TEACHING AT A DISTANCE:
THE ONLINE FACULTY WORK ENVIRONMENT

by

CAROL OLIVER

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

2004

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ABSTRACT

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by

CAROL OLIVER

Advisor: Professor Leanne G. Rivlin

This dissertation research critically examined the everyday work experiences of college teachers who teach online courses. The faculty members who have participated in this study worked at a State University of New York (SUNY) community college. This research focused on their work responsibilities as online faculty within the larger university system and on the workplace issues that affected them in their personal experiences in and outside their workplace. Environment-behavior studies and socio-technical approaches represent the theoretical frameworks used to interpret the results of this qualitative study. Some data collected were amenable to quantitative analysis.

Online college teachers reported that teaching online has transformed the way they teach and has led them to pedagogically reconceptualize their work in the online and the face-to-face classroom. Faculty reported that longer hours of work, when teaching online, has had an effect on their personal lives in and out of work. The college teachers have admitted to needing time management strategies for coping with the longer hours of work spent in the online classroom and indicated that the online class size was too large. The results are discussed using spatial themes to explain the online teaching environment and the workplace issues of faculty who teach online.

PREFACE

My Journey Towards Distance Learning

In 1997 I worked as the Associate Director of Admissions of SUNY Downstate Medical Center at Brooklyn, one of the 64 campuses of the State University of New York (SUNY). One of my administrative duties included evaluating transfer credits of students who were either transferring from an Associate degree program or transferring 60 credits from their prior academic life. At that time, I began to see admissions applicants transfering courses whose descriptions read "distance learning course" or "online course." No one in our department, including my supervisor, the Director of Admissions, knew enough about these types of courses for us to accept these credits as transfer credits. After a year of many meetings and discussions with my department and The Office of Student Affairs, we decided to investigate the nature of distance learning courses and how the State Education Department of New York viewed and evaluated them. I took it upon myself, with the help of the Associate Registrar, to research this topic and later present our findings not only to our departments but also at the annual meeting of *The Middle States Association of Collegiate Registrar and Office of Admissions* (MSACROA) (Oliver & Farrat, 1997).

In our research, both library-based and on the Web, the Associate Registrar and I discovered that distance learning courses represented legitimate courses that the State Education Department and MSACROA approved. It further, evaluated and approved them as "real" courses if they were offered through the auspices of an accredited institution of learning. At that time, this information meant that distance learning courses

could be offered in any accredited educational institution and would be evaluated and granted as credit as any other regular course taught in the classroom. I continued to research distance learning. The Registrar and I did a follow-up presentation at the annual conference of MSACROA, with the abstract being published in the proceedings (Oliver & Farrat, 1998).

By 1998, when the Student Affairs department knew more about distance learning, we began to accept credits for online courses offered by any accredited institution. During that time, I had other encounters with distance learning. First, I enrolled in a SUNY Learning Network course because I wanted to get a student perspective of how it was taught and have my own experience of an online course. I never finished the course because of work pressures, but at least I experienced distance learning from a student perspective. I became intrigued with distance learning, and I was quite aware from my professional experience that some controversy in this area existed. Some faculty and administrators with whom the Registrar and I spoke with felt that distance learning was not "real" learning, and students basically took the easy way out and did not get a quality education. They felt that administrators used distance learning as a way to enroll more students and make more money in the process. Teachers were learning how to develop a course online in a new medium through which to teach their students and became confused about what pedagogical skills they would use. As I started to understand more about this way of teaching through my own experience and in talking with professors at professional conferences, I realized that something as controversial as this problem had to be important. I decided that I would pursue distance learning as a topic for my dissertation research.

My next encounter with distance learning made me decide to do a pilot study with students taking an online course, in order to help me frame the focus of the dissertation research. I did a pilot study during 1998 (Oliver, 1998) as a participant observer in a distance learning class throughout an entire semester. This course was being taught at one school, in a classroom, with the instructor and students present, and the other students viewed it remotely in another school, through a video monitor. The professor was responsible for both classes, with one being present in the classroom and one present in real time by video. At the end of course, I surveyed both groups of students. The students at a distance were uncomfortable at times with the professor not being physically present, but overall they were satisfied with the course. The professor, on the other hand, became frustrated, confused and at times quite angry at the disruptions with the technology. He resented the lack of support and training he received and the amount of work and time he spent preparing for a class. I spoke to the professor at the end of the course, and I realized that his experience of teaching online had many interesting workplace issues that I felt needed to be addressed. After this study, I decided to study college teachers who taught online courses, and not students because I wanted to look at the former as workers, teaching distance learning courses.

During the summer of 2002, I designed and taught my first online course. Many of my experiences, as an online instructor, reaffirmed the sentiments that the participating faculty expressed in this dissertation study. For example, I experienced a greater amount of time teaching online than in the classroom. As the weeks past, I felt that online teaching consumed my time more because of the one-on-one commitment that I was making to each individual student in the online class. I also felt that my workplace

became wherever I was with the computer, at any given time, i.e. home, library, hotel room. However, despite these workplace issues, pedagogically, I found the online experience with my students, inexplicably, quite rewarding because I felt more connected to my online students than those I faced in the traditional classroom. This new kind of educational experience gave me the knowledge to engage more deeply and personally in the subject matter. The experience enhanced my broad understanding of the spatial themes presented in this dissertation, along with the foundation for designing future research on workplace issues of college teachers who teach online. I intended to portray the teaching lives of the faculty participants in this study to show the comparative differences of their teaching experiences both online and in the face-to-face classroom. This study seeks to understand the online teaching environment, as well as the workplace issues that affect online faculty and demonstrate the need for further research and new workplace policies in this area in higher education administration. I investigate distance learning as another educational tool that can be used pedagogically to teach and generate knowledge.

My professional experiences and the pilot study have led me to reframe my conceptions of online teaching as a workplace issue. I have framed the questions for my dissertation from a faculty perspective by asking teachers about the time they spend teaching online; how teaching online differs from the face-to-face classroom experience; or were they teaching online from home or in other spaces? In this study, I have surveyed and interviewed faculty members in a community college in New York State who teach online, and I have asked them to compare their experiences of online teaching versus in the face-to-face classroom teaching. Currently, as an online instructor, I have

come to understand the virtual landscape in the online classroom as a work environment. I explore this work environment in this dissertation from environmental psychological and socio-technical design perspectives. This study examines the everyday work experiences of faculty teaching online and their perceptions along with workplace issues that emerge as they teach online.

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I dedicate this dissertation to my father and mother, Luis and Olga Oliver. I honor you for all you have sacrificed to provide me with the best education and upbringing that a child can have. You have made this all possible with love and financial support. For all those vacations you never took or for all those beautiful things that you could have bought for yourselves and didn't, in order to give me the proper upbringing and education, I love you! *Los adoros y reconoscos sus sacrificios que han hecho por su unica hija.* To the rest of my family, thank you for all that love that you give me; you keep me grounded and remind me of the importance of family. Tio Ed, thanks for letting me stay at Ocean Grove. It gave me the privacy and tranquility I needed to write this dissertation. I love you Tio, you're the best!

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DEDICATION

I dedicate this dissertation to all my Latino brothers and sisters who have worked hard and have had to endure countless sacrifices to educate themselves and be part of this

club called "academia". With education being part of our basic human rights, we are often made to feel that this is only a privileged position to be in and therefore we must pay a heavy price to belong. This is not a test of how intelligent you are, but of how much you can *endure*. We have often been made to suffer unnecessarily in order to get to the top, but with encouragement, inner strength of family and friends, our good food and our music, we will reach the stars and help our children to surpass these injustices that have often deterred us from our goals. Que sus sueños sean realizados! Sigan luchando! Sigan riendo, Sigan amando!

Sacrifices and friendships have not gone, unnoticed. Thank you, Carol

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CHAPTER I

INTRODUCTION

> *None of the trends and issues in Internet education is well researched or identified. Currently, there are more questions than answers... What is it? What can it do? What is it doing? These questions and more dominate a field that frequently resembles the plot from a science fiction novel.*
>
> C. Sherritt & M. Basom, (1997) *Using the Internet for Higher Education.*

This dissertation is being written during a period of transition in education in which new forms of technology rapidly change the academic environment, as well as the role of the teacher and student. During this time of transition, technology rapidly permeates the university; and education is evaluated under the same traditional forms of education. The language of technology use in education is rapidly changing as this dissertation explores the faculty's use of the online environment in teaching. Therefore, during this transitional moment in education, this study illustrates how distance learning environments appear to alter the work environments of online faculty.

The Teaching (Working) Role of the Online Faculty Member

Teachers find that the use of information technology changes teaching and learning environments profoundly, just as the development of the printing press and the production of books forever have changed the enterprise of teaching and the access to information (Massy & Zemskey, 1995). As in the corporate world, universities play a part in the information business, and technological developments transform the education industry (Jellinek, 1998; Margolis, 1998; and Novek, 1996; Wulf, 1995). Distance

learning technologies have altered educational environments by transforming the means of access to information. Not only do professors teach online but also students have access to a myriad of information through an almost infinite market of websites and a vast number of links accessible to them. They take courses via distance learning and must learn the content of the online material on their own, while the instructor or faculty member serves as a facilitator of the learning process (Crys, 1997; Martine & Freeman, 1999;Turnoff, 1997). The teacher's role in the online classroom frames the course and supplements student interactions providing resources (Knowlton, 2000). The teacher's role in the online and face-to-face traditional classroom differs in that the technology allows students to be independent; in turn, they engage themselves with the text, interactivity, and the immediacy that the computer and Internet can provide. Professors post the mini-lectures and content material from the course online, develop activities that will encourage student interaction, such as questions for discussion; and other activities that encourage interaction among students. As students engage in the course content, they often outnumber the professor in contributions in the online discussions. The role of the professor moves to the periphery. The online classroom does not diminish the role of the professor, but rather, changes it to allow maximum independence among students (Knowlton, 2000). In essence, the restructuring and the sharing of knowledge become decentralized. Teachers do post a syllabus of the course as they do in the traditional face-to-face classroom, but quite often they redesign and change its structure continually as the dialogue in the online environment occurs through the engagement of course materials and online discussions. Historically, printed books and textbooks have done somewhat the same but the online environment differs in that the knowledge shared

online serves as a two-way or multi-interactive engagement among students or students and teacher that continually grows and changes rapidly through the interface of the Internet.

With the use of information technology space, time, and place have changed living, working, and educational environments into virtual or digital communities. They can be entered by anyone with access to a computer or the Internet. Not everyone has access to a computer or the Internet. However, according to International Technology and Trade Association Council, (2000) the number of Internet users in the summer of 2000 comprised 300 million people worldwide. Internet use is expected to surpass the one billion mark by the year 2005.

According to Shoshanna Zuboff's (1988) book, *In the Age of the Smart Machine,* "throughout history, humans have designed mechanisms to reproduce and extend the capacity of the human body as an instrument of work" (p. 8). In the application of any technology in the workplace with the intent of some managers to replicate and mass-produce faster and more efficiently, automation takes place. Zuboff states, "that information technology distinguishes itself from earlier generations of technology" (Zuboff, 1988, p. 9). She asserts that, "information technology used to reproduce, extend, and improve upon the processes of substituting machines for human agency, simultaneously accomplishes something quite different" (Zuboff, 1988, p. 9). Through devices like computers that automate, she suggests that information becomes translated into action, which also registers data about the mechanized activities in turn producing new streams of data (p.9). She coins the phrase *informate* to describe these activities and events that translate objects and makes them visible through technology (Zuboff, 1988).

She explains that technology can *automate* and replace the human body, but on the other hand, the same technology can simultaneously generate information or "informate" (p. 10).

In using Zuboff's approach of looking at technology as having a dual purpose to "*automate* as well as *informate*," one can see virtual learning technologies as automating the content and pedagogical activities in the online classroom. Nevertheless, once students have read and done all the activities and assignments in the online class, the knowledge produced through their interaction in the online discussion now becomes *informated* in the interface with the technology, or the Web. The knowledge is not centered on the teacher, but everyone shares in the online classroom changing the traditional power structure of teacher-student. Instead, students actively engage with the course material and with their online classmates, forming an online community of learners. Zuboff states, that information technology not only produces action but also produces a voice that symbolically renders events, objects, and processes so that they become visible, knowledgeable, and shareable in a new way.

While opening up new possibilities to the traditional role of the teacher technology threatens his or her role when universities cut back on faculty and produce distance learning programs which can be taught in multiple sites via video-conferencing. Moreover, faculty can be recorded, and the video recorded tape is used when needed to teach the same course elsewhere (Ables, 1999; Little, 1999; Noble, 2001).

In order to better understand the work environment of faculty teaching online, I also look at how universities as institutions change within the context of virtual learning environments. Wulf (1995) describes universities as sharing many of the attributes of the

traditional handicraft industry. Higher education institutions represent labor-intensive educational industries that depend on the skills of their master craftsmen, the professors (Wulf, 1995). Universities and professional teaching associations have become powerful guilds to protect the masters (professors) and information technology can help them perform in new ways many specialized tasks that have made their work valuable (Wulf, 1995) while replicating, re-organizing, or transforming those activities.

The role of the professor within the context of distance learning environments has begun to be explored, (Curtis, 2001, Kisner; 2001; Shea, Pelz, Fredericksen, & Pickett, 2001). But it has now become crucial to understand these roles, in order to make the most of information technology without altering the academic environment it serves. Likewise, it remains important to examine the role of information technology in altering the work environments of professors.

Information Technology, Cyberspace and Environmental Psychology

We have entered the 21st century with information technology insinuating itself into every facet of our social, cultural, psychological, and working environments creating a world where data and knowledge can be quickly attainable to all who have access to a computer. The use of information technology is dramatically altering our concepts of time, space, and place, as we use information technology in our personal and interpersonal landscapes, e.g. to obtain data and knowledge on the Web; to purchase items using the Internet; to use online banking for our financial needs, as well as to educate ourselves through distance learning courses.

The ways in which people employ information technology or how faculty use the online environment to teach presents an enormous challenge in the field of environmental psychology because of their emphasis on human-environment interaction. Environmental psychology focuses on people's behavior and their relationships to and within a physical environment (Ittelson, 1989; Moore, 1987; Proshansky & O'Hanlon, 1977; Saegert, & Winkel, 1990). The field stresses the processes whereby "people come to understand, evaluate, modify and respond to their everyday physical and social environments" (Stokols & Montero, 2002, p.661). Environmental psychology looks at behavior from an interdisciplinary perspective. It fundamentally assumes that, "complex social and physical-setting problems are not caused by one or a few variables that can be isolated. Not only are there many such variables involved but they interact with each other and indeed are themselves influenced by the very events to be explained (Proshansky, 1987, p.1474-1475).

Within the context of information technology, the field of environmental psychology will have a challenging role as it explores the relationships of people to a broadening array of technological environments, e.g. the World Wide Web (WWW), databases, chat rooms, instant messaging and learning technologies. Environmental psychology will first need to examine the concept of *cyberspace* environments as it begins to understand human relationships to electronic landscapes. Stokols and Montero (2002) have begun to look at electronic environments in behavior studies, and they have concluded that "human communities no longer are place based, but reside instead within personalized, digital communication networks unbounded by space and time." (p. 663). Cyberspace and digital environments are environments in that they incorporate the

experience of humans both in natural and built environments. People use computers and interface with other environments through the Internet. More importantly, the experiences that people are having with the use of computers and the Internet are altering their everyday environments (Sommer, 2002; Stokols and Montero (2002). For example, satisfying all of your financial needs through the Internet bank websites brings the bank to any place, from your home to the airport. Interfacing with the computer for your banking needs distances you from personal contact and, at the other end, displaces the job of a bank teller. In another example, the cell phone has removed the requirement of a fixed location to receive messages (Sommer, 2002). "One can be in a public place with several other people each of whom is engaged in an independent conversation with others not present" (Sommer, p. 654).

One concern within environmental psychology focuses on how spaces, places, and our perceptions of these novel environments can alter the environment under study. In exploring the WWW, one enters one environment after another, e.g. a website, a chat room, a digital library. The environment-behavior problem then becomes more complex because no single environment-behavioral model of it exists, rather multi-environmental-behavior models become evident. The interdisciplinary nature of this field and its study of the relationship between environments and behavior make this field ideal to study the effects of co-existing cyberspace environments and human behaviors.

Analyzing cyberspace and digital environments using the framework of behavior settings (Barker, 1968) would be useful in examining how structures of place-based settings can either undermine or enhance an individual's ability to cope with an increasing deluge of computer-mediated information (Stokols and Montero, 2002).

Barker's conceptualization of place-based behavior settings has been extended by people's experiences and participation with virtual environments (Blanchard, 1997). In the case of distance learning environments, through sustained computer-mediated communications among participants, active participation of students and instructors in a discussion board creates a symbolic sense of space (Blanchard, 1997). The electronic bulletin board or discussion board consists of a software program that makes it possible to post messages online and allows others to reply to a posting with one of their own. With this software, structured conversations can take place. For example, the instructor can post an initial commentary and students then post their replies, with all of these entries appearing in ordered rows. This hierarchical ordering is known as a *threaded* discussion. (Ko & Rossen, 2001, P.6).

The language of information technology refers to time and space as "cyberspace" or "virtual." William Gibson coined the term cyberspace in his novel, *Neuromancer* (1984), as "a 'virtual' expanse more infinite than space itself, with none of the hindrances--time, distance, geography, politics-- that impede terrestrial travel as we know it," (Lichty, 1995, p. xix). His metaphor describes the "world" of computers and the society that gathers inside and through them. The origin of the term "cyber" connotes automation, control, and computerization while "space," refers to a multidimensional place (Whittle, 1997). The interdisciplinary field of environmental psychology affords an examination of *virtual environments* in the context of their multidimensionality because of the various fields that come together when looking at the "*virtual environment – behavior*" issue, i.e., environmental studies, urban planning, resource management and architectural research to name a few (Moore, 1987, p. 1361).

Earlier research in the area of technology-environment behavior or work environments and technology has marked the use of technology in the workplace as a method for, or resistance to automating, controlling, organizing work, increasing productivity, deskilling, re-skilling and centralizing the nature of the work (e.g., Braverman, 1974;Christensen, 1988; Gottlieb, 1993; Horwitz, 1986; Klein, 1991; Parsons, 1976; Sorensen, 1991; and Zuboff, 1988). Building upon this work some ongoing work exist in such areas as computer use and web design by older adults (Larson, 2004).

In the field of environmental psychology, the study of work environments has largely concentrated on offices and industrial plants. Studies along these lines include those that address office and factory environments (Parsons, 1976), office design (Becker & Steele, 1995, and Sundstrom, 1986), computer use, social control and office work, (Klien, 1991), cooperative design and computers (Greenbaum & Kyng, 1991), home-based work (Christensen, 1988), working at home and microcomputers (Horwitz, 1986), and nursing and the use of computers in caring for patients, (Sorensen, 1991). Modern technology has produced work environments that vary in their physical space, spatial arrangement, ambient conditions, their communication, safety and health issues and appearance, motivation and satisfaction (Parsons, 1976). Other fields like industrial/ organizational psychology examine the relationship between human beings and their experiences of work, employee training, productivity, design and assessment of work environments (Muchinsky, 1987).

CHAPTER II

I. LITERATURE REVIEW: A CURRENT VIEW OF DISTANCE LEARNING ENVIRONMENTS

Online pedagogy is in its infancy. In the campus class, we generally know what works well, such as the importance of speaking sufficiently loudly, writing clearly on the board, being dynamic, maintaining eye contact with students, and inviting students to take an active role in discussion. But what works well online?

T. Bender (2003) *Discussion-based online teaching to enhance student learning. Theory, Practice and Assessment.*

The Distance Learning Environment

The Internet has had a profound effect on our current educational environments. Students, teachers, and administrators have used e-mail, websites, browsers and other links to access information either for personal use or for educational purposes. The Internet has enabled faculty to work and share academic research and other resources with colleagues and students. It also gives them, as well as their students, the option to work at a distance, away from the campus and in their homes or other preferred places in Internet-based courses, called distance learning. The distance learning environment *physically separates* the student and teacher in space. Student and instructor are not in same room at the same time and all communications between them become mediated by some type of electronic means in real or delayed time, e.g. e-mail, fax, video, or telephone (Cyrs, 1997). In this way, faculty members can use distance learning to alter their workspaces and manage their teaching time as needed. Faculty members in some schools learn to design and teach their courses online with the help of technical support

staffs, special funding, and university-wide support. Faculty and students can benefit from the convenience and flexibility of not having to spend money to travel to a campus. Teachers find benefits teaching at a distance in that it opens the doors for global learning possibilities for acquiring and sharing knowledge (Bender, 2003).

Before distance learning, many correspondence courses were taught by mail for students in rural areas or with audio and visual media for students with physical impairments (Cyrs, 1997). The movement towards distance education, through correspondence courses and broadcast television, serves as way to extend existing campuses with all of their attendant and traditional pedagogy. The same teaching strategies, with similar emphasis on the lecture, extended to different geographical locations via television or other means. Instead of face-to-face education at the same time and place, education is delivered electronically at the same time in different locations (Cyrs, 1997). For example, teaching/learning models can now occur at different times and at various places utilizing a variety of electronic technologies in both *synchronous* and *asynchronous* formats. In *synchronous* courses, communication remains in real time and not time delayed. A synchronous course uses video and audio mediums for teaching course content; an example of a synchronous course would be video conferencing. In *asynchronous* courses, instructor and students can log in to a class at their own convenience, not in the same real time (Cyrs, 1997). Instructors use different technologies depending on the availability of equipment, the policies concerning these media and technologies within their institutions, their teaching styles, and the goals of the course and, most importantly, their facility with the available technology. Although some of these technologies (fax, video, computing,) are also used in traditional classroom

environments, these alternative technologies are also used for distance learning education (Cyrs, 1997) and will be referred throughout this text as *distance learning technologies* or DLTs.

Once the academic institution and the instructor decide on which courses will be taught via distance learning and what distance learning technologies (DLT) will be used, he or she must then learn how to teach them with the technology in a visual medium (Cyrs, 1997). Usually the institution has an in-house technology team to help instructors learn to use the DLT's and the programs associated with them. With distance learning being introduced in the university, as an alternative to classroom teaching, professors must now take a closer look at how they manage the delivery of the content of their course, and how these alternative methods of teaching will affect their teaching styles (Baldwin, 1998;Cyrs, 1997, Massy and Zemsky, 1995). Furthermore, they must consider how their students learn with information technology. Apart from these issues, what remains at stake with the introduction of distance learning technologies to the university environment comprise a host of issues concerning the academic profession and academia as a work space.

Distance learning has grown rapidly, leaving teachers and administration using old, traditional methods of teaching and evaluating pedagogical processes. "Online pedagogy is in its infancy" (Bender, 2003, p. xv). Teachers utilize *what they know* to teach online, without understanding its full impact, its new language, and the effects of learning on students. In this period of pervasive technological use in academic environments, the teaching arena has become a challenge to professors as they learn to teach online, basically on their own, without any existing *online* pedagogy. Professors

learn how to use the technology, including how to design courses online; however, they still are exploring their roles as teachers and workers in online teaching, and its effect on learning and on its students.

