dear on-line student:

BACKGROUND INFORMATION: Recently you received a letter fully describing a research study that I am conducting to better understand course completion and success in on-line courses. This is a study of students who have completed community college credit courses delivered on-line with a 2.0 average or better.

The drop-out rate for credit courses delivered on-line is high. By gaining a better understanding of what assist students, who are successful in completing credit courses delivered on-line, community colleges will be better prepared to help more students be successful.

REQUEST: Participation in the study is voluntary and would involve you in a one hour face-to-face interview at a location that you select. You will receive a \$30.00 stipend for your participation.

If you would be willing to discuss the project with me further or to participate in the above mentioned interview please return the sheet below in the enclosed self addressed stamped envelope.

FOR MORE INFORMATION: If you have questions you may contact me at home (517) 324-3376 or at work (517) 483-9758 or by e-mail at jwl622@lois.lansing.cc.mi.us.

Thanking you in advance for your assistance in this matter.

Sincerely,

Jennifer Wimbish

Name: _____

Daytime Telephone Number: _____

Evening Telephone Number: _____

E-mail address if available: _____

For your convenience a self-addressed stamped envelope is enclosed.

APPENDIX C FACULTY CONSENT FORM

(Faculty Consent Form)

Jennifer Wimbish

6131 Horizon

East Lansing, Michigan 48823

Date

Dear Faculty Member:

I am writing to request your participation in a research study conducted to better understand course completion and success in computer mediated course. This is a study of students who have completed and passed with a 2.0 grade point average (GPA) or better college level on-line courses. The research will focus specifically on student-teacher interactions and their relationship to course completion.

The drop-out rate is high for courses delivered on-line. Additionally, often the drop-out rate for community college courses is high. By gaining a better understanding of what assist students who are successful in completing college level courses delivered on-line, community colleges will be better prepared to help more students be successful. In order to provide community colleges with the necessary information, I would like to interview community college students who have been successful in completing and passing on-line courses. Additionally, I would like to interview instructors, who have provided instruction for the students that participate in the study. I will be interviewing the instructors to gain an understanding of the nature of the on-line course. This study is part of my dissertation research at Michigan State University.

I would like to have you, as an on-line instructor, participate in my study by being involved in a face-to-face interview that will be approximately one hour. I am therefore seeking permission for you to participate in the study. Additionally, I would request that you identify students that have been successful in completing on-line college level courses with a 2.0 or better grade point average. Additionally, I would seek the address and phone numbers of the students so that I could invite the students to participate in the study. I will work with your institution to distribute the appropriate communication in a form that is acceptable by the institution. Participation in the study is voluntary and all data and information gathered is confidential. I would like to have your permission to audio tape the interview session. You may agree or disagree to the audio taping of the session. You may elect to discontinue involvement in the study at any time without penalty. Should you decide to withdraw entirely from the study, all information provided by you, regardless of the form in which it is held, will be turned over to you.

All results will be treated with strict confidence. Your participation in this study will not be disclosed to anyone and you will not be identified in any report of research

findings. If you so desire, the results of my study will be made available to you at the conclusion of the study.

I am sending you this letter and the attached form to explain my study and to ask you whether or not you will give permission to participate in the study. Please indicate on the Consent Form whether or not you give your permission to participate in the study.

Your participation in this research would be greatly appreciated. I would be willing to meet with you at a place and time that is convenient for you. If you have questions about this study, please feel free to contact me at work (517) 483-9758 or by e-mail at jw1622@Lois.Lansing.cc.mi.us. Thank you for considering participation in the study, and for returning the enclosed forms promptly should you decide to participate in the study.

Sincerely,

Jennifer Wimbish

(Faculty Consent Form)
Mrs. Jennifer Wimbish
6131 Horizon
East Lansing, Michigan 48823
Date

Dear Mrs. Wimbish:

I have read the letter describing your research project and, having a reasonable understanding of the project's purposes and procedures, I agree to participate in the following part (s) of the study:

Place an x beside all that apply and circle your response

- . in-depth face to face interview (1 hour) _____ yes _____ no
- . audio taping of the interview _____ yes _____ no

I understand that involvement is voluntary and that any information collected from me will be held in the strictest confidence. In any report on research findings, I understand that my name and anything that would identify me will not be mentioned; that every safeguard will be taken to ensure confidentiality; and that any information that could be used to identify me will be disguised. I further understand that all data collected from me will be destroyed at the conclusion of your study.

I also understand that I am free to withdraw from the study, or parts of it, at any time without penalty and that, if I choose to terminate my involvement entirely, all information collected from me will be turned over to me.

Signature of participant

Date

Name (please print): _____

Address: _____

City/State/Zip: _____

Daytime Telephone Number: _____ Evening: _____

Fax (if available): _____

E-mail (if appropriate): _____

If you have questions or concerns at any time during the study, please contact me, Jennifer Wimbish at (517) 483-9758 (work) or (517) 324-3376 (home) or by e-mail at jw1622@lois.lansing.cc.mi.us.

FOR YOUR CONVENIENCE A STAMPED ENVELOPE IS ENCLOSED

If you have additional questions you may contact Dr. David Wright at Michigan State University, University Committee on Research Involving Human Subjects Office (UCRIHS) at (517) 355-2108 or E-mail - UCRIHS@pilot.msu.edu.

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