Many conflicting views exist about teaching at a distance. Some instructors say that the materials and content of the course and learning process remain the same and the only things that changes constitute the methods of *delivering and organizing* the course (Cyrs, 1997, p. 4). Others say that, by using these methods of delivery in teaching, an alteration in the learning process occurs; students become self-learners and instructors operate as facilitators for the course (e.g. Knowlton, 2000). Some professors argue vehemently that students cannot learn as much, as well, or as effectively through instructional television or other technological media used as in a traditional classroom (Cyrs, 1997). A review of the early literature on teaching with technology invalidates this argument (Chu & Schramm, 1967; Crow, 1977; Deloughry, 1988;Whittington, 1987). These arguments about student learning with the use of instructional technology demonstrate the different views that instructors have regarding teaching with instructional technology. In some cases, authors argue that students learn more using instructional technology (Clark, 1983; Clark & Verduin, 1989; Cookson, 1989; Crow, 1977 Fowler & Wackerbarth, 1980; Garrison, 1990b). These students also demonstrate that no significant differences exist in the effectiveness of various media and that the learning process did occur in any form (Burge & Howard, 1990; McCleary & Egan, 1989; Moore & Thompson, 1990; Ritchie & Newby, 1989).

In a pilot study that I did of graduate students in a distance learning course, I found that students indicated that the interface with technology in their particular course

had some minor problems, but they felt that learning did occur (Oliver, 1998). Student learning outcomes mediated by the use of instructional technology constitute important issues in distance learning research. Vygotsky (1988) uses the term mediation to describe how all human psychological higher order mental processes become mediated by psychological tools, such as language, signs and symbols. The word "mediation" used here describes one example of the interface of the instructional technology and its users. Faculty members in this case study interact with their students through mediated environments. However, the focus of this dissertation will not be student-learning outcomes, but rather it will be on the faculty who use these media to teach and the perceptions they have of their teaching and working environments. In particular, I examine how their roles as teacher and worker in the university have been altered during this time of transition, with the Internet and other online technologies provocatively changing the academic environment. Faculty who teach online must now closely look at these issues but also, of equal importance, examine their role as worker in the academic environment.

The Academic Profession: The Faculty Member as Worker

Academics, of course, come from many disciplines. The academic profession operates as a mentoring-training ground for other professionals, which include doctors, lawyers, architects, engineers, and representatives of other advanced crafts or non-professional training (Clark, 1987). The academic profession involves varying dimensions of academic work, such as teaching, research, mentoring, evaluation of students' work, supervision and evaluation of dissertation work, and administration and

public policy work (Cahn, 1994; Clark, 1987; Markie, 1994; McKeachie, 1994). The question "*what do academics do*?" remains difficult to answer because it varies by discipline, institution, seniority, teaching styles and by personality. Research and publishing serve as the primary basis for prestige in some disciplines and in the profession as a whole; it is bound to play a substantial role in major universities (Clark, 1987, p.70). Aside from teaching, professors spread themselves beyond these two major teaching responsibilities; some formally counsel students; some work in administration; some serve as heads of departments; and others function as active members in committees where they determine university policies and procedures (Cahn, 1994; Clark, 1987; McKeachie, 1994). Despite this range of activities, "teaching load" usually defines the workload of academics (Clark, 1987). In some cases, the workload may include supervision of students (both in the professor's research and in activities such as mentoring, studio work, dissertation work, etc.) but teaching remains the institutional obligation for which hours can be specified (Cahn, 1994). In graduate schools, dissertation supervision and student mentoring comprise part of the faculty workload, often assessed as formal duties that are required for retention and promotion (Cahn, 1994).

Much of the literature on the current academic profession critically examines "workload" in terms of "productivity"(Green & Gilbert, 1995; Massy & Wilger, 1995; Massey & Zemsky, 1996; Robinson, 1997). During the correspondence education movement the workload of instructors also became a very big issue. Instructors began to realize that the preparation of the course material and administration of the programs had been more demanding, labor-intensive, and expensive than had been anticipated (Noble,

2001). With the evolving use of information technology in academia, how much produced within a specific time measures the work of professors. Since information technology mediates faculty work, including teaching at a distance, the question of productivity has taken on new dimensions; and, in some learning institutions this issue has become a concern. With email, distance learning, Internet technologies and fax, the method of delivering "*teaching*" or "w*hat professors will be doing"* will change as information technologies transform the environment of professors' "work" and their access to students. While the research on distance learning continues, many programs and universities continue to develop this medium to teach educational courses (Blumenstyk, 1997; Frenette, 1997; Jaffe, 1998; Luke, 1997; Maurizio, 1997).

Educators, higher education administrators, and teachers unions meet with skepticism rapid technological changes in education (Aronowitz, 2000; Cuban, 1986; Noble, 2001; Guernsey, 1997; PSCcuny Clarion, 2000. However, distance learning provides flexibility to working professionals by giving them access to online continuing education programs that keep these professionals up to date with their specialties (Ben-Jacob, et al., 2000; Phillips, Wellman, & Merisotis, 1998). Additionally, it offers on-campus students the opportunity to optimize their course of study by giving them the option to take some courses off-campus, as well. According to Ben-Jacob et al. (2000) distance learning will capture the interests of these different types of students, particularly the working student, because it provides flexible arrangements responsive to their time constraints.

Faculty concerns include *workplace* issues, such as the time that they spend re-designing their traditional courses for online instruction and how they will be

compensated for the time they spend preparing a course (Kisner, 2001). They focus on issues regarding evaluation for tenure and being retrenched by these new methods of teaching (Noble, 2001). Other issues such as publishing online, proprietary work, and mentoring also constitute matters of concern (Noble, 2001). Ethical issues, such as universities becoming "diploma mills," have become major problems for the academic community ("An on-line experience," 1995; Guernsey, 1997; Novek, 1996; Robinson, 1997; Young, 1997).

The Faculty Member at a Distance

"Faculty members are responsible for teaching their students to master appropriate subject matter, arouse appreciation for it while neither misrepresenting nor diluting it" (Cahn, 1994, p.11). In order to achieve these results, a faculty member needs to motivate students, organize the subject material and make clarifications in the material as necessary. Professors also establish a structure in which students can proceed as free inquirers to form their own rationally based beliefs about a subject, and project a vision of excellence through mentoring (Cahn, 1994; Markie, 1994).

Many faculty and university administrators have questioned whether or not technology changes teaching and whether or not information technology enhances it (Kriger, 2001; Kisner, 2001). With the use of information technology, faculty can do more than just put their courses online; they can also recommend websites and search engines that will give the student the opportunity to obtain more information than possible before (Bender, 2003). Teachers do not control all the access to information as they did in the face-to-face classroom. Instead, students directly receive and interact with

data of all kinds (Menges, 1994). Students can transform information from one medium to another and create new facts as a result of these interactions with teachers and other students (Menges, 1994). The teacher and the student, through the use of the computer and the Internet, *mediate* and *extend* their interactions with one another. In this learning-centered environment, the teacher mediates knowledge through the use of the computer and knowledge becomes then mediated again through the students. In the distance learning environment, both teacher and student are far removed from the physical environment of the classroom, each in his or her own space, appropriating information through the mediation of a computer. The distance learning environment becomes an "integrated system in which learning extends beyond the specific setting into other settings through learning paths and learning centered environments" (Lippman, 2000b, p. 5). The teacher becomes the facilitator of knowledge rather than the central source of knowledge in the classroom, thereby learning can become more decentralized (Ables, 1999; Knowlton, 2000; Menges, 1994; Thompson, 1999; Turnoff, 1997). In the virtual classroom, the teacher becomes displaced from the physical center of the classroom, and no longer stands in front of a class or sits at the head of a seminar table (Kisner, 2001). In essence, the teacher's role can shift from "content provider" to a more flexible, facilitator role. The faculty member or instructor remains on the periphery of the online classroom (Knowlton, 2000). In describing apprenticeship programs, Lave and Wenger (1991) explain that changes in knowledge and action become time and place specific and occur as individuals move from a vantage point of peripheral participation (limited engagement) to full participation (direct engagement) in a community of practice. As we apply this concept to distance learning, the participation of both students and teacher

becomes fully engaged; the teacher's role equals the "playing field" to a certain extent (Knowlton, 2000). On the other hand, though, the teacher still has the control of the evaluation component. The teacher no longer exists as part of a teacher-centered environment; rather it becomes a *learner-centered* environment where the knowledge is organized and structured and understood through cooperative efforts with others (Knowlton, 2000).

The distance learning environment forces the teacher to organize and present his or her course material in entirely different ways (Cyrs. 1997). Since all course content remains text-based in the asynchronous environment, the teacher deals with the challenge to organize and reconceptualize how the content will be presented and how the material will be taught online (Shea, Pelz, Fredericksen, & Pickett, 2001). For the teacher, incorporating interactive-based activities that engage students in the online environment serves as the optimum situation when teaching online (Lippman, 2000). When individuals are introduced into an activity system, their engagement in the task with another is often limited; as the knowledge becomes shared with others over time, the engagement in the task increases and they begin to appropriate knowledge for themselves (Lippman, 2002a). For example, when the online teacher and students first meet each other online, their engagement remains limited to introductions and small activities that comprise the online class. Not until the students and teachers begin to use the discussion board, through the course of the class, do a plethora of discussions lead to other discussions and more information. The student and instructor rapidly engage in a discussion not bound by time or space. Each member in the class participates in a dialogue that eventually leads into an *intense engagement of ideas* mediated through the

computer. The online classroom does not necessarily diminish the faculty role, but rather it becomes re-conceptualized to allow maximum independence and interdependence among students. The professor's role in the online classroom frames the course and provides resources and opportunities to supplement students' interaction (Knowlton, 2000). This fact does not mean that the faculty member no longer plays a "central" leadership role in the online classroom. Instead, the faculty member portrays a different role where he or she facilitates the engagement with students through interactive-based activities performed online. Similarly, in correspondence courses, students received individual personal attention and they worked as rapidly or as slowly as they chose to (Noble, 2001). When teaching online, as in the face-to-face classroom, instructors need to take into account students' individual learning differences (Noble, 2001). When students takes a course via distance learning, he/she can go beyond what the faculty member "teaches" in the traditional sense and can go on the Internet to seek information globally anywhere in the world, instantaneously. Going beyond the traditional boundaries of information, i.e. books, and libraries, students increase their knowledge of a topic through their transaction with Internet searches, globally and at a much faster pace and in a continuous format where they can work at their own pace, in their own personal space.

The teacher's role can be decentralized in the online classroom as students share the knowledge more autonomously with other students and the instructor in the online classroom. As the teacher's role changes within distance learning environments, so must measures of faculty roles and productivity change. New measures of evaluation must be created for an understanding of the changing role of the online professor as worker.

This decentralization in the virtual classroom remains in some ways, similar to "informating" the workplace. Zuboff (1988) contends that centralized workplace policies lead to computer systems that would be "automating" the workplace, while decentralized, enhancement schemes could change to systems that would be "informating" work. In her view, once automation takes place, technology translates information into action by registering data about those automated activities and generates new streams of information. Zuboff states,

> "while it is true that computer-based automation continues to displace the human body and its know-how (a process that has come to be known as deskilling), the *informating* power of technology simultaneously creates pressure for a profound reskilling" (Zuboff, p 57).

Applying her definition of "informate," the shared knowledge does not center on the teacher but everyone shares it in the online classroom, eliminating the traditional structure of the teacher-centered environment. Instead, students can actively engage with the course material and with their online classmates forming a community of learners in a *learner-centered* environment. Zuboff's view on technology would describe the work environment of online professors as technology reorganizing (reskilling) the faculty member's work through his/her mediation with the computer and automation of his/her teaching work. This online teaching environment would in turn "informate" the faculty work environment with the students sharing of pedagogical knowledge with other students or with teacher and the students. In this case, the information that is acquired

through the collaborative discussions and active engagement of every student and the instructor becomes new information. This collaborative knowledge shared and produced becomes *informated, "producing a voice that symbolically renders events, objects and processes so that they become visible, knowledgeable and shareable" (Zuboff, 1988, p. 9).*

Conversely, universities can use their power to use distance learning to *automate* the education process. For example, multiple courses could be taught online both synchronously and asynchronously, increasing the enrollment of students in the online class and limiting the number of professors teaching these courses. Technology can also threaten the traditional teacher's role when universities cut back on faculty and produce distance learning programs which can be taught at multiple sites via video-conferencing or faculty can be video-taped; and the tape can be used when needed to teach the same course elsewhere (Ables, 1999; Little, 1999;Thompson, 1999). Thus, if universities apply the centralized, automation model of education the results could be the downsizing of the number of professors per course and automating the educational process which can lead to the demise of tenure. Tenure-track positions in academia would become scarce, as more distance learning courses within a particular educational institution would replace the need for more full time faculty in permanent positions (Thompson, 1999). Instead of new graduate students aspiring to future long term employment in tenure-track faculty positions, part time faculty could be teaching more online courses with a large enrollment of students (Noble, 2001).

Larry Cuban (1986), in his examination of the history of instructional technology in schools from kindergarten through 12th grade, argues that the use of information

technology in the classroom does not change the role of the instructor. Rather it aids instructors with an additional tool that will help deliver the course content traditionally and, in some cases, enhance student learning. He emphasizes that the search for improving classroom productivity through technological changes has yielded very modest changes in teacher practice without any clear demonstration that the instruction is any more or less effective or productive after the introduction of radio, film, instructional television, or computers (Cuban, 1986). In Cuban's (2001) most recent book, *Oversold and Underused: Computers in the Classroom,* he contends that computers can be useful when teachers understand them well themselves, believe in the power to enhance students' learning, and have the power to organize their own classroom and shape their own curricula. This can only happen, he suggests, when there exists a commitment to public education that goes beyond preparing children to become the technicians and managers of the 21st Century economy (Cuban, 2001). Cuban points out that even though technology has been used for business to promote productivity and efficiency, it does not remain necessarily desirable for the education process. Tisha Bender's (2003) book, *Discussion-Based Online Teaching to Enhance Student Learning,* contrasts, in part, with Cuban and argues that "what is of greater importance than efficiency is effectiveness" and she believes that if done correctly, online teaching can be effective (Bender, 2003, p.161).

Some educators use distance learning technologies as another teaching tool and not necessarily as a replacement to their practice of teaching (Curtis, 2001; Kisner, 2001). The questions of how distance learning technologies alter the teaching practices of professors, and how online teaching may differ from teaching in the classroom, have

been important issues to study. Some empirical studies on these questions have been done (e.g. Massy and Zemsky, 1995; Turoff, 1997), but, as of this writing, not many studies have looked at the teaching strategies that faculty use when teaching online.

Recent work has given some considerations to issues of the professors' work environment (Curtis, 2001; Kisner, 2001; Noble, 2001). In Curtis' and Kisner's research, they examined the online professor's work environment each from different perspectives. Kisner (2001) looks at the experiences of eight professors, ethnographically and suggests that digital technology alters the traditional role of the professor. From his study he concluded that the professors interviewed acknowledge the increased time consumption in teaching online, but also elaborate on the provocative nature of teaching online. Kisner (2001) suggests that, unlike earlier forms of technology in education, the virtual classroom has the potential to become highly interactive. Nevertheless, he also points out the danger that the virtual classroom will become commodified, as Noble (2001) vehemently argues in his book, *Digital Diploma Mill.* Noble (2001) asserts that distance learning, as well as correspondence courses represent "profit-driven entities in the guise of education" (p.1). He states that in distance learning and correspondence courses commodification of education ensues, as following comment notes:

> ...educators confront the harsh realities of commodity production: speedup, routinization of work, greater work discipline and managerial supervision, reduced autonomy, job insecurity, employer appropriation of the fruits of their labor, and above all, the insistent managerial pressures to reduce labor costs in order to turn a profit. Thus the commoditization of instruction leads invariably to

> the "proletarianization," or more politely, "deprofessionalization" of the professoriate (p.4).

Curtis'(2001) research also considers the work environment of professors, although she stresses the incentives and obstacles for teaching online. The faculty members in her study, as in Kirsner's study, voiced concern regarding the additional time necessary for distance learning activities; however, only a small sample of the cohort viewed time as a future deterrent. In Curtis' (2001) research, all participants in the study saw institutional support as necessary, while a smaller sample of cohorts view peer support as essential. The next section will discuss distance learning and some pedagogical issues that affect the work of faculty who teach online.

Distance Learning and Higher Education: A Pedagogical Challenge?

Higher education confronts the challenge to rethink the concept of *a university,* as the number of distance learning course offerings increase in two and four year colleges. According to a report by the International Data Corporation in 2002 approximately 85% of two- and four-year colleges will offer distance education courses, an increase from 62% in 1998 (Kriger, 2001). Student enrollments project to increase in a few years from over 500,000 to well over a million (Kriger, 2001). Faculty and administrators have been forced to look at learning and teaching "outside" the classroom. The traditional student continues to change: from the student out of high school going to college, to the adult learner who can take online courses from home at the expense of employers, or the

university student who will take some courses online to optimize the time spent in the classroom, completing their degree faster or with greater flexibility in scheduling their time. As Turnoff (1997,) states in his article, "Alternative Futures for Distance Learning: The Force and the Darkside," "there are forces at work that are going to reshape the practice of distance learning and higher education in the United States (p.1). Technology only enters as an opportunity to channel these forces in a different direction." Turnoff's (1997) paper elaborates on how distance learning will be a greater challenge to the administrative and management practices that govern the use of instructional technologies because of the rapid permeation of technology in education.

In addition, faculty members' attitudes in most institutions cover the range of the spectrum in responding to educational technologies (Ables, 1999; Interim Report of the PCS/CUNY Management Educational Technology Committee, 1999; PSCcuny Clarion, 2000, Turnoff, 1997). Some fear that technology will change education and greatly affect their positions as faculty members (e.g.,Turnoff, 1997); while others feel that technology will be a refreshing change for their teaching styles, a welcome tool to enhance learning, and a means of having greater flexibility in their working lives as teachers and administrators (Curtis, 2001; Cyrs, 1997; Kisner, 2001; Knowlton, 2000, also personal communication with professors at the Third Annual Teaching and Technology Conference at Baurch College, CUNY, March, 2000).

Summary

In this dissertation, I present the view that online teaching differs from

face-to-face teaching. Based on the survey interview data presented in the following chapters V and VI, as well as my experiences, as an online instructor; I contend that the experience of teaching in a face-to-face classroom, when compared with that of teaching online differs with respect to teaching, time, space and workplace issues. Faculty members who have experienced teaching online indicate that it can be quite time-consuming and that the actual teaching of a distance course took more time than face-to-face classes (Interim Report PSC/CUNY, 1999; Professor I. Abramov, personal communication, Spring, 1998). Therefore, teaching and learning will need to be re-evaluated in order for distance learning classes to be planned and implemented effectively.

Distance learning programs have developed at a very rapid pace in both public and private institutions. The focus has been more on creating these programs to recruit the growing population of non-traditional learners (Ben-Jacob, 2000). It also responds to the complex economic and enrollment management needs of the university system (Noble, 1997, 2001; Turoff, 1997). There has been less focus on understanding what these technologies mean for the academic profession and institutions over the longer term (Interim Report, 1999; Oliver, 1997; 1998; Turoff, 1997).

The growth in information technology has outstripped the development of empirical data on learning theories in computer-mediated courses in the higher education literature on distance learning. The use of learning technologies will be a pedagogical challenge to the faculty, higher education administrators, and complex university systems as a whole. As these online courses continue to grow in number within academic institutions, faculty and administrators will need to assess their impact on the complex

university environment. Their general concerns regarding distance learning include the use of technology to teach online as compared to their traditional courses as well as concerns of faculty member's experience of working online. Other concerns consist of how workplace issues change the faculty workload (i.e. compensation for online courses); and most importantly, how this method of teaching will be evaluated. In order to comprehend online pedagogy, new methods of evaluation and assessment will be necessary. Many questions in this area have only now been formulated, as these educational technologies become a more widely accepted practice of academia.

Distance learning and the use of the Internet in education have not been the first factors capable of undermining the traditional practices of educational environments. Nor have these learning technologies been the first factors able to threaten the role of the teachers and their work. A quite elaborate history of technological use exists in education, illustrating the unyielding attempts of technology to enhance learning and its evolving attempts to change the nature of education. (For a review of this history, see Saettler, 1968; 1990). Although this research does not focus on this history, the following chapter illustrates a few, selected examples of how technology has been introduced in education and how each new technology precedes the next innovation, following its path in trying to enhance the higher educational system and improve learning.

CHAPTER III

II. LITERATURE REVIEW: A BRIEF HISTORY OF INSTRUCTIONAL TECHNOLOGY USE AND NON-TRADITIONAL LEARNING ENVIRONMENTS

The issue of technology used in the classroom is not new. Nor are teachers' adaptations and resistances to technological innovations in the classroom novel. The interplay between classroom teachers and technology has been apparent since the mid-nineteenth century when classrooms became the sites of a succession of technologies (e.g., textbooks, chalkboards, radios, films, recorders, and television) that have supported the practices of teaching (Cuban, 1986). In the nineteenth century, the teacher used chalk, slate, books and pictures as media to aid in conveying facts, skills and values.

This chapter illustrates a selected, brief historical account of how technology and non-traditional learning environments have been used in education, in the twentieth century, with the intention to either improve education or aid the teacher in the enhancement of teaching skills and student's learning. All of these technologies and non-traditional learning environments have attempted in some degree or other to improve the educational process. However, none have been as pervasive as the use of the computer and the Internet in dramatically changing the role of the teacher, the students and the university, as the case is today. This history, although a selected, brief review of technology use in education, demonstrates the intentions and promises of improving the educational process. But many of these technologies have fallen short of their promises. Each technology has been more powerful than the previous one, only to leave the educational system somewhat unmarked as a result of its use. The use of the Internet in

teaching, however, has dramatically changed the academic landscape as it has in all aspects of our lives today. The Internet pervasively continues to change education during this period of transition. This study will illustrate how its impact has altered education in great proportions, leaving its users with much to learn about its impact; including a continuously new changing language that transforms the student, the teacher and the university.

Film

In the early 1900's, instructional film and movie projectors were first introduced to American schools (Kisner, 2001). Bell and Howell Company, founded in Chicago in 1907, became one of the first companies to enter the instructional technology business, and manufacture film projectors and cameras. The company soon recognized a potential market for instructional film and then built instructional film libraries in many parts of the country. They provided their patrons, mainly the public schools, with projectors, screens and projectionists when they borrowed films (Kisner, 2001). As early as 1910, interest in instructional films grew quickly and motion pictures were adopted for instructional use in the classroom (Cuban, 1986; Kisner, 2001). In this same year, George Kleine published the Catalogue of Educational Motion Pictures, the first comprehensive catalogue of its kind which was about 330 pages long and listed 1,065 titles (Kisner, 2001). Kleine screened selected films at meetings of the New York City Board of Education and established a profit-sharing service that rented educational films at affordable prices to the schools (Saettler, 1968). Later in that year, Alexander F.

Victor formed a company that manufactured the first portable projector, combining a camera with sound on a disc (Kisner, 2001).

The use of film for the classroom became a symbol of a progressive teaching approach in the early twentieth century. In 1911, the Edison Company opened Edison's Library, which produced a series of instructional films on history and physical sciences. Thomas Edison, in 1913, said "Books, will soon be obsolete in the schools. Scholars will soon be instructed through the eye. It is possible to touch every branch of human knowledge with the motion picture" (Cuban, 1986, p.11, Kisner, 2001, p.86).

In 1916, Henry Ford established the Atlas Motion Picture Corporation and, three years after its inception, he invited a group of educators from the University of Wisconsin to the Ford facility to edit 51 Ford films for instructional use. These films, released in 1920 at the Ford Library, each came with a complete synopsis and a syllabus that included instructional objectives, activities, discussion questions, problems, tests and a list of references (Saettler, 1968). Other corporations involved in the instructional film industry were John R. Bray Studios, F.S. Whyte Pictures Corporation, Fox Films Corporation, Eastman Teaching Films, and the University Film Foundation founded at Harvard University in 1927 (Saettler, 1968). In the 1920's, a number of books were published, explaining how to teach using films. However, the effort to formalize instructional films by these corporations failed at the end of the decade, not only because of the depression which forced many companies out of business, but because many educators reacted negatively toward the medium. The sales methods used and the ways corporations advertised and promoted instructional films used to "mechanize instruction and supplant educators" offended them (Kisner, 2001, p. 89). The administrative and

technical problems that arose with the operation of the equipment also contributed to the failure of the instructional film at this time.

Film continued to be used for instruction in the classroom in the 20th century and remains in use today, although more commonly in video or DVD format. Film used in the classroom was considered a successful "add-on" to teacher instruction. Most teachers used films infrequently in the classroom (Cuban, 1986). Cuban (1986) further outlines that the reasons for this infrequency of use as: 1) teachers lacking the skills to use the technology; 2) films and equipment costing too much needed money for upkeep; 3) the inaccessibility of equipment when needed; and 4) instructors finding the right film for the class (in other words fitting the curriculum and/or changing the curriculum).

As this study will show, faculty members faced learning technologies and the use of computers for instruction, giving similar reasons. Many teachers lacked training because institutional funding did not provide for adequate training to teach them how to use computers for educational instruction. Despite these problems, instructional films continue to be used in the classroom though their use does not dramatically change the American education system as many had thought. The same thing could be said of radio for instructional use.

Radio

In the 1920's,while instructional films failed to live up to their promise of aiding the teacher to enhance learning and instruction, radio became the next technology that some educators began to experiment with for use in classroom instruction. Educational radio also became popular in the 1920's when the federal government issued the first

radio educational license to the Latter Day Saints University of Salt Lake City in 1921 (Levensen, 1945). In the mid 1920's, both The University of Minnesota and the University of Wisconsin received licenses to establish educational radio stations (Saettler, 1990). A number of public schools during that time, including those in the cities of Cleveland, Chicago, Detroit, Buffalo, and Rochester, experimented with instructional radio, as well as some colleges and universities such as the University of Wisconsin, Kansas, Michigan, and Minnesota. These universities established their own radio stations also forming a consortium called "Schools of Air" (Kisner, 2001). Students, who did not have easy access to the university, used radios in rural areas. Instructional radio did not become a success story and did much worse than instructional film because of the monotony and lack imagination of many broadcasts. Instructors did not sound clearly on radio, since many read their notes into a microphone often sounding quite dull. Strict federal regulations and competition of national commercial radio networks became the most important factors in its demise; and the invention of the television undermined it as popular medium for instruction (Kisner, 2001).

Television

Cuban (1986) describes the use of instructional television in the classroom as well as radio and film in his book. In 1953, the first instance of classroom television, the television station KUHT in Houston, Texas, began broadcasting more than 200 television programs. Veteran broadcasters produced these programs developed for educational purposes and became concerned about the number of available channels allocated for commercial interests by the Federal Communication Commission (FCC). The programs

came from impassioned educators who saw much promise for television in the public schools as a supplement to the curriculum (Cuban, 1986). They developed these education programs in the hope that classroom television would aid teachers in improving the curriculum (Cuban, 1986). By the mid-1950's, teachers used instructional television in the classroom as an aid and supplement to classroom instruction. The teachers acted as supervisors for students who viewed these programs in the small and large classroom. By the late 1950's, seventeen programs used television as part of their classroom instructional materials. Use of educational television continued to grow slowly. By 1961, 53 stations had become affiliated with the National Educational Television Network (NET) sharing films and coordinating scheduling for distance learning (Curtis, 2001; Kisner, 2001). Although instructional television continued through the next decades, a small number of teachers in the elementary and secondary schools used the medium as an *accessory* rather than the primary vehicle of instruction (Cuban, 1986).

Within the next two decades, other technologies were experimented with for use in instruction. In the 1960's, many schools explored closed circuit television (CCTV) and Instructional Fixed Television Services (IFTS), a microwave system. In the 1970's, the quality of these media improved and for the first time *distance education* became considered part of the extended classroom, available to people who could not come to the campus. The inexpensive and portable videocassette emerged at this time as well. Schools produced and marketed video telecourses and students viewed these courses at home rather inexpensively (Kisner, 2001). In the 1980's, the Public Broadcast System (PBS) formed partnerships with several schools that produced video courses, and they established the Adult Learning Services (ALS). By 1998, PBS created a program called

"The College of Air," offering telecourses to over 450,000 students in 2,000 schools. Other newer technologies continued to evolve in the 1980's and 1990's, such as the microcomputer, computer-assisted instructional (CAI) technologies, compact disc (CD) and digital videodisc (DVD).

The inexpensiveness and portability of these newer forms of instructional technologies contained a wide variety of features that the earlier forms of instructional technology did not have, including immediate feedback, remediation, self-testing, tracking and recording (Kisner, 2001). The introduction of instructional technologies into the educational system for nearly a century with newer inventions far more powerful than previous ones, promised much but failed to meet the expectations of educators and school systems. During the 1990's, another instructional technology came onto the scene, more pervasive than its predecessors: the Internet.

The History of the Internet

In 1960, J.C. R. Licklider, a psychologist, envisioned what we call today "e-commerce," "online banking" and "digital libraries"(Chamberlin, 2000). Licklider did research with computers in a program he headed at Massachusetts Institute of Technology (MIT) that created a computer-based system to be used against Soviet bombers. Licklider had a vision that people could have easy access to machines, and he spent hours "spinning visions of graphical computing, digital libraries, online banking, e-commerce and computers with megabytes of memory and software that would live on the network and migrate wherever needed" (Waldrop, 2000). He wrote two seminal papers describing what bore an astonishing resemblance to today's Internet (Licklider, 1960;

Licklider and Taylor 1968). In 1962, Licklider was asked to be the project manager at the Advanced Research Projects Agency (ARPA) at the Department of Defense. The work that he began from 1962 to1969 in the U.S. Defense Department led to the development of the computer network known as ARPANET. Computer networks allowed contractors and universities doing military research to exchange information electronically (Vivian, 1995). The current Internet technology originated from ARPANET protocols developed for the Department of Defense in the 1970's.

By the early 1980's, university educators shared instructional materials and computing resources through interconnected computers (Lichty, 1995). Unlike larger corporations, educators focused on accessing and sharing their academic research with one another. Their computers held vast amounts of data, and they wanted to share information without bias. In fact, educators wanted all members of their academic community to have equal access to information online. Educators needed a network—*a worldwide network,* and ARPANET became their answer. But conflicts between the military and academic attitudes led the academic community to develop their own network, which they called NSFNet, named after the National Science Foundation, which had become central to the Internet's development.

In the 1980's, the National Science Foundation had created a network giving researchers access to costly supercomputers at research universities, such as Cornell, Illinois, Pittsburgh and San Diego (Vivian, 1995). This network attracted more and more users, many of whom had their own internal networks. The National Science Foundation network became the backbone connecting hundreds of other networks that educational institutions, government agencies and research organizations operated (Vivian, 1995).

Information technology created a rapid transformation in the communication industry as well as in the way people communicated with one another. This network, called the Internet, grew and touched an expanding array of communities, peoples and institutions.

The Internet produced a culture that began to influence the way these entities and the people in them operated both online and off-line and the way they (self-consciously) pictured themselves and their activities (Keller, 1995; Whittle, 1997). Users viewed the Internet as a technology for providing access to information and its tools. Currently, the term, *user,* refers to people who use a particular computer system or application (Bannon, 1991). The Internet gives researchers and students at colleges and universities of all sizes access to high performance computing tools, data banks, supercomputers, libraries, specialized research facilities, and educational activities (Sproull & Faraj, 1995). With the Internet, information can be disseminated instantaneously over distances and entirely new forms of collaboration become possible. In learning environments, the Internet has become a growing alternative and educational option. The Internet is unlike radio and television/film whose major disadvantage for distance instruction is that it restricts the ability of engaging in two-way communication between the teacher and student (Curtis, 2001).

Government agencies, corporations, and universities use the Internet and the World Wide Web (WWW) to reach people in other organizations and institutions like themselves in order to access and share information globally (Carnevale, 2000; Keller, 1995). In the 1990's and in the beginning of the 21st century, learning institutions have increased their boundaries globally, using distance learning in the university as a popular alternative to teaching on and off campus for students of all ages and academic

backgrounds (Ben-Jacobs, M.G., Levin, D. S. & Ben-Jacobs, T. K., 2000; Berg, G. B., 2000). Moreover, it is important to mention here that prior to distance learning, the correspondence course functioned as a mode of teaching students of all ages and academic backgrounds, away from the classroom; and, in this sense, it was similar to distance learning.

In the United Kingdom, the British also established the first distance education program in the form of the correspondence model called the Open University. Both correspondence education and the Open University had the same goals as distance education: to offer courses to students who had difficulties going to the university because of long distance, physical disabilities, or complicated schedules. This chapter began discussing earlier forms of technology used in education, and it ends with an examination of correspondence education and the Open University

Correspondence Education

Over a century ago, in the United States some students participated in correspondence education through mailed materials and letters. It allowed students who needed a flexible schedule, any time and anywhere, to learn at a distance. It provided for students of all ages, one-on-one mentoring contact with an instructor and accessiblity to anyone from home or the workplace. "Correspondence instruction was a method of instruction in which *correspondence* is the means of communication between the student and the teacher" (MacKenzie, Christensen & Rigby, 1968, p. 2). As in contemporary distance learning, correspondence courses provided educational instruction to people who did not have access to a local school due to physical disabilities, poverty, and a distant

setting, or to non-traditional students who worked and could not go to school because of scheduling problems and other conflicts.

Boston became one of the earlier instances of correspondence courses where in 1873, Anna Eliot Tickor, daughter of a Harvard University professor, organized a home correspondence school called "Society to Encourage Studies at Home." It was offered within several departments of history, science, art, literature, French and German to mostly women students (MacKenzie, Christensen & Rigby, 1968). The second institution to offer correspondence education in the United States was Illinois Wesleyan University. In 1850, the Methodist Church endowed Illinois Wesleyan University and it began offering undergraduate and graduate degrees through correspondence courses. This program did not convince its critics that equivalent measures of study could be used for both resident and correspondence students. As a result, other institutions did not recognize the degree the correspondence program gave. By 1906, the University Senate of the Methodist Institution decided that all colleges in the federation, including Illinois Wesleyan College, phase-out their correspondence programs (MacKenzie, Christensen & Rigby, 1968, in Curtis, 2001).

Meanwhile, in the 1880's, Thomas J. Foster established one of the earliest private, for-profit correspondence schools in Pennsylvania to provide vocational training in mining, safety, drafting and metalworking. In 1892, he founded the International Correspondence Schools, which became one of the largest and most enduring enterprises in education history (MacKenzie, Christensen & Rigby, 1968). In 1926, over three hundred such schools existed in the United States (Noble, 2001). Another example of a consortium of correspondence schools, the Correspondence University, was established

in 1883 when 32 professors from different colleges, (which included Harvard, The Johns Hopkins University, and the University of Wisconsin) joined together to form the Correspondence University. Despite the name, it did not have a charter or any authority to grant degrees (Curtis, 2001). These comprise a few examples of correspondence programs in the United States during the later part of the 19th century and the early part of the 20th century.

Today, critique of online learning resembles the criticism of correspondence programs. Some critics suggest that the new technologies accelerate the commodification of knowledge and the commercialization of education (Kisner, 2001). In *Digital Diploma Mills: The Automation of Higher Education,* David Noble (2001), examines the technological transformation of the university pointing to a dangerous trend. He discusses how online education commodifies education and takes away the teaching from the instructor, eventually rendering him/her obsolete when technology replaces the instructor. He also states that the universities usurp the property and ownership rights of instructors who design their online course, making it the property of the university (Noble, 2001). David Noble (2001) summarizes his views in describing correspondence education:

> ...correspondence instruction emerged in the last decade of the nineteenth century along two parallel paths, as a commercial, for-profit enterprise, and as an extension of university-based higher education. At the heart of both was the production and distribution of prepackaged courses of instruction, educational commodities bought, sold and serviced through the mail (Noble, p. 5).

Noble (2001) provides a similar description of distance learning stating that it commercializes and commodifies education at the expense of learning. Correspondence courses become a large profit-making enterprise due to the fact that the colleges that offered these programs lived on the earnings made from those who paid fees, but who drop out at an early stage, thereby making very little demand on the system (Perry, 1977). Some colleges offering the correspondence courses do provide good service for student, who completed the course. But eventually, since students cannot get their money back for courses they do not complete, among other reasons, the demand for correspondence education has decreased (Noble, 2001; Perry 1977).

The Open University

In 1969, the decision to create the Open University, in England, then known as 'University of the Air,' became an act to offer alternative options to students who could not go to the traditional colleges (Perry, 1977). In that same year, the Royal Society granted a charter to the Open University that did not set out to re-write the curriculum of higher education. "The Open University was begun with the assumption that students had much to learn from an intact cultural tradition" (McIntosh, 1977). The Open University (OU) from its inception committed itself to allowing anyone over the age of twenty-one years old to enroll in courses and pursue a degree, regardless of the applicant's previous academic performance (McIntosh, 1977; Miller, 1998; Perry, 1977). Before the inception of the Open University, adults who wished to go to school and earn a degree would find it exceptionally hard to gain entrance into any university or

polytechnic because of the limited provisions for mature students in most universities (McIntosh, 1977). The idea to have a 'University of Air' or an Open University gave all students from all classes the opportunity to be educated.

The OU had many of the same qualities as that of correspondence courses and distance learning courses. It had a credit degree structure, a combination of courses chosen by individual students, and degrees could be completed at student's own pace. It used multi-media teaching techniques and provided a multi-faceted support system which students used according to their needs. The Open University offered courses either by mail, television, or radio communication transmission through the British Broadcasting Communication (BBC). Perry (1977) explicated that the correspondence courses did not have the quality of the OU program because colleges offering them profited from student tuition. Students who paid for the correspondence courses and later dropped out without completing them were never refunded their money; they thereby made very little demand on the system to recompensate them financially (Noble 2001). Colleges did not encourage students nor support them very well. On the other hand, the better colleges offering correspondence courses did provide good service for those students that completed them (Noble, 2001).

Richard E. Miller (1998) in his book, *As If Learning Mattered,* compares the City University of New York (CUNY) with the Open University in 1969. In his comparison, he examines the open admissions process and CUNY's emphasis on access and excellence. Miller's reason for researching the OU was "to consider the range of institutional and disciplinary forces that simultaneously enabled and constricted pedagogical encounters with the OU student," (Miller, p.122). The OU, although it

admitted everyone on a first-come-first-served basis, ended up with a sample of highly successful and committed, well prepared, upwardly mobile, and largely male students. Similarly, at CUNY in 1969, admitted college students did not reflect the racial composition of the high school graduating classes in the city (Miller, p.121). CUNY altered its open admissions policy, after students actively protested, but the OU continued to admit only highly accomplished, mostly white male students, diminishing the original purpose of the school--to enroll non-traditional students. OU began to collect data on the racial and ethnic backgrounds of students eighteen years after they entered the school system. According to Miller (1998), preliminary data suggested that OU had not done a good job of retaining racial and ethnic minorities either as students, faculty or staff. Miller (1998) asserts that OU "was able to ignore the fundamental concerns of real students in the world because it delivers its educational lessons at a distance." According to Miller (1998), this occurred because not all students who applied actually enrolled in OU, only the elite few, upwardly mobile, largely white male students. Miller (1998) concludes that OU insured students could not come together and articulate a common set of interests capable of threatening the status quo. He describes the Open University as distance education, popularly thought to guarantee a "color-blind" educational experience. The disparity in racial and ethnic minority education actually served to conceal the fact that the university sought to make itself amenable to the needs and desires of those potential students who truly stood outside the system.

However, correspondence courses and the Open University system served, and still serve, a population of students that would not otherwise get educated if these methods of distance instruction were not available, e.g. working students, disabled

students and rural students. Currently, distance education serves students both on campus and off campus. Students take distance learning courses for a variety of reasons similar to correspondence education and the Open University. Many on-campus students, as well, take distance learning courses to accommodate a certain number of credits within a semester. All three options, correspondence courses, the Open University, and distance learning have added to the history of instructional technology providing an education outside the walls of educational institutions and in students' homes or other places at a distance. This brief exploration of technological use in education and non-traditional learning environments has illustrated the attempts that have been made to offer other options in education. Nevertheless, computer-mediated distance learning has had a more pervasive and profound impact on the traditional educational system in that it offers students and teachers an immediate two-way interactive access to one another, and it gives access to information globally at rapid rates. The Internet has provided the virtual online class an opportunity to share information, allowing for information to exist in large measure, to produce and to reproduce, interchangeably and reflectively in a space not bounded by time and space.

The following section describes the methods used in conducting the study of this work landscape.

CHAPTER IV

METHODOLOGY

They regarded the computer as a machine naturally suited for representing things that you could see, control and play with. Its interesting potential lay not in its ability to perform calculations but in its capacity to represent action in which humans could participate.

B. Laurel, (1993). *Computers as Theater.*

Goals of Study and Research Questions

The focus of this study is to identify the everyday work experiences of faculty members who teach courses online and to explore the time and space issues that affect them. Other areas that this study explores, though they are not the primary focus of this study, include their work responsibilities within the larger university system and "shop floor" issues that address concerns, such as compensation, release time, copyright ownership, course ownership, and tenure. This dissertation addresses broader issues relating to the impact of distance learning technologies on learning and teaching environments. The acronym DLT will be used for distance learning technologies. In order to understand and explain some of these issues, I focus on the following research questions in this study:

(1) How do faculty members use distance learning technologies in their work?

(2) What are faculty members' teaching practices in a DLT environment and how (if at all) are they different from teaching in a traditional classroom environment?

(3) How do faculty members experience their academic/teaching environments when using DLT?

(4) How has faculty use of DLT had an effect on their work lives in higher education?

(5) In what ways, if any, has distance learning changed or had an effect on the workplace *policy issues* for faculty in the university?

These research questions, addressed in relation to the growing literature on distance learning technology, critically examine the working lives of faculty when distance learning technologies become part of how they teach and educate their students. There has been little to date that offers a theoretical framework for understanding the broader environmental and professional relationships of college teachers affected and altered by these technologies. I intend to illustrate, with this study how a particular group of faculty members at a public community college in New York State experienced, perceived, and evaluated their *work* as online instructors in understanding the relationship between distance learning technologies and professors' work in the university. Finally, this study adds to the literature in environmental psychology concerning contemporary *virtual* work environments. I draw on this research to show a future need for environment and behavior studies in virtual environments in educational institutions as well as other cyberspace environments.

Site and History of Setting:

In 1998, I prepared the following research design for this study after conducting a pilot study to broadly look at a particular distance learning environment. This unpublished pilot study (Oliver, 1998) helped me to clarify the focus of the dissertation

research from a broader issue of teaching and learning via distance learning to the more focused issue of the work environment. How the professor, in this pilot study taught his course online and how he perceived the teaching-work environment (in this case, the *virtual* teaching environment) became the intriguing topic of study that I decided to pursue. This dissertation builds on this pilot study by exploring how professors' experience academic/teaching environments that involve their use of information technology in asynchronous teaching environments.

Selection of Site

In order to obtain a varied and sizable sample of faculty to study, I chose a site where a large number of faculty members used distance learning. Another criterion for the site included finding a place where the faculty would teach the same courses online that they taught off-line so that they could address, and compare their work experiences teaching in both environmental settings. I obtained a contact name from the New York State Education Department, Office of College and University Evaluation's Task Force On Distance Higher Education, and of a community college in New York State. As part of the State University of New York (SUNY), the college's faculty actively participated in the design and delivery of distance learning as one of their teaching options within their school programs. This community college will be called for purposes of confidentiality, *Community College* or *CC.*

The New York State Department of Education gave me the name of the Community College's Vice President of Educational Technology to contact. My initial call to him led to several communications regarding the college and the faculty who teach online there. The Vice President of Educational Technology invited me to visit during

the late Fall of 2000 where I talked to the distance learning faculty, the distance learning advisory board, and the technical support staff members who were actively involved in helping the faculty design and implement their courses. After this visit, I made a proposal to conduct my research at Community College and the college administration and faculty approved the research proposal. The following section describes Community College, the setting for this research.

Setting of Study

Community College (CC) is a two-year public college that is part of the State University of New York (SUNY) system, that receives state and private funding and is subject to State regulations. Community College is both a liberal arts and a technical college that offers a large variety of courses and multiple curricula within a single consortium of SUNY and other private colleges. Because CC is a community college, the faculty teach courses that are either part of associate degree programs [Associate of Arts (AA) and Associate of Applied Science (AAS)] or part of various certificate programs. The associate degree programs offer courses in Liberal Arts and Sciences as well as Service programs including areas such as Food Services Administration and Travel and Tourism. The certificate programs offer a range of courses for fields that require certification, such as Dental Assisting. Community College (CC) is quite large with over 15,000 students enrolled both on-campus and off-campus. When this research began at CC in the fall 2000 semester, over 1000 CC students enrolled in asynchronous SUNY Learning Network courses. In the spring 2001 semester, CC also had over 1000 enrolled students in online courses.

Most of its students online and otherwise live nearby; 58% of the students who take online courses at CC live less than 30 minutes by car from the college (data obtained from CC's Comparative Demographic and Grade Data of SUNY Learning Network (SLN) report, February 5, 2003). Students enrolled in these courses are similar to on-campus students. Many of these community college students, are mostly working adults and find it easier to take an online course. More traditional students, who have a full schedule of classes, take an online class to complete additional credits in their credit load. All asynchronous courses at CC are offered through the SUNY Learning Network (SLN), a New York State Colleges consortium of courses that provides an asynchronous online environment. SLN serves as the online instructional program created for the 64 colleges and nearly 400,000 students of State University of New York (SUNY). However, as a community college, CC has its own governing board, sponsored by the County legislature, which also provides some of its funding.

All Community College instructors interested in conducting an online course receive training prior to teaching an online course. Each faculty member receives instruction from the SUNY Learning Network faculty development-training program as well as his/her own internal training with his/her Community College cohorts. Training for all SUNY faculty in the SUNY-Learning Network involves a four-stage process: 1) getting connected online, 2) conceptualizing the course, 3) developing the course, 4) pilot testing the course. Training involves not only learning the platform (Lotus) program for the course, but also the designing and developing of pedagogical content. The time that it takes a CC faculty member to design and develop a course ranges from one to eight months (mean =3.4 months; median=3 months). This wide variation in the number of

months it takes each one of them to design and develop an online course could be a function of prior off-line experience with the course that he/she develops or prior experience teaching an online course.

The teaching load is defined by Faculty Contact Hours (FCH) or the number of classes taught per semester, within a tri-semester academic year. The regular annual teaching load for a full time faculty member at CC is 30. For part-time faculty the requirement is 30 FCH and it is nine FCH for the adjunct faculty. Regardless of whether faculty members teach in the classroom or online, the FCH requirement remains the same and is calculated in the same way as indicated in the Contractual Agreement between the Faculty Association of CC and the CC Board of Trustees. This contract reads "*for classes taught via distance education, there is no change in official maximum class size or faculty contact hours.*" This contract became effective September 1, 1999 through August 31st 2003; and during my period of research, it was extended until August 31st 2004.

The official minimum class size for a course taught both in the classroom and online consists of 25 students per class. Some faculty members volunteer to teach their course online while departmental heads encourage others to teach online depending on need. Generally faculty members who teach an online course must have already taught the same course in the classroom before they can go online, although some experienced online faculty members have designed and taught new courses that they never did in the classroom.

History of Distance Learning Technology Use at CC

Community College provides three types of distance learning technologies to both matriculated and non-matriculated students: telecourses, interactive video classrooms, and asynchronous online courses.

- ***Telecourse:*** The first telecourse at CC was initiated and taught by Public Broadcasting System (PBS) in 1978. These are a series of videotapes accompanied by a textbook and study guide focusing on a given subject. CC has provided to its students 5 to 7 telecourses per semester since 1983.

- ***Interactive Video classroom:*** Since 1996, CC began delivering instruction via two-way video and audio to off campus sites as part of its county telecommunications network. This network connects area high schools and colleges via fiber optic cables to form a two-way video and audio interactive network of classrooms.

- ***Online Courses (SUNY Learning Network):*** The first asynchronous courses were offered in 1997. Community College offers approximately 100 courses through the SUNY Learning Network (SLN) each year. These courses included Liberal Arts and Sciences as well as more technical courses in such areas as Dental Assisting and Office Technology. In fall 2002, 1725

students enrolled in at least one online course. This figure has proportionately increased each year since 1997 when 31 students were enrolled in the first online course taught at CC. Of all the distance learning models used at CC, online asynchronous courses are the most widely used. Online courses at CC comprise 20% of the course offerings of the SLN in New York State and 20% of SLN's enrollment.

- ***Distance Interactive***: Distance Interactive courses are new distance learning courses that are specifically designed by the electronics faculty for laboratory-based courses. Materials are provided on the website along with books, CDs, and additional laboratory hardware that may be needed for the particular lab course. Students use computers to perform many of the tasks that would be normally performed in a college laboratory setting. At the time this data was collected distance interactive courses were not offered, and currently only one is being offered. The other two have been cancelled due to low enrollment.

In fall 2002, CC offered 126 courses online within the SLN, an increase from 4 courses in the fall of 1997 when CC started offering online courses. In 1997 just seven telecourses were offered and no interactive classrooms were in place. This dissertation study focuses only on the faculty who teach asynchronous online courses offered at CC,

since there were too few telecourses and no interactive video courses offered at the time the data was collected.

Research Design

A case study method was used, as well as both qualitative and quantitative methods (Kirby & McKenna, 1989, Marshall & Rossman, 1989, Miles & Huberman, 1994;) to examine the working lives of online faculty. Faculty surveys were administered, followed by in-depth interviews of distance learning faculty who volunteered to participate in them. Historical data of the college and CC literature concerning DLT use at the college were reviewed in order to examine the faculty and the college as a whole, and to look at the history of distance learning use at the college. Since the area of distance learning has not been studied in the field of environmental psychology, using a case study approach helped in building a theoretical framework, which would help in understanding the online work environment of faculty. Some of the data collected were amenable to quantitative analyses (e.g. forced choice questions from surveys).

The first portion of the three-part survey yielded data used to compare non-online faculty (faculty that did not teach online) with online faculty. The interview instrument that was developed was based on the survey data collected, which also helped to validate some of the questions in the interviews. The following sections will describe the design of the qualitative and quantitative instruments used in this study.

Description of Research Instruments and Procedures

Phase I: Description of Survey Instrument and Procedures:

A three-part survey instrument (See Appendix B) was developed and used in this study. Sections I and II of the survey were for all faculty members, both non-online and online, to answer; and Section III was for online faculty only. The goal of surveying both the non-online faculty and online faculty at CC sought to use the data of the non-online faculty as a comparative group in the analysis of data. Most importantly, the study sought to understand if the responses of the online faculty compared to those of the non-online faculty members at CC. Section I of the survey contained general descriptive questions regarding personal teaching styles, evaluation of student performance and questions regarding work related issues, e.g. course ownership, release time, faculty contact hours. It also included some demographic questions relating, for example, to the age and gender of respondents. Section II of the survey covered questions regarding the general usage of computers for personal and work tasks and questioned the faculty whether or not they taught online. Those faculty members who indicated that they taught online continued to answer questions in Section III, which addressed issues involving teaching using DLT environments. Questions particular to the online faculty included experiences with teaching in traditional vs. DLT environments, the difficulties and advantages in using DLT environments, and the design, faculty training, and implementation of course curricula and workplace issues.

The survey was piloted in CC three months before it was administered, using some faculty outside of the sample of those to be included in the research. The questions in the survey included those of interest in this research as well as those characterized by

the concerns of the faculty piloting the survey and the CC administration. By including their questions in this research as well, it built trust and it gained me inclusion within this academic community; also their questions revealed faculty's perceptions of teaching online.

The study was advertised in the CC campus newspaper, stating that the faculty surveys would be mailed to their homes. In addition to the publicized campus news, the Vice President of Educational Technology along with the Vice President of Academic Services wrote a letter to the faculty announcing the research goals and the forthcoming surveys. The letter informed the faculty members that surveys would be sent to their homes at the end of the spring 2001 semester. The Community College administration reassured the faculty that their individual responses would be completely confidential and not available to the administration. All data would be reported as group data in order to protect the anonymity and confidentiality of the faculty members who responded to the surveys and the interviews.

In May 2001, the Vice President of Educational Technology at Community College provided mailing address labels, a total of 299, of all full-time and part-time faculty members at CC. This total included full-time and part-time faculty who taught at the college during the spring 2001 semester. This total (N=299) was slightly less than the total (N=314) of full-time and part time faculty reported in the fall of 2000. The study excluded the adjunct faculty members as part of the sample.

In June 1, 2001, the 299 surveys (Appendix B), attached to a cover letter (Appendix A) describing the study and research goals and a self-addressed return postcard (Appendix C), were mailed to the faculty's home mailing addresses rather than

to the CC mailboxes because not all the college teachers were on campus after the spring semester ended. This sample also included faculty members who had never used DLT environments during the time of the surveys. A few began to do so during the time of the collection of data. Moreover as non-users, these faculty members added valuable insights regarding their experiences of computer use to the study, as did the faculty in Blanco's dissertation study (1996). Postcards included in the mailing to the faculty asked faculty (a) if they would like to participate in an individual open-ended interview addressing questions *relating to their personal experiences* in designing and teaching with DLT; (b) if they wanted a copy of the report on the survey results; and (c) if they wanted, both to participate in the interview and to receive a copy of the reported results. Faculty participants were asked to respond to the survey instrument by mailing the response within two weeks. They were also asked to mail the surveys separately from the pre-stamped postcard, indicating their choice on the postcard. The online faculty members who indicated in the postcard that they wished to be interviewed served as part of the follow-up for Phase II of the study. The following is a brief description of the interview instrument and the procedures for interviewing the CC faculty.

Phase II: Description of Interview Instrument and Procedures:

Based on the analyses of survey responses (the analyses and results will be in Chapter IV, the results section), the creation of a semi-structured interview (See Appendix E) addressed the main issues and concerns that emerged from the survey research instrument. Faculty responses from Section III of the survey detailed their experiences with both online and traditional classroom teaching and helped to frame

subsequent interview questions. Some of the faculty members' concerns from their survey responses included workplace issues, such as more consumption of online work-time, little or no compensation for the time spent online, and their ambiguity of flexible work-time and space when teaching online. The aim of these interviews sought to gather additional information on the faculty's experiences with teaching online and how they compared in their traditional teaching environments. Faculty members had to describe their *day-to-day* experiences teaching online, addressing time and personal space issues relevant to their online teaching experiences. They answered questions about their employment, such as released time, course ownership, course design, technical support professional training, censorship, and research time. They had to describe how much time they spent on campus and in the classroom vs. "at a distance," in addition to other issues that emerged from the analysis of the survey. Faculty members addressed how teaching online affected their individual work environment more generally.

All faculty members who wished to be interviewed within a two-week time frame were offered appointments. Each interested faculty member received, by e-mail, a two-week calendar with possible dates and times, to set up an appointment for an interview. The Vice President of Institutional Technology provided for a comfortable, private office in which to conduct the interviews. The faculty members had the option to meet in this office or to meet wherever they chose, e.g. their personal offices or in their homes. Allowing them to choose the place of the interview afforded the opportunity for more data, since *the place and space* of the interview could also be their place of "*online work.*" Joan Greenbaum (2001) recommends that researchers conduct interviews of workers in the place or space in which they work because "situated interviews or

observations are useful for pulling apart the difference between plans and situated actions...they help one look for contextual relations surrounding the research subject" (p. 1). However, of the entire group of faculty who were interviewed in this study, only one member chose to be interviewed in the faculty lounge because of the relative emptiness and quietness, as opposed to her noisy office. The other faculty members chose to be interviewed in the office that was provided for the interviews. The faculty did not seem concerned about the place of their interview. The fact that I had sent them an invitation by e-mail, offering them a room in which to meet me, seemed to satisfy them. They did not object to the room made available and therefore, I did not include their choice in the analysis of data.

A total of 17 faculty members signed a consent form (see Appendix D) and agreed to be interviewed. I conducted all of the faculty interviews in April 2002 and in May 2002 and tape recorded the interviews with the faculty members' permission; and later transcribed and analyzed these recordings. The results section discusses the analyses and results of the surveys and interviews. A quantitative summary of the data yielded by the surveys will be found in Appendix F, in the form of tables.

CHAPTER V

RESULTS

This chapter includes a discussion of the analyses and results of the two phases of this study: Phase 1) a three-section survey comparing non-online faculty with online faculty responses; and Phase 2) a one-on-one interview administered to only the online faculty who volunteered for the interview. A brief discussion of a final visit to Community College, after the analysis of data and a report sent to the college, are also included in this chapter.

Response rates of surveys and postcards

Of the 299 surveys mailed to the faculty's home addresses, 112, (37.5%) were returned. Twenty-six out of the 112 (23.2%) surveys came from faculty who identified themselves as online instructors. The response rate was possibly lowered by the following two factors: 1) during May of 2001, the Institutional Research Department gave the CC faculty members another survey. The institution indicated that if the faculty had to answer two surveys at the same time that they would refrain from responding to my survey and do their own institutional survey. The Vice President of Instructional Technology recommended that I did my survey after their internal one. 2) the administration also suggested that I should mail the surveys after the end of the semester, a less busy time, because the faculty might not find time to respond or would more likely be on vacation. Therefore, they recommended that I mail out the surveys to the faculty members' homes in June, at the end of the spring 2001 semester.

Twenty-one responses from 52 postcards indicated an interest in being interviewed for this study. The others came from those who wanted a copy of the reported results. From the twenty-one respondents who indicated that they would like to participate in the interview, one was not an online faculty and could not be part of the interview; one instructor went on maternity leave and did not wish to participate at the time; one never responded to the calendar of dates or numerous calls made for her to set up an appointment, and the fourth was quite overwhelmed with personal commitments and asked that I call her for a phone interview. Due to time and date scheduling problems, this faculty member indicated later that she did not have time to be interviewed on the phone. According to the CC administration, 64 faculty members of the 299 respondents (or 21.4%) were online faculty during the spring of 2001. The total number of faculty members interviewed was 17. From the entire pool of 299 faculty members, 5.7% were interviewed, representing 26.6% of the total number of online faculty at Community College.

The following section describes the analysis of the three-part survey leading to Phase II, the description of interview instrument and procedures.

Phase I: Analysis of Survey Data

The analysis of the survey includes Section I and II, which consisted of responses from all the faculty members who answered the survey (both non-online and online faculty), and Section III, which included the responses from *only* the online faculty (See Appendix B). The analysis of Section I and II helped in the analysis of Section III in order to compare the online faculty with that of the non-online faculty sample. The

analysis of Section III completed Phase I and led to the development of the interview instrument, Phase II, described later in this chapter.

The answers to the survey questions were coded and entered in a SPSS.10 data file. These questions were analyzed quantitatively, using frequencies. The answers to open-ended questions were analyzed *qualitatively* by grouping the open-ended responses into similar responses and charting them into categories. Examined for relevant issues in the survey, these categorized responses became important in creating the semi-structured interviews in order to represent the most relevant issues and concerns that the faculty members had about teaching online. The following section described the results from Sections I and II of the survey comparing the non-online faculty and the online faculty responses.

Results of Survey Section I and II:

A frequency report of all the survey responses was created to analyze the survey data. Tables to represent the frequencies and analysis of this data were created and are located in Appendix F in this dissertation. The tables in Appendix F also included data that was important to the Community College faculty and administration. Survey Sections I and II were answered by 112 faculty members and included non-online and online faculty, of which 86 faculty members did not teach online.

Teaching & Demographic Data of Survey Section I:

Survey Section I addressed questions regarding teaching and descriptive data only for the 86 non-online faculty members. This section was primarily concerned with the

teaching styles of faculty in the face-to-face classroom; office hours spent with students; questions regarding their attendance at faculty development workshops; and demographic data such as age, gender, and number of years teaching at CC or teaching at the college level in general. The following results addressed some of the descriptive data of the non-online faculty that will be used in comparison with the online faculty descriptive data.

The teaching styles of the non-online faculty varied in their responses. However, their most frequent style consisted of the lecture and student discussions; 35 (40.7%) of faculty used the lecture and student discussion in the face-to-face classroom. Another 28 (or 32.6%) of the faculty indicated that they used combinations of all these styles in the face-to-face classroom (Appendix F, Table 4). This chapter later compares the teaching style of the non-online faculty with the online faculty.

The criteria used to evaluate student performance in the face-to-face classroom varied. Responses included attendance, participation, exams, projects, homework assignments and lab work. The responses here became difficult to quantify, and highly dependent not only on the type of course that the faculty member offer, but also on his or her style of teaching. This is also true of the evaluation of the online courses.

Another question used for comparison data consisted of the average amount of office hours that a non-online faculty spent with students. In Community College, 84.9% of the non-online faculty members spent five hours or more per week in scheduled office hours (Appendix F, Table 5). The amount of time that it takes a faculty member to prepare for each face-to-face course was also asked in the surveys in order to compare the amount of preparation for faculty who teach online. On average, non-online faculty indicated that it took 2-3 hours preparing for a face-to-face class (Appendix F, Table 6).

At Community College, the non-online as well as the online faculty attend faculty development seminars. Ninety-three percent (or 80 out of 86) of the non-online faculty reported that they attended faculty development seminars and 35 (or 40.7%) rated the seminars as a "4" on a scale of 1 (poor) to (5) excellent. Rating the seminar a 4 indicating their satisfaction with the faculty development seminars.

Gender, Age and Number of Years Teaching

This study included questions about the gender, age and the number of years of faculty teaching. Forty-seven (54.6%) males and 39 (45.3%) females in the non-online faculty sample (N=86) responded to the survey. In comparing the gender proportion of the faculty non-online sample with that of the total sample (N=299), the same was true. According to the CC administration, a total of 157 (52.5%) males and 142 (47.5%) females in the larger sample included all off-line and online faculty members at Community College (Appendix F, Table 7). Interestingly, the later discussion of the data regarding online faculty will reveal the opposite as true. More women than men professors taught online. Of the 86 faculty members that returned the completed survey, the non-online faculty age group ranged from 25 to "over 55" years old. Thirty-one percent of the non-online faculty members were over the age of 55 years old (Appendix F, Table 8). Of this group of non-online faculty, 39.5% of this sample of 86 had also been teaching at the college level for over 20 years (Appendix F, Table 9). Twenty-six (30.2%) of the non-online faculty had been teaching at CC for over 20 years. It can be assumed, given the data, that a high proportion of the total faculty had also been teaching at CC most of their professional lives (Appendix F, Table 10).

Section I of the data gave the reader a glimpse of the CC non-online faculty profile in order to later compare this sample (N=86) with that of the online faculty sample (N=26). Section II deals primarily with the general use of computers by both the online and non-online faculty at CC.

Data of Survey Section II-Faculty Use of Computers:

The non-online faculty answered questions that in this section addressed the use of computer by the faculty at CC and at home. These questions served to analyze the level of computer usage and the likelihood of online teaching in the future. Eighty-five out of 86 non-online faculty (or 98.3%) said they had a computer at home. Sixty-five percent of the non-online faculty used their home computers at least once a day and 29.1% used their home computers once or twice a week. They used computers at home for e-mail, non-academic work, academic work, games and chatting (Appendix F, Table 11). Additionally, 55.8% of the non-online faculty claimed to have working knowledge of computers. All 86 non-online faculty members indicated that they used computers at work and 98.8% of them indicated that CC provided a computer for them to use at work. Of the computers that CC provided for the faculty, 93% had desktops and 5.8% had both laptops and desktops. Finally, of the 86 non-online instructors, 38 (or 44.1%) indicated that they would be interested in teaching online in the future. The following group of quotations from the open-ended questions in the survey, illustrates some of their interests in teaching online in the future:

- I am interested in new challenges. I am willing to try a new method of teaching.

- I think it can be an equally valuable course for students if made equally valuable in instruction.

- I think online is a different opportunity to access information.

- It is where academia is headed. It is the future of college teaching.

- This is what is coming, more flexibility for students.

- I think it would bring dimension to my course work.

Of the 86 non-online faculty members in this sample, 48 (or 55.8%) indicated that they did not want to teach online in the future. Some of their comments included:

- I have no time now to prepare a traditional course; online takes three times more work and I already have an overload.
- The type of courses that I teach I feel are best taught face-to-face. I enjoy the rapport that I build with students. Students that are struggling need that personalized contact even more.

- I do not think that this is a good medium for students trying to learn physics.

- It is too much work!

- I prefer personalized contacts with students.

- This is not my teaching style and I am too old to try.

- You really have no idea who is taking the course; it could be anyone using the student's name.

- We need release time; presently the college offers only money. Given the steep learning curve, what faculty need is time to master the online system to prepare their course(s).

- Why increase my workload and suffer a sense of deprivation for no extra pay?

These quotations indicated some of the apprehensions of the non-online faculty in their decision not to teach online. This completed the analysis of Sections I and II of the survey data for the non-online faculty. I turn now to an analysis of the same sections for the online faculty compared to the non-online faculty

Non-Online vs Online Responses Compared for Sections I & II of Survey:

In this section, the online faculty member will be compared to the non-online counterpart in order to assess whether or not the online faculty member's demographic information and teaching styles differed. This comparison will help in understanding whether or not the online faculty member had unique qualities that encouraged them or drew them to teaching in the online environment.

The pedagogical and preferred teaching styles of teaching in the classroom for the online faculty member were comparable to that of the non-online faculty member. The online faculty, as did the non-online faculty, both used a mixture of different styles to teach online. However, for online instructors the most preferred method was the discussion board forum, which allowed students and teachers to interactively communicate with one another asynchronously during their own preferred time. Even though both the non-online and online CC instructors similarly employed a mixture of methods to teach in the face-to-face classroom or the online environment, their pedagogical styles and teaching methods in their classes depended upon the course they taught and their own personal preferences. For the online professor, it became a question of how savvy he/she was with the technology and how much effort he/she put into the design of the course to make it interactive and engaging to everyone for the online environment.

Age

The frequency data and the analysis of the faculty survey showed in some instances that the online faculty (N=26) had answered responses similar or comparable to

those of the 86 non-online faculty members who responded to the surveys. For example, in those responding to the survey the great majority of both the non-online faculty and online faculty were over 36 years of age, as is the total faculty of CC. Overall, the online faculty members were comparable in age to the non-online faculty.

These data are interesting in that many of the assumptions that are made of faculty who teach online are that younger faculty are more versatile with computers and eager to try new things. At Community College, the instructors who taught online are comparable to the larger faculty sample of traditional class instructors (non-online group) over the age of 45 years old. Since the online cohort of teachers who were largely from the 36 and higher age groups and this study did not include adjuncts, it remains likely that older faculty in stable positions taught online classes at CC (Appendix F, Table 12).

Gender

The total sample of faculty (N=112), males and females numbered 56 (50%) and 56 (50%) respectively. However, in comparing the online faculty sample with that of the non-online faculty sample, the data demonstrated that there were more males in the non-online sample than females (Appendix F, Table 13). This data was also true in the total sample of all faculty members (N=299), which included non-online and online faculty, with the total number of males, 157 (52.5%) and the total number of females, 142 (47.5%), (Appendix F, Table 13a). In the faculty survey sample, more women, 17 (65.4%) than men, 9 (34.6 %) taught online (N=26), (Appendix F, Table 13). Interestingly, this pattern of data was also true for the total number of faculty (N=299), where 28 (9.36%) males and 36 (12%) females taught online (Appendix F, Table 13a).

Even though more men than women existed in the total faculty sample (N=299), one can say from these data that women taught more online courses at Community College than men. This finding contested the public perception of men being more frequent and adept users of technology than women.

Years of College Teaching

Little difference existed in the survey sample for online and non-online faculty regarding the number of years taught in their career. The findings indicated that 57.7% of the online (N=15 of the 26) and 55.8% of the non-online (N=48 of the 86) had taught 16 or more years at the college level (Appendix F, Table 14). Both Tables 14 and 15, in Appendix F, reveal that the online faculty who responded to Section III of the survey were comparable to the non-online faculty. Note in Table 15 that over 60% of both online and non-online faculty taught at Community College in excess of 10 years. This finding demonstrates that a large proportion (62.1%) of the online faculty surveyed (N=26) belonged to the senior faculty of Community College.

The data on teaching styles of online and non-online faculty indicated that the latter preferred lecture and student discussion. However, for the online faculty a mixture of all the various styles existed. This interesting data revealed that teaching online included, various forms of styles and design methods to convey the content on screen and to make it an interactive medium for learning. The online faculty stated that they use a mixture of different styles as their most frequent response, suggesting this as an indicator of why they may be more acclimated to teach online courses than non-online faculty. It

can be inferred from the data that style as one of the descriptors, explains why faculty may choose to teach online.

The online faculty also responded to questions about faculty development and training programs. Twenty-four out of 26 surveyed online faculty also attended faculty development seminars. Rated on a scale of 1 (poor) to 5 (excellent), ten out of the 26 online faculty rated the seminars a 5 and 9 rated the faculty seminars as 4. It can be assumed from their responses that they were satisfied with the faculty development seminars. The surveyed online faculty also had technology training in order to learn how to develop an online class. On a scale rated 1 (poor) to 5 (excellent), they also rated these seminars: 11 (or 42.3%) online faculty rated the training a 4 and 12 (or 46.1%) rated the training a 5. The higher the number on the scale indicated that in general the faculty seemed to think of technology training as very good in helping them to learn how to develop and design an online class. Most of the online and the non-online faculty in general expressed satisfaction with the faculty development and technology training that they received (Appendix F, Table 16).

The survey also asked faculty how often they used computers at home. All 26 online faculty members surveyed had computers at home, and the majority of them used their computers at least once a day (Appendix F, Table 17). The majority of non-online faculty surveyed used their computers at least once a day. The online faculty sample also stated that they had either working or excellent knowledge of computers. As could be expected, no one in the survey indicated that they could not use a computer and all 26 online instructors stated that they all used their computers at work in the college. Of the 26 online instructors who stated that they had a computer, seven had a desktop and 19

had both a desktop and a laptop at work. It can be fairly stated that the Community College faculty use their computers at work and that they felt that they had a fair understanding of how to use their computers. With CC's strong, supportive technology staff and their availability to work with faculty, it can be inferred that any faculty member at CC can, if they wished to do so, teach an online course. Therefore, the decision to solely teach in the traditional classroom environment due to lack of computer knowledge and experience would probably not be a reason why a CC faculty member would only teach in a traditional face-to-face environment. Community College faculty described a supportive relationship with the technology staff, and therefore if they need help using a computer program, CC's technology support staff would supports them.

The 26 surveyed online faculty members varied in the number of semesters that they taught online, but more than two-thirds have taught online for more than one semester. (Appendix F, Table 18). The faculty who responded to the "other" category reported to teaching online from eight to 12 semesters. At the time of the administration of the survey, the online faculty reported to have been teaching one to two courses online that semester. Section III also included questions that asked the faculty how they first learned about the distance learning. Twelve out of 26 (46%) online faculty indicated that they learned about distance learning from the CC administration's introduction of the medium; while 8 (31%) faculty members said that they were introduced to distance learning by another faculty colleague; and the remaining 6 (23%) faculty learned of distance learning by taking an online course themselves, reading about distance learning technologies or another source. They made their decision to teach online mostly on a volunteer basis: 24 (92.3%) of the surveyed online faculty members indicated that the

college gave them the opportunity to teach online, and 2 (7.7%) stated that it required that they taught online. The requirement to teach online may be due to a departmental need for a particular course since the decisions of what classes and who will teach them are made by individual program departments. Twenty-four or 92.3% of the online faculty members developed their own online courses, and 2 (7.7%) taught an online course that another faculty member designed and developed. All of the online faculty members reported that they received technical training from CC and the SUNY Learning Network in order to learn how to develop their own online course.

It took more time for faculty members to develop their first online course as compared to a classroom course; 22 out of 26 (84.6%) online faculty members asserted that developing the online class took more time (Appendix F, Table 19). Twenty out of 26 (77%) of the online faculty also indicated that it took more time overall to prepare for a distance learning course than it did for a traditional face-to-face course. This finding shows that faculty members spent more time preparing and designing their online class than their face-to-face class. This finding also addressed the issue of time worked; the consumption of work time that was spent to design and prepare to teach an online course was more time than that of the face-to-face course. The issue of online time worked becomes important later in this study, since time to prepare, develop, and design a course was part of the "work" involved in teaching an online course. The online faculty who volunteered to be interviewed in this study (N=17) answered questions similar to those of Section III, specifically regarding their personal teaching experiences online.

Phase II: Faculty Interview Data

Interview questions came from the survey questions. Particular responses to the questions in the survey, such as the issue of online teaching consuming a lot of time, became important to explore in the interview. The interview questions were separated into four areas of concern to this research in order to study the experience of online teaching: (a) *demographics*, (b) *online teaching experiences*, (c) *online teaching environment- time, space and place* and, (d) *academic issues and policies*. The following section consists of the analysis of interview data and the responses of the online faculty in each of these areas.

Phase II: Analysis of Data – Interviews:

The interviews clarified the survey responses and elaborated on issues that appeared, upon a preliminary analysis of the surveys, compelling to the faculty at Community College. The interviews illustrate, through the voices of the faculty participants, their teaching-work experiences as online instructors. In the analysis of the interviews, I addressed similarities and differences in faculty's responses. The following results compare some of the descriptive survey responses of the online faculty with that of the interview data responses.

(a) Demographic Data:

All of the interviewed online faculty stated that their first online teaching experience was at Community College. The faculty interviewed in this phase of the study (N=17) came from a larger sample who reported that they taught online (N=26) from the total survey sample at Community College of 112 faculty members. All of the

faculty of this sample were full time faculty. The following results summarize the demographic data of the online faculty interviewed.

The 26 online faculty members who answered the survey were compared in age to the smaller sample of them (n=17) interviewed (Appendix F, Table 20). The frequencies of online faculty showed comparability between the total online sample (N=26) and the interviewed sample (N=17). In general, there were more female online instructors reported than male online instructors (Appendix F, Tables 13, 13a & 21). Although the survey data indicated this was trend, faculty who participated in the interviews were not asked why more women were teaching online than men. In the surveys, for the non-online faculty group the opposite occurred, more males than females taught in the traditional face-to-face classroom (Tables 13 &13a). Both the interviewed faculty (N=17) and the total number of surveyed online faculty were comparable to one another. It is important to note here that those faculty members who were interviewed also answered the survey, and therefore the two groups are not independent of each other.

Reasons for teaching online:

Factors that influenced the faculty to teach online courses varied.

- Five teachers indicated that their department encouraged or recommended their faculty to teach online courses.
- Five faculty members reported that they wanted to teach online because they felt it would benefit student learning, and it would allow them to study their experience as a pedagogical issue.

- Three faculty members indicated that they were interested in teaching online because of its innovation, fun, or challenge.
- Two instructors volunteered to teach online when they heard that the Community College would offer online courses.

The process used by the college or by the departments to select each faculty member to teach online was similarly differentiated. Ten instructors volunteered to teach online; the department encouraged the other seven faculty members to participate due to "needs" for an online curriculum. Departmental "needs" became quite specific to each department which, at the time of this data collection, were not available to me. However, in talking to colleagues who teach online courses at other institutions, these departmental needs usually included desire for more course offerings, increased student enrollment, or other administrative pressures.

Before I began these interviews, I knew from the administration that all faculty members who taught an online course had to first teach it in a traditional face-to-face class. Faculty confirmed this information: 15 (88.2%) out of 17 faculty members stated that all the courses that they taught online came from their traditional face-to-face courses. The online courses could either be offered by the faculty who had developed, designed and taught the course, or by some other faculty. Thirteen instructors (or 76.5%) indicated that they developed their own course from "scratch," while four instructors indicated that they were teaching a course that someone else developed and designed. Similarly, in reviewing responses of the 26 surveyed online instructors, 23 (or 88.5%) respondents indicated that they developed their own course online. All instructors

received SUNY Learning Network and CC training for the design and the development of the online courses.

(b) Online Teaching Experiences:

As in the traditional face-to-face classes, one can distinguish between the elements that comprise a course in terms of, what will be called here, its components. The online faculty interviewed divided these course components into (1) online discussions, (2) mini-lectures/ modules, (3) written assignments/reports, (4) tests and quizzes, (5) reading assignments, (6) group work, and (7) a student-produced video for one of the humanities courses. Interviewed online faculty taught online courses from the Liberal Arts, Social Sciences, Applied Science and Certification programs in a variety of fields. Quite similar to the course components in their traditional face-to-face class, faculty asserted that the most important part in an online class was its discussion.

Discussion or online discussion meant only the interactive asynchronous communication that happened among the students and the faculty members. All participants saw the discussion in text format, which then became a dialogue and therefore students all needed to participate in order to be "in" the class. Unlike the traditional face-to-face course, if a student did not participate in the online discussion, then the instructor and other students may not interact with him/her making he/she feel neglected or uncomfortable in the course.

However, in general, there can be online courses designed asynchronously where discussion did not become the focal point of the class. In this example, an instructor puts the syllabus as well as mini-lectures and assignments online and the students

communicated with the instructor by e-mail, in a fashion similar to a correspondence course. At CC, the online professors were encouraged to actively engage students in the discussion and they considered it to be the focal point of the course. They encouraged active engagement because CC administrators and instructors expressed strongly that a successful online course required interaction and engaged students. The asynchronous course was primarily taught and learned in a text format. Therefore, to engage students, the discussion area allowed students and teachers to respond to each other's comments and engaged in a dialogue that can be both interactive and experiential, through active discussion, activities and group work. The degree of interaction in a course also depended on the teaching style of the faculty member. The following quotations illustrated how two faculty members articulated the importance of discussions in online courses by awarding grade points for them and expecting active participation:

- Discussions are a big part of the course. I put the hot-button topics online and I expect them to comment on them once they have completed the chapter in the text. The discussion is the dramatic difference. I award points for the quality of the discussions.

- I have a lot of discussions. Students have to be active and have to respond at least 3 times per week.

One of the guiding research questions of this project was how did online faculty teaching compare to a traditional face-to-face course for faculty teaching online courses?

The faculty responded to this question in two mutually exclusive ways: some faculty answered the question in terms of their work processes and others responded by discussing what they perceived were the differences among the students who took the online versus the traditional courses. The responses were divided into two areas: "faculty teaching-work processes" and "faculty perception of students' experiences."

In the category of "faculty teaching-work processes," online faculty discussed issues involving pedagogy, class size, time spent, and the term "flexibility." When discussing teaching differences between the online and traditional classroom students, the faculty responded by saying that they spent more time online producing thought provoking responses. In the traditional classroom, instructors answered impromptu questions, usually signaling the end of the response. Online instructors stated that they thought about responses more: they researched them; and they took more time to give the student a response. This response process differed considerably from answering a question on the spot in the span of a three-hour class and moving on to different topics the following week. Once the instructor researched a response, he/she could either respond to that student directly, post the question and response for all students to see in the discussion board or cut-and-paste the response to other students who may have the same question. The following quotation describes a faculty member's response to the process of responding to student questions in the online environment.

> ➢ I like being able to think about an answer before I give it. In the online classroom sometimes students will ask a question and I will say "let me research it and I will get back to you next week." In this case, I think

about the question, think about it, and research it and then respond online. I do not have to wait a few days to get back to the students.

Another issue that faculty mentioned was class size. Faculty felt that the class size on average was too large for an online class. Community College had a policy that the number of students in a traditional face-to-face course would be the same as the number for an online class. Therefore at CC, the online class sizes ranged from 25 to 38 students, with 25 being the minimum class size. Faculty stated that 25 was a large number of students, considering that all of their individual answers had to be responded to online, and each student had many places within the online environment to ask the teacher questions. The first quotation is from a professor, who taught a course in a certificate program and the second quotation is from a liberal arts professor.

- It is hard for me to compare - I have 60-65 students in the classroom so that makes it not highly interactive. Whereas online is more interactive (20 online) if I had a classroom of 20-30 students then it would be different. It should be contractual not more than 20 students. There are too many slots on the screen and you can miss a student. You have to look at their folders, their discussions, their assignments; you have to e-mail students when there are problems--you definitely lose students.

- I dislike the fact that I have too many places to answer students; the advantage is the flexibility; I like the fact that there are some students who

> really give some wonderful, thoughtful responses. I think they really work hard at it. I generally just like teaching online. I like it because it does give me huge flexibility on the time that I can do it. One thing that I find difficult is when I taught the class with 38 students. When I taught the course for the first time it was a cap of 25 students. I almost went nuts with 38 students in that format. There are too many places to look for the students; too many lists of things you have to correct--it takes too long, I did it, but it was horrible. It was a lousy experience because I'd take it out on me before I'd take it out on them. It was horrible, almost no one dropped out. It also worries me when students have technological problems and they start taking the course--they have no one to help them.

Faculty work experiences and flexible working arrangements:

Faculty did state in this category that they liked the flexibility that they had when teaching online. Let me note here that the meaning of "flexibility" differed among faculty. Some faculty described flexibility as not having to be in a classroom at the college and teaching the course from a different place, anywhere, anytime. Others described the meaning of flexibility as the delay of responding to student's questions and global access to information. The faculty explained the notion of flexible time as being "not immediate" in response to students' questions and researching information during the instructors' available time while on the other hand, being thorough enough to give a more researched and knowledgeable answer. The different meaning of "flexibility" will

be examined in the *Discussion.* In the following quotations faculty described their experience of "flexibility."

- I like the convenience of doing it when I want to, I have parameters. I have online office hours.

- I like the flexibility. I like knowing that I can do my class in my jammies.

- I also like being able to get on anytime that I want. I get on every morning and every evening so that is nice. I do not have to get class coverage as I just did this week if I have to go out of town. I just post and I leave. I like the discussions in online classes. There is not enough time in the classroom to have all the discussions that I require online. I actually learn from the online students because they are required to "talk" online. If I had the same amount of discussion in the classroom, I would never be able to lecture because I would never have enough time. The one thing that I have a tough time with online is the face recognition because they are not in front of you, all you know is that it is a name. I have a tough time knowing who is who. Sometimes even in their comments I have to first look for their names. I think in my next course, I may do something with pictures online.

Faculty's perceptions of students' experiences:

Faculty compared their online students with their classroom students. The faculty participants described their online students as having similar learning outcomes. The students in both types of academic environments learned the same content. However, they learned the content depending on how the instructor introduced it and how they engaged in the material. Traditional classroom students learned the material through the reading assignments and other reading materials in class, through lectures and group discussions. Online students learn using similar materials as well, but they interacted with other students and the instructor in their own spaces, allowing them more time to respond to and engage in discussions the teacher posted as well as with each other in the "electronic bulletin board."

The "threaded" online discussions give students and teacher the opportunity to respond to these posted commentaries in their own time. These threaded discussions remained on the electronic discussion board and allowed for a textual recording of the conversations of everyone in the online class. Faculty perceived their online students as having better performance and research ability in the online class due to the fact that they would do it in their own time and place. Students engaged in dialogue and interactively responded to each other's postings and surfed the Internet for information or the linked resources that instructors provided. In doing so, faculty perceived their online students as more thorough in class participation and online discussions. The faculty below discussed how they perceived their online students to be stronger in their performance:

- I think you really get to know your students much more in-depth online because the students are more open in terms of sharing themselves. I feel when I go online that I am going into a psychological space-it is not a room, now I am going into their heads and seeing what is going on. We can interact in a way that you don't accept when you are sitting in a classroom. I think the other thing is that when you go into a classroom there are discussion issues, the depth of grappling with material even if students have read the textbook before they get there, you can never reach that same kind of real involvement with material and personalize it. Because students will sit online and are talking about [subject matter] they are out there researching as they are thinking about the material, because they are already online. They are already connected to the web. I can also give better feedback on an individual basis on writing techniques, and presenting information. I feel like I can get the message through and see better improvement online, than in the traditional classroom, even though I use many of the same exercises in the traditional class and online.

- I think students get into the material better and I get more in-depth responses online.

- I think my students online are more reflective, because they have more access. I think they take more of an initiative of accessing me because in addition to being in an online environment, I also gave them my office

> phone number and they can always call me and they also can come by my office. In a lot of respects, they know where my office is and it is just that they do not seem to take the initiative to contact me. As the semester goes on, they share more and more with each other and will open up and share personal things. I get a flavor for words, and phrases that will come out, that will give me a hint about how old they are and that gives me a different perspective and sometimes I get to know their personalities.

The faculty perceived that students liked having the "flexibility" of doing an online class, anytime and anywhere. Faculty also asserted that the online course reinforced a learner-centered environment rather than a teacher-centered environment, as the case in a traditional face-to-face classroom course. Students could be on the web researching subject matter for the course and instantaneously also be in the online class. Faculty stated that the online environment allowed the opportunity to be interactive with students and then to be interactive with one another, affording immediacy or a complexity of a certain kind that the face-to-face classroom did not seem to have.

I also asked the faculty "what do you like and dislike about distance learning?" Here too, I categorized the responses as "faculty teaching-work processes" and "faculty perception of students' experiences." In the category of "faculty work processes", faculty reported enjoying their online teaching because it afforded them flexibility and the ability to think about research questions and concerns rather than giving impromptu responses in a span of a three-hour traditional face-to-face class. Faculty in an online class had the ability to respond to every student's questions. This is unlike a face-to-face class where

sometimes not all questions were answered, due to the time and number of students in the class. Some faculty reported disliking the fact that they did not see the faces of the student in the online class. Although not the focus of this study, two faculty members also reported ergonomic and health issues, i.e. carpal tunnel syndrome, back and neck pain, eye problems. Instead of a large class size of 25 or more students, faculty would like to see a class size capped at a maximum of 15 to 20 students in an online class.

Under the category of how they perceived their students' experiences, faculty liked the apparent sense of community that students in an online class developed from their discussions. Instructors also liked the fact that all students in an online class must participate in the class discussions, as well as in all the traditional components of an online course. Students participated by posting responses to questions from the instructor. They worked together in group projects, handed in written assignments, and also used asked questions of the single faculty member and other students via e-mail. Students also used the Web for research and to surf through hyperlinks that provided them with information. If a student failed to participate, then it became a problem for the instructor to evaluate a student online, as would also be the case in the face-to-face classroom. However, it became more difficult for a teacher to evaluate a student online because the online medium served as the only way for the teacher to know if the student was "present." Faculty members also reported that the online classroom helped the introverted student who normally would not participate in a face-to-face classroom.

What faculty disliked about students' experiences online was that not all students had the technological preparation and the organizational skills needed to take an online course. Faculty expressed concern about the very high online student attrition due to lack

of preparedness that students had to take an online course. At the time of the interview data collection, the administration was working on distributing orientation CD's to first time students taking online courses in order to prepare them for the process.

Faculty also disliked the fact that students did not always enter the online course immediately after class started. Once they registered and received a pin number, they took it upon themselves to come online two or three modules late, causing them to get behind in class and often having to drop out of it. Overall, out of the 17 participant faculty members interviewed in this study, 16 expressed satisfaction with the online teaching experience. The one instructor who did not find the online experience gratifying admitted that he did not use the technology support staff nor did he use other resources available to him. His other administrative responsibilities overwhelmed him; he taught online classes only because departmental needs mandated it.

(b) The Online Teaching Environment – Time, Space and Place.

Faculty's experience teaching in preferred places and spaces:

The intent in this area was to ask faculty members questions regarding how they perceived their time, space, and notion of place online. Before asking these questions, an explanation was given of what I meant by these spatial/temporal constructs since many of the faculty members had never thought of these constructs when teaching online. In the first question in this area, I asked them where they were *physically located* when they taught online, interacting with students in online discussions or assessing students' work. Six instructors stated that when they taught online they were located at home; six said they were in their school office; and five instructors indicated that they would use both

their home and school spaces to teach online. When they were asked where they *preferred* to teach online, 10 faculty members said they preferred to do the online teaching at home; six said they preferred to teach online in their work office and one instructor said that he liked the option of teaching the course in both places, the office and at home. Many of the faculty members talked about how they had started teaching at home and had to move back to teaching in their college office because the time they spent online interrupted their home life. One instructor spoke about how upset her husband would become when she taught online at home. She claimed that she spent more hours on the computer at home than spent with him. The professor, one of the first people to volunteer to teach online when the online program began at Community College, taught a course in the humanities. In the following quotation, she pointed out the problems she had at home when she taught online.

> ➢ I have two computers in my office and one at home. My husband just could not stand it any longer, so I stopped using e-mail at home. I do not do it anymore. He just could not take it anymore. I was glued. I was so addicted. I still am. I come to school early enough. I will come to school on Saturday and Sunday if I need to use my e-mail, but also the connection is much faster. It is funny I am a real technical person. The rule is that I do not do it at home.

Another instructor who taught in one of the social science programs felt strongly about not working at home, and he made the personal decision not to have Internet service at home. He spoke vehemently to me and said:

- The reason that I prefer to do the online in the office is because I made a commitment to myself a long time ago. I do not have access to the Internet at home and that is by design and not by accident. When I go home, I want to be with my wife and my family. I do not want to go off to my little room and surf the web. I do not grade these things at home. I carry a portable. The boundary to me is where I place family. So that means I'm in my office a hell of a lot more than a regular full-time faculty member. And that is also the benefit of my resident students because when I am grading something I can break away. In my office, my door is open so people know I am there. I have a window in my office and it looks out at a blocked wall of a garage, it is a window and it is a sky. My computer sits right to the right of that and there it is. I work at my desk. I spin to the left and there it is.

Others said that they wanted to do the online work on their own time in their office, but often they had many interruptions from the students knocking on their door to ask questions or committee meetings and administrative responsibilities. As one professor said to me:

- Since I decided that I did not want to compromise the time I spent with my family at home, I decided to do the online class in my college office. I have many interruptions there, people knocking on my door or the phone ringing. Now I make 'online office hours' and I post a sign outside my office door – "Do Not Disturb-Online Teaching."

Some instructors preferred to do the online teaching at home because they enjoyed their physical spaces in there, and therefore they felt more comfortable. The following quotations represented some examples of their preferred spaces within the home and the reasons they said why like that space:

- I am at home in my office. I have an office at home. I have a Macintosh computer. I have a beautiful view of the woods. Sometimes deer come right to my window. It is beautiful- I just bought a new house less than a year ago so I have a great environment. I usually have some chocolate cashews right there along side of me, and some iced tea. I never do my online classes at school simply because when I am at my office here there's usually classes of students waiting to see me. So I've never even been able to grade a paper online at my school office. I sign in on my computer-online at 6:00 am in the morning.

- My house is very quiet. I don't even have a dog, you know. My husband is away during the day and I find it much easier to sit home and do it there and it works. We just moved a year ago and I spent the previous fifteen years in a very tiny dark little office and virtually no light outside. It was cold and unpleasant. And, I did a lot of work in that office and a lot of publishing work in that office. It was not nice. When we moved, we moved to a house where there is a beautiful office in one upstairs bedroom that already is fitted-out as an office with cable connection and everything else. I decided to splurge and I bought myself a beautiful set of office furniture and a lovely desk and a lovely nice comfy chair, a good office chair and a brand new computer. I have been really enjoying that space and I am perfectly happy to be in my office and do my thing. I do it either at night or in the evening and sometimes in the morning before I go off to do other things. It is a good time for me.

- At home, because I am very spatially oriented. So 25 years as an interior designer, I'm very conscious of where I'm comfortable. So, I have that kind of comfort at home and sometimes in my school, office although I share an office, it is not always comfortable.

- Fifty percent of the time I am at my office and fifty percent of the time I am at home. When I teach in the summer I do it strictly at home. In the winter months, in the fall semester I do it in the dining room just because I am one level down and warmer and everything else is just for physical comfort. When I am on campus, the days that I do my online work is in this cold office, I am too distracted even with my door shut I am too distracted by other things I see on my desk at work. So I really try to keep both things separate.

- I like doing it at home, because I can smoke. I can drink some coffee. And if it is late I can even eat and have a glass of wine. No one has to know. And that actually makes me more comfortable with the students writing and giving them feedback. It is not rushed.

- I did my Ph.D. my MBA and half of my bachelor's having children at home and raising a family. And I did more work at my kitchen table; even when I was a kid I worked on my kitchen table or in the dining room table. I did that because I needed a table and the kids could find me so it is a big jump for me to work upstairs in the office. It is interesting because when I am online, I'm upstairs in the office, of course, but when I am correcting papers I'm still down at the kitchen table. Some habits do not die, I have to be at the kitchen table to correct my papers and it is nice and bright there too. It makes a difference.

Faculty's experience with time:

Faculty members were asked how they experienced their *time* online and how it was differed from the time they spent teaching in a traditional face-to-face class. All 17 faculty interview participants stated that teaching online became far more time consuming than in a face-to-face class. In the survey data, the majority of online instructors as well stated that it took more time to develop a course online than it does to develop a face-to-face course. Of the online faculty sample (N=26), 22 (or 84.6%) stated that online courses took more time to develop than face-to face courses and 2 (or 7.7%) faculty members stated that it took about the same amount of time to develop an online course as a face-to-face course (Appendix F, Table 19). One of the faculty members who said the latter stated that she had taught online for a number of semesters, had attended many training seminars at CC, and now she had developed strategies for better success in developing online courses. The other faculty member stated that he had taken over another faculty member's course that had previously been designed, and he did not have to develop the course. However, at the time of the survey, he was about to start the design of a new course. No online faculty member said that the development of an online course took less time to develop than that of a traditional face-to-face class. Two (7.7%) faculty members did not respond to this question in the survey.

Many factors played into the time consumption the faculty described. Some instructors claimed that they spent enormous amounts of time responding to individual student questions online. Another factor that consumed time for the instructor was that students posted questions in many places online, like e-mail, modules, discussion area, etc. In this situation when the instructor clicked on each of these linked areas, the same

student could have different questions for him/her in each of these places. If students were to ask questions in each of these links and the instructor had 25 students or more who asked similar questions, he/she would spend a greater amount of time communicating with them. This communication did not happen within a scheduled time as in a classroom or in an instructor's office hours; instead, it happened online, at any time. On other hand, some instructors indicated that they would handle this situation by posting similar questions through cutting and pasting these responses to the students. Some instructors did not like to do it because they wanted to interact with each student online. Everything in an online class was either written or read which also added to the amount of time that instructor's teaching time was consumed.

Faculty participants were asked whether or not the length of time it took them to develop and design an online course decreased over time. Fifteen instructors said that the more experience they had developing, designing and teaching an online course, the less time it took to create a new course. Two instructors stated that they needed to work on strategies for managing their time online better. They responded that this issue had to do with their personal teaching style and how they acclimated to the online environment. Some instructors suggested that if they learned to manage their time better they could decrease it online. They admitted that that they had not adequately used resources that CC had available to them to manage their online teaching better, such as CC's technology support staff.

Faculty were asked to describe how their lives as teachers occupied time and space when they taught online. The following quotations showed their differences and personal styles for dealing with time and space issues when teaching online. They did

not print assignments in order to save time and paper. They learned to schedule, divide and prioritize their time for specific tasks.

- It's my front office of my house and I would say I spend looking at the monitor and on the keyboard ninety-five percent of the time, so I am constantly interacting, checking, doing grading. I do everything online; I do not print anything. I wanted to learn how to do that from the start. I have a portable PC. I have a Dell laptop that I take with me to visit my daughter and I work from my hotel room. I do all the grading online; I do everything online.

- What I do every morning is I go in, every morning I will go in and check the course and respond to any student questions or we have online office hours, which is a private communication and I check those. Then three times a week I go in and I will spend probably like two hours grading, commenting and checking quizzes. Students have ten written assignments per student and it takes me somewhere, if it is a good student two to five minutes and if the students needs a lot of comments, up to ten minutes per thing to grade. But, I can grade faster online than I can in a face-to-face class. I do everything online. I don't print things out to grade them. You do them right on the screen. I have a file of standard comments with points associated and I have, I collected students' answers and give them feedback by publishing the answers after an exam.

One professor claimed that online teaching consumed her time and now she worked a seven-day workweek. She reported needing help in organizing her workweek and managing her time better so that she would not have to teach online during the weekends. One of her recommendations was that administration have faculty workshops that would be geared to time management strategies.

- It has changed in that I'm spending weekends working online; now I also teach a Saturday morning class so it is more time consuming in that respect. I now teach 7 days a week.

Another professor reported how he interchangeably used some techniques from his online class in his face-to-face classroom course. He felt that he has learned to manage time well so he could teach online and in the classroom. The instructor claimed that he had become a better teacher in the traditional classroom because of his online teaching experience. This professor explained how he continually re-conceptualized his teaching strategies in the classroom because of his online experience. Thirteen other instructors, who said that they were better teachers because of their online teaching experiences, confirmed this response. He stated,

- Online has no impact on my campus and departmental commitments. I think it improves how I deliver on-campus because as I develop techniques that are usable in online courses, I try to adapt them into the traditional classroom. I am a different classroom teacher as a result of

this. And I think the reason for that is in a normal lecture you can say a million times the only dumb question is the question that 's not asked. Stop me at anytime that you do not understand. But when a hand goes up five minutes before class ends you see the faces of the students wanting to leave. Students in online classes do ask questions: "I wasn't too clear on that." I can see that and then go back and redesign proportionally in my online class.

The SUNY Leaning Network report (2001) provided evidence that the online experience "fostered pedagogical review and instructional transformation." One professor stated that when he taught online he felt as though he was always thinking about work. He felt that it never ended and he resented that he felt this way. He admitted that he needed to manage his time more effectively in order to have a balance between work and family life. This issue, examined in the *Discussion* chapter, was very important in regards to issues of permeability of boundaries between personal time and online work time. He elaborated here on his frustrations when his work time permeated into his personal time:

- I'm always thinking about work...it doesn't go away. And the online courses make it more intense. When you are on campus there is finite time. I'm there. I have to be there. I got to end there. Online I do not have finite time, I sort of get resentful sometimes. I get flexibility, but when I feel self-victimized...I am so busy and they are working me hard, I

> go back, I made my choice because it is flexible, and because I have fewer boundaries in this online class in terms of time. So I have to remind myself of that constantly. Therefore I have to manage my time more effectively. So my work hours in professorial life and my standard, it's different online.

One professor had organized what she felt was a more manageable way to handle her online course. She set priorities and certain times to check students' work during the day, usually twice a day. She also worked weekends. The different teaching styles and time management skills of online instructors remains key in understanding the issues of time and space that online instructors discussed in this research; and it will be important in creating strategies for managing their time online. She stated,

> ➢ My inclination when I teach is to respond to people immediately. I think students appreciate that. It does not overwhelm me in the number of things that I need to get done. So I am an immediate responder. I walk into my office, I have a list of things that I left from last night that I will accomplish in the morning. So I am on twice a day almost on that account. When I get up in the morning I'm on and sometimes it is just to check quick messages. But the important questions where a student is in a panic I respond to their question immediately. So I do not necessarily look at all the discussions, but I will look to see who has left me a question about an assignment that is due in two days and I will respond to those

immediately. Then when I get home at night I will check back on things again. I will do the same thing on Saturday and Sunday morning and night. In a traditional class you do not have to do that stuff. In my classroom it is different. I go over my notes, I prepare and I get myself organized. The difference with a campus class is that sometimes I get projects late and then I have to take my papers everywhere to grade them.

Similarly, another professor had management strategies that he used to respond to students' work and grading. He stated:

- It seems that what I do with the online course, I just respond to the work because the development and the professorial stuff has been put into the system. It's already online and the students just access it. My job, basically, when dealing online is just to respond to their work. When I give them a grade I am just responding to their work. So it usually doesn't take a lot of work on my part. When they take a test, I give an explanation for their wrong responses. Once they see the right answer they say "oh yeah I understand where that comes from." Even in my regular classes it's the same way. While the course is going on it seems to be all self-learned, it is all there already for students. That's the kind of an advantage to that online course because you really are just responding to their assignments.

Another professor explained how he was more tired mentally than physically because of the student-teacher interface. He claims that when he taught online, the level of knowledge among students was a higher than his students in a face-to-face classroom. He felt academically challenged with his online students:

> ➢ I am not as socially exhausted at the end of the day when I teach online versus when I teach on campus. I am more mentally tired. And part of it I wonder if that is just the interface of working with the screen, but I do not see the screen. I don't think about that medium of transferring through the keyboard and we have a conversation via the technology that does become invisible. I am more mentally tired because I think the conversations and the assignments and what we are doing is just at a higher level than we are able to get into more actually than what we do on campus.

All of these instructors in these quotations demonstrated clear differences among one another in their online teaching styles and management of courses. It will be important in the discussion section to talk about the *time* issue and what instructors and administrators can do to streamline their time management problems that some expressed as time consuming and overlapping into their personal lives.

(d) Academic Issues & Policies

This area of the interviews contained questions that pertained to the academic policies and issues that were quite relevant in the lives of faculty who taught online.

Many policies and procedures that apply to traditional, face-to-face teaching were used in online courses. In asking these questions, I found a sense of hesitancy in some of their responses because not all the policies for online teaching had been thoroughly evaluated in Community College. This fact was undoubtedly true as well in other colleges.

(i) Course ownership: Community College had a contractual policy that states that any course that a CC faculty member produced and developed belonged to the college for the first five years and after that it became the property of the faculty member who produced the course. Eleven of the 17 faculty members interviewed stated that they thought the policy was fair. Four instructors had no opinion and one instructor asserted that, as long as the institution did not make a profit, he agreed with the policy. Although they had some concerns about these issues in general, the interviewed CC faculty had a strong sense of commitment to the institution; they felt that most of the time these courses they developed were given to other instructors and they made changes to them, thereby altering the courses. At this moment in time, the question of course ownership was not an issue for them.

(ii) Copyright issues of work that is published and available online: Community College faculty who were interviewed had two concerns, consistent throughout the faculty. One concern was that they felt that they needed more training or research in the area of copyright issues because there were many things available to them and the students online, but they did not know whether they were copyrighted or could be freely used. Some instructors wanted to use materials such as pictures and streaming

video in their online classes. Streaming video are videos clippings or movies linked to a website by clicking on to a hyper-link. In order to do this, it was necessary to have a high-speed computer available which concerned the faculty; they were not sure when and how they could do this activity in their online classes and suggested that perhaps the administration or technical services could help them in this area.

The second concern that faculty had was that students had a perception that if something was available online they could use it and this had encouraged students to plagiarize in their research papers and other assignments. Faculty explained to their students that some things could be available for use but there existed a legal and social issue of proper identification of the sources. They instructed their students to reference the website where they obtained the material. Some faculty stated in the interviews that the administration needed to address this issue in an orientation for students taking online courses. Some of these issues went beyond the online courses and related to property rights in general. Computer use opened up some complex property-related issues that needed to be addressed in the future, but was not the focus of this research.

(iii) *What impact will online education have on education as a whole?*

All 17 interviewed faculty members' expressed similar views on online education. In general, they strongly agreed that online education would not be the demise of education, as we know it. Rather it would be a tool or vehicle for students who otherwise would not go to school, i.e. working adults, rural people, disabled students or people with complicated time schedules. The following quotations give examples of participants' thoughts on the impact of distance learning on education. These instructors expressed the

idea that online courses gave students the flexibility and availability that would not otherwise be possible to them because of distance, time, or personal issues that would make it impossible to be in a campus environment:

- I think it is awesome. I would guess probably within the next fifteen years about 30 to 40% of all college level courses will be online. Simply because it makes so much sense, and a lot of that will be dependent on the cost of transportation. What if the cost of gasoline goes up which will have an impact on teaching? Especially, teaching poorer students who have been in college for a while -but also amongst older students. I think 30 to 40% of all college level teaching will be online. It is that good of a medium!

The following three instructors similarly stated that online courses gave access to people who would otherwise not be able to go to school on campus.

- I think it will make education available and accessible to people that normally would not be, and I think that is the biggest joy of it. You know students are able to finish degrees when they still go to 40 hours-a-week jobs and they have three kids at home. I can see the difficulties like someone doing the work for someone else and so forth, those are minor compared to accessibility issue. Distance plays a part in it for someone who would otherwise not be in school. We have students from other

countries that were originally from CC, and have moved away and still taking courses with us. I have a student who is devastated, whose husband is being transferred to Toronto and I am helping her with registering with online professors because she wants a Community College degree.

- I think it gives people the opportunity to do things they would not be able to do otherwise. I think there is all the side issues of yes you can get someone else to do work for you; you can get a degree that you really did not earn, but I have got to believe that the majority of the people aren't going to find somebody else to take their course for them. Online is overwhelming, you must set time limits, to check messages, assignments etc.

- I think it will make it available especially to more adult learners than non-traditional ones that have been precluded from, excluded from, higher education because of responsibilities of family and jobs. So I see that's part of it. It is going to allow people to go to school, take courses where they want to rather than where they have to because my family's here and I can't go to the university of __. I have a student now who lives in Lake Placid and it is the only way that she can go to school. Last year I had someone that was on a ship, he was in the Coast Guard. So we can eliminate space where no one has to travel. And we can break a time barrier that hasn't been possible with traditional learning.

However, students at Community College took online courses at a distance, as well as on the campus. In Community College, 58% of the online students lived less than 30 minutes away from campus (per data provided by a Community College report on online students in 2003). One can infer from this report that for this population of students, many online students at Community College took online courses for reasons other than distance from college.

One professor said online education was a way to provide students with not only a mastery of obtaining information on the Net, but also as a way to learn how to network with other students and learn to be better at researching primary sources:

- If it enables a student who can't make the commitment to Tuesday, Thursday 9:30-11:00 am to take the course at a convenient time, that is great. Second, if a student can know for themselves, to go for mastery as opposed to snapshot knowledge, success number two. Three, I am an old historian. If it means they go to primary documents, I think students are going to be more savvy at how to get primary sources, as opposed to interpretation and explanation documents. Fourthly, I do not know of a career today that does not depend on knowing the computer. So there are ancillary skills that are being taught. And fifth and lastly, do they know their fellow students better than in the classroom, yes. And last, about 10% are outside of the college and it is good to have outsiders for an exchange of viewpoints.

Another professor explained that online education was for students who were more independent in their learning. He also claimed that technology has not changed education. Some instructors expressed similar thoughts on the technological aspect, claiming that it was only another means of producing knowledge. Students and teachers expanded the walls of knowledge by using the Internet and World Wide Web. As one professor explained:

- I do not know if it is more anarchistic. The dividing lines are not clear anymore. Students can take it anytime; they do not have to depend upon the structure to do it. In a right sort of way, it fosters independence. Independence for the self motivated ones who are very self- realistic, it is very good; in that way it is very positive. I do not know, I used to think that technology is going to be transforming education, and it comes down to even if you are a "techie" it comes down to who you are. What you love to do and how well your passion is able to exude- I can deliver my passion online in a different way than I do it there [classroom], but the passion's there. And it is not the technology that transforms, it is the passion for what one does.

(iv) What are faculty's thoughts on the release time policy at CC?

Fourteen faculty members responded that they had no release time policy at the college. Four instructors stated they received a small stipend in the beginning when they first taught courses online and then it decreased as time went on. One instructor said, " I

think if you put up a new course you should get the money." However, another instructor said, "I would rather have the extra time to put into the course than the money." A consensus existed among the faculty that some form of financial /and or time compensation should be received for the design of a new course because of the fact that developing an online course was more time consuming than developing a conventional one. One faculty member suggested that the college should pay for the Internet provider service at home, since faculty did most or all of the online work there.

(v) Do you feel that asynchronous teaching has changed the way you teach in the classroom? It was reported earlier that out of 17 Community College faculty interviewed 15 stated that online teaching had an impact on their classroom teaching and that they had become better teachers because of their experience. Two instructors stated that they did not feel that asynchronous teaching had an impact on their classroom course because they were not yet comfortable with the online teaching and kept the conventional and online course experiences separate.

In a survey conducted of 255 online instructors from the 31 colleges of the SUNY Learning Network, The State University of New York (Shea, Pelz, Frederickson, Pickett, 2001), the faculty similarly reported that teaching online "does not simply entail mimicking of what happens in the classroom, but rather, requires a transformation: a re-conceptualization of their course and learning objectives given the option and constraints of a new learning environment" (p 9). The following quotations from the faculty members interviewed in the SUNY study alluded to the *transformation* that the interviewed faculty discussed in this case study.

- Yes, and I think it has actually changed the way I teach not only online, but on campus as well. Things that I saw online that have sparked the students' interests, I now have brought into the classroom. I think I am actually going to do more of that.

- In looking to put some pieces in, I think it forced me, this was a course I had taught many times, and it forced me to look at it again and restructure it. I pulled some lessons in that I used for my online class into a traditional classroom. It is a fresh look. It is almost like giving it to someone else to look at it! It is nice because it has to be on this screen. Now you have to re-conceptualize it and how to do it. You know you are informally writing up objectives when you put those modules together for each of the modules, and so wait a minute...I may not be really affecting this learning, and you are always questioning yourself.

- It has made me re-sequence my course. Once I started to teach online, because you are independent, you had to see the logic to things. It made me rethink what I was doing in the campus courses.

- I know that there are multiple ways of learning and so I think that I'm enriched in many ways because I understand, or I just experience the learning. You know, something that my online students write up, I can

> use for my campus classes or I often times take my lectures and then contribute to my on-campus class. The asynchronous learning is an acknowledgement that students can learn on their own, and I guess I used to applaud asynchronous as something so big and different. But, the asynchronous says 'on your own', 'on your own time', and at your best'. So my attitude about my time and how it is distributed, hopefully, positively, translate into better performance at work.

This last quotation spoke of the traditional image of the process of education. Online professors taught, and continue to teach, in a period of transition, using the same educational practices in both online and in the face-to-face classroom. Many of these professors stated that while they were in this transitional period of technology rapidly transforming the university, they tried to continue teaching using their traditional methods. Both online and non-online faculty members faced the challenge of having to redefine how they taught with the rapid permeation of technology in education.

Finally, I asked the faculty what would improve their online teaching experiences at Community College. In general, the instructors who participated in the interview expressed the fact that the administration and the technology staff supported them. One professor stated that she was quite "spoiled" by the technology staff because they were quite accommodating to her, as well as her online cohorts; they even come to their homes to get them through their technology problems.

Instructors did express concerns, throughout, about the large size of the online class. They stated that there was a disparity in the *work* involved in an online class

compared to a traditional face-to-face class. Additionally, for each of the extra number of students enrolled in the class, the workload increased by a certain number of hours per week. Most faculty members wanted the class size limit to be about 20 students, making it the maximum cap instead of the minimum. They also commented that for faculty who taught online, even courses that were developed and designed by another instructor should be compensated for, because of the numerous hours spent working online compared to conventional teaching. Faculty wanted the online format upgraded to make it easier to maneuver the "Lotus" program. Instructors reported that students had too many areas to respond, and therefore streamlining the format would cut down on the number of work hours. Finally, faculty wanted to know what other departments were doing online. They wanted to share pedagogical content and design issues. In particular, they wanted to exchange online strategies with other departments without administrators or technology staff present. Some faculty members suggested that the administration provide them with seminars specifically dealing with time management skills for online teachers.

Returning to Community College to report the data:

In the spring of 2003, I completed the analysis of the interviews and I went back to Community College to share the data with the faculty and administrative staff. All the faculty members who participated in this study received invitations from the college to attend either one of two presentations that I did on that day. The Community College faculty members who came to the presentation candidly stated how happy they were that I voiced their issues and concerns. They responded to the data positively because they

realized that they were not the only ones with concerns about these issues. During the question and answer period, faculty shared some of their particular situations and concerns with respect to the design of their course. They discussed some of the content and pedagogical issues particular to their departments.

I gave them a copy of the reported results, and I thanked them for their participation. Many of the faculty thanked me for putting the work issues "out there." After the presentation, I met with the Vice President of Academic Services to discuss the pertinent issues of my study. She was very happy with the work because of her familiarity with some of the issues that I addressed and told me that they were being examined. She did not make any promises to the faculty regarding these issues. Class size was one issue that she did not see changing in the near future due to the supply of available teachers, departmental demands, and the number of students wanting to enroll. She agreed with the faculty that the copyright issue and a few ergonomic issues that were reported were also concerns that needed to be examined more closely in the future.

Summary

The findings of this case study revealed that during this transitional period in education where information technology continues to permeate the academic environment, the Community College faculty work experiences and workplace issues are being altered. Faculty members have learned how to engage with their students virtually, often in a more personal and mentoring space. The Community College faculty re-conceptualized the time they spent teaching online and engaged in a new teaching work space that made it necessary for them to reconsider pedagogical and content issues when

they taught in their online class. This re-conceptualization and pedagogical review fostered in them a *transformation* in their teaching experiences when returned to the face-to-face classroom.

These faculty members also experienced the blurring of time and space boundaries when they taught at home and at school. Many instructors expressed the view that they learned to re-organize and manage their time better in order not to be consumed by the greater amount of time that they spent teaching online, often at the expense of flexibility. The issues of compensation, release time, and class size all represented concerns that affect time and space. The notion of *flexibility* had become an important issue in the consumption of faculty time. The expressions of flexible time among the faculty, in this case study, will be examined in the discussion chapter to follow.

CHAPTER VI

DISCUSSION

Today's professors are confronted by the challenges of new information technologies, and they need to better understand the promise and peril associated with them. They need to keep an open but critical mind...The virtual classroom challenges us because it is much more than a technological development. It is a complex, multidimensional development that is challenging the culture of our schools.

C. G. Kisner, (2001). *The virtual professor: teaching on the electronic frontier, 1995-1999.* Doctoral Dissertation

This research topic came from my own interests about faculty members as workers and their experiences working in the online environment. Similar studies to date look only at online teaching and learning from the students learning perspective. Through my past professional experiences and the pilot study that I conducted, I reframed my conceptions of teaching online in order to see it as a workplace issue. My research questions focused primarily on faculty members as workers and their "online classroom" as their place of work. The professors in this study used distance learning to teach their courses in this medium and learned to do the pedagogical work mostly by trial and error. They had to create their own methods of teaching to engage their students in learning "outside" the traditional classroom. Online faculty members in CC were challenged to manage their time and strategized how to "teach" in the online classroom without an available online pedagogy. These online faculty members worked in a rapidly changing environment where technology altered their roles as teachers and their teaching lives as workers. These online faculty members taught and experienced the changing work environment using the same traditional practices of teaching and the same methods of

evaluation during this current transitional moment of technology's impact on education. They have found that their work is changing and this study illustrates these changes.

Online Differences in Teaching Practices

In order to understand the work environment of online faculty, this case study shows that there is an important difference in teaching online than teaching in face-to-face classes, both *pedagogically and as a workplace issue*. These findings contest many of university administrator's perceptions that online teaching does not differ from that of the face-to-face course and that the only difference being the medium used to teach online. This perception remains popular in general and some administrators in many institutions use the promising guise of providing faculty with *flexible* work situations, while pushing their enrollment numbers high and offering as many courses online as possible. The term "flexibility" in terms of faculty and management perspectives is also discussed. This chapter shows the differences in teaching online from the faculty responses in the interviews.

These issues can best be described through spatial themes and therefore it is my intention in this chapter, to use these spatial themes to examine and explain the findings. In moving away from the more traditional teaching environments to the online learning environment there will be an important need for redefining what these differences are and using these themes in beginning to understand the rapidly changing online work environment of online professors.

Spatial Themes in Distant Learning Environments

The issues in this study can best be explained in an environmental psychology perspective. Proshansky (1987) describes a pattern of mutually influencing characteristics of a socio-physical setting as a complex social entity where many variables are involved and they interact with one another and are themselves explained by the events that occur within the setting. Proshansky asserted that "some of these characteristics change as events external or internal to the setting change; and as a result still other changes in the properties of these setting occur" (p. 1475). According to Proshansky (1987), these changes can be fast or slow depending on the circumstances within the setting. Within the distance learning environment teaching is being experienced by the CC faculty in the context of complex variables or events that are changing continuously with the rapid permeation of technology and information that flows within this setting. Members of the online class, students and teachers, are interacting with each other in a space or multiple spaces influenced by the interplay of time and the cultural, social and psychological influences that each brings to the space. Within the field of environmental psychology the online teaching environment can be described as a space and a place whose context has "immediacy and reality that extends over time" (Proshansky, 1987 p. 1475). Time, an extremely important factor, plays a part in these spatial themes that I am introducing in order to understand the complexities of the online teaching environment. The issues reported in the findings are described environmentally within the distance learning environment which I am calling the *Virtual Teaching Space, Reflective Space, Engagement Space and Proximal Space..*

Pedagogical Issues: The CC faculty participants stated that they used many styles of teaching online similar to those of face-to-face, i.e. lecture, student discussions group work etc. However, in terms of teaching the course online they felt that they needed help to know more about online pedagogy, or rather, was there an online pedagogy? In the online environment they were always concerned about reaching all the students in the class, that the lessons were interactive, exciting and that their teaching style and the content could be translated online. Since the entire online class is designed in text and visual formats, faculty usually were concerned with the pedagogical presentations of their courses. Many of the faculty expressed that they had to work harder at making the class interactive and fresh. Many indicated that they were constantly changing material and course activities all the time, more so than in their face-to-face classes, because they did not want their online classes to be boring, have uninterested students or confused students online. They wanted their personalities and style to be as "natural" as they could possibly manage to portray them online. The following faculty member described how she would be interested in sharing with other faculty members how they use the online environment and discuss their online pedagogy:

- This experience has changed the way I teach online and on campus. I am always very conscious of how I teach online; prior to teaching online I was conscious of my persona on campus. My students now know me how I am on campus and online. I think what would improve my online experience even more would be to spend more time, more unstructured time with online faculty, getting together without the VP's, without the

instructional designers, at times just a way for us to create space, for more informal time for us to get together and talk about pedagogy.

The following faculty member discussed how she needed to work differently (in a different style), beyond how she taught in the face-to-face classroom in order to teach online.

- You need to be open-minded; you have to be very thorough. You have to think about how you want to put the content online. You have to go beyond your overheads and your handouts. You have to remember the points that you make in class all the time and remember that you have to write that down. You cannot forget to say those things. If you put up an overhead, you add the supplement to what you are saying; and online you have to remember to put it all.

The following spatial themes discussed some of the other pedagogical and workplace differences of teaching online from that of teaching in the classroom. In analyzing this data from an environmental framework, I realized that the data show online faculty to be "located" in a variety of spaces when teaching in the online classroom, as opposed to the face-to-face classroom where they are confined to the physical space of the classroom and the time in which the class is held. It is true that faculty used email and the phone to contact students in the face-to-face classroom, but when professors teach online the spaces that they are "in" and the time that they consume

to teach online are quite different, than that of face-to-face. The following spatial themes are evidence of this finding.

Virtual Teaching Space: This is the space where teaching takes place through the mediation of the computer and the Internet. As part of their work in teaching online classes the CC faculty needed to interface with the technology in order to first teach their classes. Faculty members had to go through a series of courses to learn the mechanics of teaching online. Some professors indicated that this was one of the most difficult parts of teaching online, especially if the instructor was not savvy with the computer. However, as was mentioned earlier, they were very grateful to have an excellent and supportive technology staff that tried to be available to them as often as was necessary. Some CC faculty indicated that once the faculty learned through training, the design and development of putting their traditional course online, with practice, the technology part of teaching online became an almost non-existent problem. The computer screen became invisible to the user (teacher and student), and teaching occured beyond the interface of the computer and keyboard. The technology then became almost invisible, as three instructors stated earlier in the results section:

- ...I do not see the screen. I do not think about that medium of transferring through the keyboard, and we [students and instructor] have a conversation via technology that does become invisible.

- I used to think that technology was going to transform it [education], and it comes down to who you are. What you love to do and how well your passion is able to exude. And I can deliver my passion online in a different way than I do it there. But the passion is there. ... It is not technology that transforms. It is the passion for what one does.

- I feel when I go online that I am going into a psychological space-it is not a room, now I am going into their heads and seeing what is going on.

Multiple teaching spaces: The online classroom becomes multiple spaces used by both the instructor and the students. When teaching online faculty make contact with students through email, through the phone and through a variety of other spaces within the online environment, for example the discussion board, chat rooms, group pages and other spaces that faculty often find tedious. Some CC faculty stated that there were too many places to "find" students in and many places that they needed to check to see if students made contact with them. They stated that they often found this tiresome, time consuming and difficult. This became a time consumption problem that was affecting their work as teachers. The more places they "checked" daily to see if a student responded, the more time they spent online. At the time of collecting the interview data, the technology staff made some changes to the online program creating online office hours for the faculty members. Students were encouraged to contact them during these time slots; this would allow students to contact the teacher and also post questions during these office hours. Also the technology staff worked very closely with the teaching staff

to accommodate and streamline the technical work involved in teaching online. The Community College faculty felt that streamlining the Lotus program design would give them more time to teach reflectively, as opposed to spending time responding to a student in multiple teaching spaces. The next section describes another online *space* available to the faculty and the one that they found to be the most profound space used in their online teaching. This space, which I am calling *reflective space,* was part of the teaching space that allowed them the freedom or flexibility of time and space to teach online.

Reflective Space: Some CC faculty members indicated that the online environment afforded the opportunity for more creativity, imagination and reflective critiques due to the fact that both students and teachers had more one-on-one space to engage in. This *reflective space* afforded faculty the flexibility of time and space by allowing both teacher and student to respond in their own time, at their own pace and place. The faculty member were able to "get to know" their students quite well in the online environment. Faculty mentioned, in some of the interviews and the surveys, that they "knew" their students better, and in some cases in a different way than in the online environment because of the one-on-one mentoring relationship to the student that developed online and also because all students online must participate in the online environment. The only way that an instructor can evaluate a student online is through active student participation in the discussions, which is important to the online experience.

The CC faculty also described the online environment as being "flexible" because it allowed them to gain a stronger bond with students and their learning. In this reflective

space, the CC instructors claimed that they spent many hours at a time answering and researching questions for the students. When researching answers to questions for students, faculty used the "flexibility" of time to thoughtfully and reflectively think through or research responses for the student. They claimed it was different from a face-to-face-classroom where for example, students would ask questions and if it was the end of class a teacher may say, "let's pick up there in the next class" or "I am not sure about that-let me find out and I will tell you next week." Instructors claimed that, in the online class, the shared knowledge of students and instructors was powerful and made the experience of teaching and learning different from that of the classroom. However, when I asked them why they thought this was so, they could not pinpoint why, but they asserted that they thought that maybe it was the flexibility of time that they and their students had to think reflectively, that promoted a stronger collegial dialogue and academic experience.

In interviews, Community College online faculty discussed how the online environment allowed them the flexibility to respond to student's questions, discussions and course content in a more creative and reflective way. This is what they liked the most when asked what they liked about teaching online. All 17 interviewed-faculty members agreed that teaching online gave them the flexibility to reflectively think, research and review their thoughts in responding to student's discussion, work or questions. This reflection did not need to happen within the span of a three-hour class, but rather in a space that they as teachers were comfortable in and in their own time. The faculty stated that the online environment also afforded them the opportunity to interact with students in a way that they had never done before in a traditional face-to-face class.

It required them as teachers to re-conceptualize their courses and learning objectives within the virtual environment, which included a constant re-evaluation of how to create a sense of class community. The following faculty member describes how she used the flexible time that she had online to reflectively think through and reframe her thoughts and continuously build on her ideas and those of her students.

- But with an online teaching situation, in time if something's perplexing within the class environment, and I really would prefer to stand back and think about how I want to address that, I have that possibility. I can go back and build on it too. It is not a week that has to go by and I have to reintroduce that into the face-to-face class. Where as in online class maybe I can go away for an hour and come back and build some thing else into it.

Within this reflective space faculty can continue to re-structure and re-frame the course content as the dialogue and discussions within the online environment continues among students and with students and instructor in their own spaces and at their own time. Another space that I think is important to look at is the engagement space among students and between students and teachers. Once the reflective thoughts are being shared within the online environment, faculty and students often become engrossed in the discussions and in the activities that are taking place within the online environment. This space I am calling *engagement space*.

Engagement Space: The interviewed online faculty indicated how engaging

students in the course content and with other classmates was always their concern. Also, how to continue the dialogue and promote a learner-centered environment was another concern. They discussed how they always felt challenged about creating an engaging interactive environment for their students since their physical absence and the absence of a physical classroom always forced them to think about how to create this virtual classroom to standards that they understood as teachers in the traditional face-to-face classroom. *Engagement* space is a space in which faculty, as well as students, are continually engrossed in the course content and in the class discussions. Since it is required in an online class that everyone participates, each person that posts a response to a homework assignment or part of a discussion leads into a threaded response that can be engaging to all members of the online class. Even though the CC professors stressed that engaging students in an online class was often a challenge, they felt that this was the most fascinating part or space for an online instructor. The engagement of everyone in the online class is what the interviewed faculty claimed was exciting for them about online teaching. The faculty stated that creating a space to engage in the materials and coursework in the online class was often a moving experience for them because they felt that they reached students in a way that they could not reach students in the traditional classroom; students made connections to new material and discussed its meaning online. The connections that the students made through their online experience was exciting to the professors; however faculty did not know how or why these experiences were different online. Some professors offered that the online environment was anonymous (e.g., gender, class) and that it offered the possibility for students to be more open to expressions and thoughts online. The Community College faculty interviewed stated that

this experience was challenging them to go back to the traditional classroom and create activities and assignments that would engage their traditional face-to-face students, as they did with their online students. This was also true of the SUNY study report of 255 online SUNY Learning Network teachers from 31 colleges who suggested that faculty experienced with online teaching "fostered pedagogical review and instructional transformation," (Shea, Pelz, Fredericksen, & Pickett's 2001). They stated in their report that these interactions of the instructors, students, and course content were opportunities for the student to negotiate meaning, and connect new concepts to previous knowledge. In this *engagement space,* the teacher is not at the center of the class but rather the teacher is sharing and negotiating the meanings and content of old and new information with their students in the online classroom. As one instructor commented:

- The big thing I like is that, the ability to have a student-centered classroom is greater online. Because sometimes I am not there, but they are there. So a lot of times they are forced to take responsibility for each other's problems. And I can put them into situations, but they need to answer to each other. They can't look at me and wait for the question. They have to respond to each other. ...And it doesn't mean that you don't have control of your classroom. It just means that you spread out the possibility in a different way.

In the traditional face-to-face classrooms, the teacher and student are in the same physical location and, (Lippman 2002b), "the acquisition of knowledge occurs through

social situations." In the online environment the teacher and students are not in fixed location, but in various locations, influenced by different social and virtual influences that have an effect on the active transaction of the online class. The academic dialogue and research that occurs online is different from that of the face-to-face classroom because the interaction to the social and physical spaces of students and the teachers are constantly changing and often more immediate with the use of the Internet. In other words, what each student and teacher brings into the online experience are the values, knowledge and social influences from a variety of spaces, and at various times of the day, thereby increasing the possibility of sharing a plethora of knowledge and experiences within this engaging space. In the traditional classroom, the teacher and the students are in the same physical space, during the same time and the engagement is quite limited to the scheduled class time.

Interviewed CC faculty were asked "where" they were physically located when they taught online and "where" did they preferred to teach online. Although this was not an issue that was largely studied in this dissertation, the question was asked in order to have a sense of the places and spaces that faculty used when teaching online. Because these were places that they chose to teach in, I am describing this spatially by calling it the *proximal* space.

Proximal Space: The CC online faculty had a variety of places and spaces where they preferred to teach online. In the results, faculty enumerated the variety of places and spaces that they were physically located when they taught online. They also gave descriptions of some of these spaces. Some faculty members reminisced about how these

spaces were comfortable for them and allowed them the flexibility of doing their work in their comfort zone or their own space and in their own time. Others indicated that working in the school office was the preferred space because teaching online at home was distracting and their personal time at home was consumed by teaching online, thereby blurring their boundaries of work and home. In another example, in this study, an instructor spoke about how her kitchen table was the place she would do all her school work as a child and now currently she does all her teaching work on a kitchen table, despite the fact that she has built a new office in her home. Another faculty member talked about his beautiful home office facing a window that would look out into the woods. He described how relaxing and pleasant it was to see a deer or two outside his window from where he worked. This serenity, he described as comforting and put him in a different mood when teaching online that was not bounded by time.

By calling this space, *proximal space* I am identifying it as the activity zone in which the learner chooses to acquire understanding. When in this zone, individuals may be in different physical locations. However, through the virtual world the physical barriers to knowledge appropriation can be overcome. Within this realm, the tool of the computer affords the opportunity for the distribution of understanding and accelerates the time in which people may develop understanding of the material presented as opposed to when learning occurs in isolation.

These faculty members had personal attachments to some of these physical spaces while others used physical spaces for personal convenience. Place attachment was somewhat evident in their examples of places they preferred to teach. The construct of *place attachment* involves the "interplay of affect and emotions, knowledge and beliefs

and behaviors to a particular place" (Proshansky, Fabian, & Kaminoff, 1983). The attachment to place can be a useful construct here in that "the target of affective bonding to people in the environmental setting themselves is satisfying to people because they permit, creativity, and mastery, and they provide opportunities for privacy, personal displays, security and serenity," (Low & Altman, 1992).

These faculty members spoke of different styles and spaces that they used when teaching online. All the faculty members interviewed in this study described how different the online space was to that of the classroom landscape. Faculty members teaching online at Community College varied in their personally preferred places to teach online. The attachment to particular places in order to teach online (whether the issue was personal preference due to flexibility, convenience of time or whether it was an attachment to a particular location that had memories or personal meaning) was a surprising and interesting finding. Perhaps Sommer's (2002) critical review of personal space in the digital age identifies the need for significant research in this area, and therefore I mention this as a finding that is beyond the scope of this study and needs to be examined further within the field of environmental psychology.

Not only did the CC faculty speak of these preferred teaching spaces but they also talked about how the online teaching environment was different from the face-to-face classroom in that it transported them as well as their students into different places and spaces. From one website to another they are transported to different cultures, different places " thereby broadening their understanding of the world and strengthening their sense of connection with remote people and places" (Stokols & Montero, 2002, p. 664). Although books, films and other media can do this as well, the use of the Internet in

teaching can make these remote places more immediately available and significant to the users. The other difference is that often times a person can, with the use of the Internet, be in multiple places and spaces on the computer screen. Stokols and Montero (2002) described the Internet as having the capacity to make remote places and events psychologically salient to those who use the new technology and they expressed how important these psychological consequences would be across the lifespan.

As individuals make attachments to spaces and draw meaning from physical places so too will they have these connections with virtual environments. Dolores Hayden (1997) identifies "an individual's sense of place as both a biological response to the surrounding physical environment and a cultural creation of that environment." Although attachment to teaching spaces was not the focus of this dissertation, this finding produces interesting research possibilities, if one wants to study how people choose particular spaces to teach online. The notion of place and where one prefers to teach online can be studied in relation to professor's choices of "flexible" places to teach online. Place attachment and personal space issues in virtual learning environments can be important work for future environmental psychology research in virtual and digital environments.

The teaching issues described within these spatial themes, in this study, shed light on some of the possibilities that faculty members may have in using the online environment as a teaching tool. The CC faculty commented on these online teaching issues in a positive manner. They stated that given the opportunity to meet with other instructors, informally, in other departments, their teaching online experiences could be more pedagogically enriched through shared ideas. Community College faculty members

were interested in sharing with other colleagues their methods used to teach, how to creatively engage students and share evaluation criteria. The CC faculty were very interested in continuing to teach online despite some workplace issues that they wanted to negotiate or discuss. The next section describes some of these issues.

Workplace Issues:

Negotiating Time and Space

The use of technology to teach has changed not only the environment of teaching but it has changed the nature of the work that faculty or instructors do (Massy & Wigler, 1995; Shea, Pelz, Fredericksen & Pickett, 2001; Turoff, 1997). Issues of time and space are very important for faculty teaching online courses. Faculty members in this study addressed the issue of the number of hours they spend teaching online, which had greatly increased their workload. Teaching online also has blurred some of their personal space and time boundaries. For example, some online teachers returned to their school offices to teach online because teaching at home became an intrusion into their home life.

Faculty also claimed that, as the number of online students increased in the online class, the number of hours grading, evaluating and responding to students also increased. Also the excessive amounts of email or student postings added to this enormous amount of time spent on the computer, compounding their teaching time and the amount of information that they consumed. This was described as information overload. As mentioned earlier in the section on virtual teaching space, faculty also asserted that they consumed enormous amounts of time locating students online in several areas such as discussion boards and in e-mail as was mentioned before in the section on multiple

student spaces. Some faculty members discussed the fact that, though they were working more online, they did have the flexibility or convenience of teaching any time and in any place. Other instructors discussed the fact that they were working exorbitant amounts of hours teaching online and that they only received a small stipend for development when they first taught the course. They claimed that they were not receiving these stipends anymore because they were only available to faculty who were teaching online courses for the first time.

The Community College administrators know from their faculty that the excessive amount of work time is an issue for those teaching online. The college has emphasized that this is a departmental issue and that faculty have to discuss and negotiate these concerns within their respective departments. As in Community College, some university administrators encouraged the faculty to teach "any time" and "any place" using these phrases as an administrative marketing tool aimed at prospective students. The "any time" and "any place" phrase becomes a pitch to sell the *flexibility* of time and place to the faculty. At Community College, my sense was that the faculty liked the pedagogical rewards of teaching online, and they continued to do so at the expense of longer hours of worked. One instructor stated:

- Even though I am not getting extra money or release time to teach online, having the flexibility to teach any place, in my own time affords me a lot of flexibility while I am teaching online.

Despite the number of hours worked online, when asked if they would continue teaching online they all said that they would. They did, however, appear to accept or 'buy into' their administrators definitions of flexibility as more of a matter of their own choice. Faculty work, in general, tends to be traditionally more flexible than that of a typical nine-to five job and therefore the term flexibility is usually negotiated as time during the semester where the faculty member is working depending on the credit workload or whether faculty does administrative work in exchange for less classroom teaching. In terms of the online faculty in this study, the flexibility they negotiate is the time they are not on campus or in a specific classroom, but rather at home or in another space teaching at their leisure and convenience. The flexibility that they get when teaching online comes at the expense of working longer hours; more work per individual student; more time in thinking reflectively; and more time engaging with students.

In analyzing the issue of flexibility from a socio-technical perspective, the CC online faculty are part of a socio-technical system or open system that "are affected by outside events and engage in active transaction with the environment" (Pasmore & Sherwood, 1978). The spatial themes mentioned earlier in this chapter actively transact online instructors with their teaching environment; however, this is done at the expense of flexibility or the negotiated agreement of teaching "any time" and "anyplace." With technology rapidly permeating the university and faculty workplace, faculty and administrators are trying to understand and learn a "new" online pedagogy; however, this is done at the expense of a "new" work-relations that is emerging and is evident in these findings. The open system of the online environment consists of the *transactional* environment, those variables that faculty can control, i.e. teaching style, course content,

choice of place to work in, and the *contextual* environment, those variables in the hands of administration or management such as, enrollment numbers, compensation, release time, class size. As faculty continue to teach online or use technology in their work and universities continue to offer online courses to increase funding through increased enrollment, a thorough examination of faculty working conditions needs to be addressed. The Community College online faculty members to a certain extent were well supported by administration and the technology staff. They were also actively supported in faculty-administration committees; however the workplace issues and conditions of online teaching still need further examination.

Management vs. Faculty Work Relations

Online teaching at Community College has provided another source of income to meet funding needs and remains competitive among other colleges and universities. It is an enrollment management tool for the institution, enrolling students who would otherwise not attend school like adult learners, people in remote areas and employees in specific industries who are looking for advancement. Distance learning programs are also becoming quite popular among the community colleges and they are ignoring traditional geographical borders in seeking students (Carnavale & Olsen, 2003). Educational institutions look for students through the Internet beyond their states, sometimes even other countries, changing their mission of serving local students only, thereby increasing the competition among colleges (Carvavale & Olsen, 2003). Through online courses, Community College serves students locally and remotely. This demand by management to increase funding and enrollment at the expense of faculty workplace

and quality of life issues requires a redefinition of management-faculty relations. As a socio-technical environment, this work organization is a system of interrelated elements of inputs and outputs that are potentially capable of self-regulation. The findings in this study show that the online work environment has brought with it a set of workplace issues that needs to be addressed if workers needs, in this case the faculty, are going to be self-regulated.

Another area in the findings that deals with management and faculty relations is decision-making in information technology use in the online environment. In the CC community, faculty as well as administrators and technology staff, actively participated in committees and programs that dealt with information technology. In Community College there is a decentralized decision-making system regarding technology use and online design of programs and curriculum development. This is particular to this school since many universities and college, of colleagues that I have spoken to, acknowledged the educational institutions that they work for as a more centralized system. Administrators and university officials in these institutions have centralized decision-making which has also influenced and controlled technology decisions that can affect the lives of the faculty who teach online courses. Centralized technology decisions affect the faculty when administrators put technology before pedagogy (Greenbaum, 2003). When corporate universities cut costs by eliminating people and increasing capital equipment, they limit faculty and limit the programs and course curricula offered at the institutions. Also faculty cannot teach well when technology resources are cut or the decision of what content will be taught in the online classroom is taken away from the hands of the instructors, thereby jeopardizing pedagogical content. Greenbaum (2003) recommends

that faculty and administrators work collectively by decentralizing the decision-making process, putting pedagogical issues before technological choices. In an executive summary report published by the American Federation of Teachers (Kriger, 2001), decentralization is recommended for a successful distance education program. Kriger (2001) states,

> Based on a review of the latest trend in organizing distance education, this report finds that distance education can be a great asset as long as academic decision-making is placed in the hands of teaching professionals. However, serious problems arise if distance education is organized primarily around a corporate model of marketing and command-and-control management.

Teachers are expected to teach using a structured program like WebCT or BlackBoard and they must learn to use the technology that does not encourage the "live performance" of teaching. Usually the educational institution makes the decisions of what programs will be used and how these programs are implemented when teaching online. The online interviewed faculty from CC did not have a choice of what platform programs to use. They used Lotus to teach online, which was used throughout the SUNY system. One the other hand, through the technology support staff, they had the opportunity to creatively design their course in any way they chose to, within the limits of the Lotus program. One instructor discussed how he was looking to discuss the option of using streaming video in his course. With this option students could tune in to PBS or other television programming through their computer screens.

One of the faculty members I interviewed stated that it would be helpful to her if Community College would have a faculty workshop where online faculty members shared ideas on how to go beyond the content and the technology and develop online skills that would enhance ideas on how to interact with students online and how to create interactive activities that encourage engagement in the online class. According to her, this would be a good way to share with other faculty members ideas and experiences that could be used across disciplines and within different departments. In Brenda Laurel's (1993) book, *Computers as Theater,* she states:

> ...technologies offer new opportunities for creative, interactive experiences and, in particular, for new forms of drama. But these new opportunities will come to pass only if control of the technology is taken from the technologist and given to those who understand human beings, human interaction, communication, pleasure and pain (p. xi).

Laurel (1993) discusses how important it is for the "dramatists" to manage interactions in illuminating the paths of technology for interaction. Greenbaum (1995) states the same idea when discussing computer information system development, where the focus is on the user instead of on the traditional approach where systems integrate the user into the system, but not how the system could serve the user. Both Laurel (1993) and Greenbaum (1995) advocated user participation in technology design; in this case, it would mean including students, teachers and administration in shaping websites and designing programs for learning.

Implications for Future Research of Online Faculty Working Environments

The faculty of Community College did not express concern with centralized decision-making with their distance learning program. In fact, they were quite pleased with the administration's decentralized decision-making process and their collaboration with faculty to help to build an infrastructure of technology and administrative support to help faculty teach at a distance. The Community College faculty reported that they were actively involved with administration in committees, seminars, and faculty workshops, where decisions were made involving the development of their distance education program. Community College faculty along with administrators actively participated in their union very early on, before the inception of the distance learning program, in order to aid in making decisions that affected the online faculty. Furthermore, the faculty praised the technology administrative and support staff for their dedication, diligence and support of the online faculty when designing, developing and teaching online courses. Even though faculty did not like the increased hours of teaching that they performed online, some were willing to "put up with" the increase of time in exchange for having the flexibility to teach anywhere, at any time. While there remains some online faculty who want administration to work collectively with them to come up with a time-management program to help them cut work-time. They also would like to cap the number of students per online class to 20-25 students maximum. These issues are not new nor are they particular to the Community College faculty. These issues are quite prevalent among many online programs that my colleagues have worked with, or with online instructors to whom I have spoken to regarding their online teaching experience.

However, the online teachers in this study demonstrated that if online teachers are supported technologically, by their peers and by the administration when they teach online, their experiences of teaching online are positive and they are still willing to teach online despite the increased hours that they consume when they teach online. Issues such as absenteeism, faculty contact hours, offices hours and evaluation are all questions that still need to be addressed under these new methods of teaching and assessment, altering the traditional forms of teaching. The work issues of online faculty needs to be further explored in order to have an understanding of the work environment of these online instructors.

My personal experiences as a student of online courses, a university administrator and as a teacher of both classroom and online teaching have benefited me in comprehending the faculty experiences voiced in this study. Although I am not using my personal experience as data here, my first-hand experience of the work environment of faculty who teach online has helped me in the analyses of data and in the conceptualization of these work issues and themes. When I first started this study, my experiences of online teaching environments had led me to skepticism. I thought, as do some people, that online courses were the comodification of learning, and compromising education as we know it.

The results of this study illustrated through the voices of Community College faculty, that if online courses are designed properly and taught in a non-corporate, not-for-profit manner and if curriculum development is left in the hands of educators, then online learning environments can be a vehicle or tool to further enhance teaching (Kriger, 2001). Online teaching need not be the demise of education. Rather, it can transform our

performance as educators, if further research and understanding of online learning environments are undertaken. The study of an *online pedagogy* is necessary in order for faculty, students and administrators to understand distance learning and how it is altering their academic environments and roles in these environments. The design and development of virtual learning programs needs to be created in a decentralized collective decision-making effort by educators, university administrators and technology developers and, most importantly students, in order to explore all facets of the virtual learning environment. Up to now many distance learning programs have been designed first and studied later. I recommend that new programs be developed with the collaboration and collective-decision making of educators, administrators and technology developers, as was done in Community College. Community College has not included students in this process. However, I recommend that having committees of faculty, administrators and technology people that include students will yield benefits, since students are the learners who are enrolled in these courses and are at the receiving end of these learning environments.

Virtual learning environments should be viewed as another tool for teaching and learning in the contemporary university. The use of virtual learning environments has increased rapidly since I first started to study distance learning. This increased use of technology is aiding professors, doctors and scientists in instruction, research, collecting and analyzing data, reading and searching the scientific and academic literature, publishing papers, and communicating with peers (Hanson & Coontz, 2002). The non-online faculty members of Community College also indicated that they used the computer at least once a day for e-mails and other academic work. Based the literature (Blanco,

1996; Curtis, 2001; Gillespie, 1998; Hanson & Coontz, 2002), there is currently a sense that even if professors do not teach online, there is a greater increase in technology use (i.e. fax, telephone, e-mail, Web searching) in academic life. It is therefore important for researchers studying virtual learning environments to continue to explore its relationship to the faculty members, as workers in their virtual teaching environments.

There will be a greater need to study the time and space of faculty who teach online, in order for administrators and program developers to comprehend how time and space is used and consumed. This understanding can aid in forming new policies that will affect the "shop-floor" issues of faculty who teach online. This may lead to increases in future compensation or release time, which faculty will receive for working longer hours when they teach online. Research in this area can also help in understanding how faculty better manage their time online and how to create strategies that will better suit their "flexible" work schedule. In the field of environmental psychology, how online faculty members appropriate space as workers and how this defines virtual learning environment as an environment, will be necessary in order to conceptualize educational environments. In industrial and organizational psychology, the virtual learning environment will need to be looked at in terms of how professors work online. This will lead to a re-evaluation of measurements of work productivity and work satisfaction. Another area that needs to be looked at by both of these fields is occupational safety and health and the ergonomic concerns of workers in online environments. Some faculty expressed concerns regarding the consequences to their health from having to spend numerous hours online; these aliments included: carpal tunnel syndrome, lower back problems, eye strain and neck and shoulder pain.

The fair use of copyrighted materials and course ownership polices also needs to be examined so that policies can be implemented to help faculty make legal decisions regarding the work that they do online. These policies should be introduced to university-wide users of the Internet in order to promote sound decisions about materials used that are copyrighted. Universities, colleges and teachers' unions need to create policies that are collaboratively decided upon by educators and administrators, regarding ownership of courses that are designed and developed by educators.

The theoretical frameworks of environmental psychology (Montero & Stokols, 2003; Sommer, 2002; Stokols & Montero, 2002 and Stokols, 1999) and industrial and organizational psychology (Cherns, 1976; Herbst, 1974; Pava, 1987; and Pasmore and Sherwood, 1978) helped in examining this data. These theoretical perspectives have afforded an understanding of the relationship of online faculty and their transactions with the virtual learning environment. This study has only begun to scratch the surface in understanding the work environment of online faculty teaching in asynchronous environments. The field of environmental psychology, in its interdisciplinary approach, has opened the door to the study of *the environmental psychology of the Internet* (Sommer, 2002; Stokols & Montero, 2002). The introduction of information technology in educational environments has introduced many complexities into the life of the faculty member, as worker. Only in recognizing the multi-dimensional interactions of the online teacher and the multiple spaces within the virtual learning environment itself will one begin to understand the role that information technology plays in education today. This dissertation reported on this and has introduced the online work environment of online teachers. Nevertheless, one is left with more questions than answers as we muddle

through this transitional period of electronic environments used for the practice of teaching.

APPENDIX A: SURVEY COVER LETTER

Cover Letter for Faculty Surveys

My name is Carol Oliver and I am a doctoral candidate in Environmental Psychology at The Graduate Center /The City University of New York. For my Ph.D. dissertation, I am studying the impact of information technology on the work environment of professors. My work is an effort to look at how faculty uses technology in their everyday experiences as faculty members and in their personal lives. This dissertation research will be a two-part study: *Phase I* will be a faculty survey and Phase II will consist of faculty interviews for faculty who teach online. Many questions will focus on the practices of faculty who teach online. However, I am looking forward to the responses of faculty who do not teach online as well.

For *Phase I*, this survey is being distributed to the faculty of ***COMMUNITY COLLEGE.*** Your contribution to this work will be very helpful to me in understanding the growing impact of information technology on faculty work lives. I would greatly appreciate your time in answering the questions in this survey. This survey will take approximately 20 minutes of your time. Please note that your responses to this survey will remain confidential and the anonymity of all participants will be strictly maintained. There will be no identifying information in the survey to directly link the responses to particular faculty. All surveys will be numbered so that each completed survey response will represent a numbered participant.

Although the CC administration has given me permission to do my study, they will **not** see the completed surveys. ***Any written publications or materials, which mention the reported results of the study will not identify names, departments or the institution, will be reported as group data to the CC administration and it will be available to all CC faculty who would like a copy of the results.*** A return postage-paid postcard is provided for all faculty who wish to participate in the interviews (Phase II) and for faculty who wish to receive a copy of the results. If you would like a copy of the report and/or you are willing to be interviewed, please check the appropriate box for your request in the enclosed return postage-paid postcard and mail it separately to me. **Return this postcard separately from the survey to protect your anonymity in the survey. Please return both the completed survey and postcard by June 18th, 2001.**

Thank you for your participation. If you have any questions contact me or my thesis advisor, Dr. Leanne Rivlin.

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APPENDIX B SURVEY –FACULTY SURVEY

Faculty Distance Learning Survey – Community College

Section I: Descriptive Data

THE FOLLOWING QUESTIONS IN SECTION I ARE TO BE ANSWERED BY ALL FACULTY (WHETHER YOU TEACH CLASSROOM COURSES, ONLINE COURSES OR BOTH). These questions relate to demographic status and a description of current faculty positions within CC. These items will also include your personal experiences with computers at work and off-campus.

The following questions relate to classroom teaching only.
Place a check (✓) mark on your responses

1. What is your teaching style in the traditional classroom environment?

- ❑ Lecture
- ❑ Lecture and student discussions
- ❑ Student-centered discussions
- ❑ **All of the above teaching styles**
- ❑ **Other, please describe**

_____
_____
_____
_____

2. For each class session, how much time do you devote to lecturing rather than student-centered discussions?

- ❑ 1/3 or less of the class session
- ❑ 1/2 of the class session
- ❑ 2/3 or more of the class session
- ❑ **The entire class time**

3. **For each class session, how much time do students spend in student discussions?**

- ❑ 1/3 or less of the class session
- ❑ 1/2 of the class session
- ❑ 2/3 or more of the class session
- ❑ The entire class session

4. What criteria do you use to evaluate the performance of your students, i.e. papers, quizzes, exams, class participation, attendance? Please describe and give proportions for each.

_____
_____

5. Do you have an office in CC?

- ❑ Yes, my office only
- ❑ Yes, shared
- ❑ No

6. On average, how many office hours do you schedule for students weekly?

- ❑ Less than 1 hour
- ❑ 1 -2 hours
- ❑ 3 -4 hours
- ❑ 5 hours or over
- ❑ Other, please describe

_____

_____

7. On average, how much time do you spend preparing for each class session?

- ❑ Less than one hour
- ❑ One hour
- ❑ 2 - 3 hours
- ❑ 4 – 5 hours
- ❑ Over 5 hours
- ❑ If more time is needed to prepare for each class session, please explain.

_____

_____

8. Have you attended faculty development seminars at CC?

- ❑ Yes → If yes, go to question 9.
- ❑ No →If no, go to question 12

9. If you have attended faculty development seminars, how do you overall rate them for content? Use the scale below.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

10. Have you attended faculty development seminars on learning how to use technology in your teaching?

- ❑ Yes → If yes, go to question 11
- ❑ No → If no, go to question 12

11. How do you evaluate these seminars for content? Use the scale below.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

12. For the following items, indicate your satisfaction with the current policies or procedures at CC. (Please note these questions are related to all faculty whether teaching online or not). Use the scales below.

Faculty contact hours.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

Release time policy.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

College policy on course ownership.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

Technology training.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

13. What is your employment status?

- ❑ Full-Time
- ❑ Part-Time

14. Gender:

- ❑ Male
- ❑ Female

15. Age:

- ❑ Less than 25
- ❑ 25-35
- ❑ 36-45
- ❑ 46-55
- ❑ Over 55

16. What programs do you teach in at CC?

- ❑ Associate degree program
- ❑ Non-degree or certificate programs
- ❑ Both

17. In which department(s) or program(s) do you teach at CC?_____

18. How many years have you taught at CC? (Including FT/PT/or Both).

- ❑ 0-1
- ❑ 2-5
- ❑ 6-10
- ❑ 11-15
- ❑ 16-20
- ❑ Over 20

19. Overall, how many years have you been teaching in college(s)?

- ❑ 0-1
- ❑ 2-5
- ❑ 6-10
- ❑ 11-15
- ❑ 16-20
- ❑ Over 20

Section II: Faculty Use of Computers

The following questions relate to the use of computers at home and at work. These questions are for all faculty members to answer whether or not you are teaching online.

20. Do you have a computer at home?

- ❑ Yes → If yes, go to question 21.
- ❑ No → If no, go to question 23.

21. If yes, how often do you use it?

- ❑ Never
- ❑ Once or twice a week
- ❑ At least once a day. →If at least once a day, how many hours per day? _____hrs.

22. If you have a computer at home, for what activities do you use a computer? Check (✓) all that apply.

- ❑ For email messages and/or fax
- ❑ For non-academic work.
- ❑ For academic work e.g. writing articles, writing grants and course curriculum and record keeping
- ❑ For the Internet/ Web browsing
- ❑ For games and chatting
- ❑ For all of the above
- ❑ Other:_____

23. How comfortable are you with using a computer?

- ❑ I have no knowledge of computers
- ❑ I have some knowledge of computers
- ❑ I have working knowledge of computers
- ❑ I have excellent knowledge of computers

24. Do you use a computer at work?

- ❑ Yes →If yes go to question 25.
- ❑ No → If no go to question 30.

25. Does CC provide a computer for your academic responsibilities?

- ❑ Yes →If yes, go to question 26
- ❑ No → If no, go to question 27

26. What kind of computer is it?

- ❑ Desktop
- ❑ Laptop
- ❑ Both

27. For what activities do you use a computer at work? Check (✓) all that apply.

- ❑ For email messages and/or fax
- ❑ For non-academic work.
- ❑ For academic work i.e. writing articles, writing grants course curriculum, grants and record keeping
- ❑ For graphic programs, databases, and statistical programs
- ❑ For teaching courses online
- ❑ For all the above

Other:_____

28. Have you <u>ever</u> taught online?

- ❑ Yes. → If yes, go to question 29
- ❑ No. → If no, go to question 30.

29. How long have you been teaching online courses?

- ❑ 0 -1 semester
- ❑ 2 -3 semesters
- ❑ 4 - 5 semesters
- ❑ 6 - 7 semesters
- ❑ Other: → If other, please indicate amount. _____.

30. If you have <u>never</u> taught a course online, are you interested in teaching a course online in the future?

- ❑ Yes →If yes, please explain why?

_____

_____

- ❑ No → If no please explain why not?

_____

_____

If you have never taught a course "online," <u>you have completed the survey.</u> Thank you for your cooperation. Please mail the survey back to me, in the envelope provided, by June 18, 2001 and remember to return the reply postage-paid postcard <u>*separately*</u> if you want a copy of the results. See instructions on "RETURNING THE SURVEY" on the last page of this survey.

If you have taught online in the past or are presently teaching an "online" course, please continue with survey Section III, beginning with question 31.

Section III: Teaching in a Distance Learning Environment.

The following questions relate to your use of information technology to teach courses online. Questions will address your experiences of designing courses online and your experiences of teaching online compared to teaching in a classroom environment.

31. How many courses did you teach online this semester at CC?

_____

32. How did you first learn about distance learning environments?

- ❑ It was introduced to me by the college administration.
- ❑ A faculty colleague introduced me to it.
- ❑ I read about distance learning.
- ❑ I took a distance learning course.
- ❑ Other sources: please indicate

_____

_____

33. How did you decide to teach online course(s)?

- ❑ The college gave me the opportunity to teach my course online.
- ❑ The college **required** that I teach my course online.

_____

If in question 31 you stated that you teach more than one course online this semester, choose the one course that is most representative of your online teaching experience to answer questions 34-44.

_____

34. Did you develop your own online course?

- ❑ Yes → If yes, go to question 35.
- ❑ No → If no, go to question 38.

35. Did you receive any technical training from CC to develop your course online?

- ❑ Yes → If yes, describe the kind of training you received and then go to question 36.

_____

_____

- ❑ No → If no, please go to question 37.

36. If yes, how good was the technical support staff in helping you to acclimate to the online environment? Use the scale below.

Poor				*Excellent*
1	**2**	**3**	**4**	**5**
❑	❑	❑	❑	❑

37. Did you find any difference between the time it took to develop your first distance learning (DL) course compared to a classroom (in-person) course?

- ❑ It took the same amount of time to develop as a classroom course.
- ❑ It took less time to develop in an online course.
- ❑ It took more time to develop an online course.

Please describe:

_____

_____

_____

_____

38. How good was the ongoing technical support <u>during</u> the semester? Use the scale below.

Poor				*Excellent*
1	2	3	4	5
❑	❑	❑	❑	❑

39. With this experience, do you now find any difference between the preparation time required for a distance learning course compared to a traditional class course?

- ❑ It takes the same amount of time to develop as a classroom course.
- ❑ It takes less time to develop in an online course.
- ❑ It takes more time to develop an online course.

Please describe:

_____

_____

40. How many times have you taught this course online? _____

41. How many students were enrolled in this online course this semester?

_____

_____

42. Do you think this number of students is appropriate for an online course?

- ❑ **Yes → If yes, explain**

_____

_____

- ❑ **No → If no, explain**

_____

_____

43. Do you think this online environment is appropriate for teaching your course content?

- ❑ **Yes → If yes, explain**

_____

_____

- ❑ **No → If no, explain**

_____

_____

44. On average, how did your students perform in this class compared to your traditional class course?

- ❑ Better
- ❑ Worse
- ❑ About the same

Please explain:

_____

_____

45. What criteria do you use to evaluate the performance of your <u>online</u> students, i.e. papers, quizzes, exams, class participation, attendance? Please describe and give proportions for each.

_____

_____

46. What are your overall impressions and perceptions about your online students compared to your traditional classroom students?

_____

_____

47. Does the online experience help improve the performance of your online students when compared to your similar traditional classroom students?

_____

_____

_____

_____

48. In thinking about the work that you do as a teacher, how do you feel about teaching an online course compared to an in-person classroom course.

- ❑ Same → If same, please explain.
- ❑ Different → If different, please explain.

_____

_____

49. Do you *prepare* the online lessons

- ❑ all at once before the semester
- ❑ a few at a time over the semester
  Please explain:

_____

_____

50. Do you make the lessons available to the students

- ❑ all at once, at the beginning of the semester
- ❑ a few at a time during the semester
  Please explain:

_____

_____

51. Would you like to teach an online course again?

- ❑ Yes
- ❑ No

Please explain:

_____

_____

52. How satisfied are you with online course(s) compared to the in-person classroom teaching in general?
Use the scale below.

Very Satisfied *Very dissatisfied*

1	2	3	4	5
❑	❑	❑	❑	❑

53. Were you compensated, given release time or otherwise rewarded if the distance education PREPARATION TIME exceeded traditional preparation time?

- ❑ Yes →If yes, how do you feel about it?
- ❑ No →If no, how do you feel about it?

Please describe:

_____

_____

54. Were you compensated or rewarded by CC for TEACHING online?

- ❑ Yes if yes, in what way?
- ❑ No

In any case, how do you feel about this?_____

_____

55. When you are teaching online, do you find yourself spending more time or less time doing your teaching duties with respect to student contact, teaching, grading?

- ❑ More time
- ❑ Less time
- ❑ The same amount of time I spend in a traditional classroom course.
  Please explain:

_____

_____

_____

56. Please feel free to comment on your overall reactions and experiences regarding online teaching touched on in this survey or on any other issues that I did not touch upon, but that you feel are important.

_____

_____

RETURNING THE SURVEY

Thank you for your participation!

Please use the attached stamped, self-addressed envelope to return your completed survey form to me by June 18th, 2001, via mail addressed to:

Ms. Carol Oliver
Distance Learning Survey
The Graduate Center /
The City University of New York
Environmental Psychology.
365 Fifth Avenue 6th Floor
New York, NY 10016-4309

Also, remember to return the reply postage-paid postcard *separately* if you want a copy of the results and / or are willing to be interviewed in the follow-up interviews. (Interviews will only be for faculty who teach online)

APPENDIX C: POSTCARD FOR RESPONSE FOR INTERVIEW OR RESULTS

Dear faculty member:
Thank you for completing the survey. Please return this attached reply postage-paid postcard to me if you would like to participate in the interview **and/ or** you would like a copy of the reported result. Please check (✓) your request(s). ***Please return postcard separately from survey by June 18, 2001.***

☐ **I would like to participate in the interviews for this study.***

and /or

☐ **I would like a copy of the final report.**

Please provide your contact information below:

Name: _____

Address:_____

Telephone: _____(DAY) _____(EVENING)

E-mail Address

_____

Please note that all interviews will be anonymous and confidential. A consent form will be given to you before the interview and all measures will be taken to maintain all data confidential. If you have any questions please call me at (718)-438-7634 or e-mail me at oliverc126@aol.com.
Thank you, Carol Oliver

End of Survey

APPENDIX D: CONSENT FORM

Faculty Interview Consent Form

My name is Carol Oliver and I am a student in the Environmental Psychology Department at the Graduate School and University Center at the City University of New York (CUNY), and principal investigator of this dissertation research study, entitled *The Professoriate in the Context of Distance Learning Environments.* **This is a research study of how faculty members experience their academic work environments when they teach in distance learning environments. I would like permission to interview you about your teaching experiences and work experiences when teaching online.**

You have already answered questions in an anonymous survey that I previously sent to you about your experiences with distance learning and you have returned the attached post card indicating that you are interested in participating in this interview. The interview will take approximately from one to one hour and a half. With your permission, I would like to tape this interview in order to record the details accurately. Only I and my faculty committee members will hear the tapes. All information gathered will be kept strictly confidential, and will be stored in a locked file cabinet, to which only my advisor and I will have access. At any time, you can refuse to answer any questions or end this interview without any consequences.

I have found in my personal conversations with faculty, that most faculty enjoy talking about their distance learning experience. The only possible risk involved in this study is that you may experience some discomfort in answering questions pertaining to your work experiences teaching online. The benefit of your participation is that, in the future, there will be more information on how to help address faculty concerns and issues that will aid in formulating theoretical frameworks for designing courses online and future polices that affect faculty workplace issues.

I may publish results of this study, but names of people and college or any identifying characteristics, will not be used in any of the publications. If you would like a copy of the study, please provide me with your address and I will send you a copy in the future.

If you have any questions about this research, you can contact me at (718) 438-7634, oliverc126@aol.com or my advisor, Professor Leanne Rivlin at (212) 817-8726, lrivlin@gc.cuny.edu. If you have questions about your rights as a participant in this study, you can contact Hilry Fisher, Sponsored Research, Graduate Center/ City University of New York, (212) 817-7523, hfisher@gc.cuny.edu.

Thank you for your participation in this study. I will give you a copy of this form to take with you.

If you agree to be interviewed, please sign below:

I agree to have this interview taped, please [circle one]. YES NO

Participant's signature	**Date**	**Investigator's signature**	**Date**

APPENDIX E: DISTANCE LEARNING FACULTY INTERVIEW

Distance Learning Faculty Interview Protocol

Name _____ **Date** _____ **Time**_____

Interview number_____ **# of tapes**_____

Thank you for agreeing to participate in this interview (Phase II) and for your participation in answering and returning the survey last spring (Phase I). As I indicated in the consent form, this interview will take from one hour to an hour and a half of your time. The questions in this interview will ***only*** *address your experiences with online teaching and your experiences with your professorial work life. These questions will be about* ***your own experiences*** *at CC. (Please remember that any information you provide, will be reported as part of a group). I am taping the interview, for the purposes of keeping track of the information so that I can concentrate on your responses. If at some point you do not wish to be recorded, I will turn off the recorder and take notes on your responses in a notebook. If there are any questions you do not want to answer, you can skip those questions.*

Demographics: "I would like to begin this interview by asking you "

1. For how many years have you been teaching at the college-level? _____
2. For how may years have you been teaching at CC? _____
3. Where have you taught online: at CC only _____other schools? ____ Explain.
4. For how many semesters have you taught online at CC or at another institution? _____.
5. How many courses have you taught online at CC ?_____ At another institution? _____ Explain.
6. What factors influenced your decision to teach online? Explain.
7. What process was used to select you as an online instructor? Explain.

"Now I would like to ask you questions about the: teaching/ designing online courses..."

8. Do you first teach a course in the classroom before teaching it online?

9. Have you developed and delivered your own course(s), or have you only delivered online course(s) that were developed by another instructor? Explain.

10. As I understand from the CC administration, no faculty develops online course(s) without the CC/SLN training. Have you received help beyond the SUNY/CC training sessions? Please explain.

11. How many months did it take you to design your first course—from reconceptualizing the course, to course template completion? Explain.

Online teaching experiences

12. Please describe the major components that make up your online teaching efforts. Explain.

13. How does it compare with classroom teaching?

14. I am interested in knowing what do you ***like*** and ***dislike*** about distance learning, (*what I mean by dl is asynchronous online environments*)?

15. In what ways, are your interactions with students online the *same* or *different* as compared to face-to-face classroom interaction?

16. Compared to a classroom course, is online (asynchronous) teaching gratifying? Explain.

The following are questions relating to time and space: (When I speak here of "time and space", I am speaking of your spatial environment, i.e. physical spaces that you use to perform your professorial duties- including teaching and by "time" I mean the periods of time that you spend performing these professorial duties on campus and off campus).

17. When you are interacting online with your online students or assessing their discussions and/or assessments, where are you generally located?

18. What place(s) do you generally prefer to teach online? Explain.

19. Is your experience of ***time*** online, different than off-line (face-to-face)?

20. In general, has your experience with the ***time*** it takes to design and deliver an online course improved over time? Please explain. (If no, probe here, how has it decreased or stayed the same?).

21. Can you talk about *how* your professorial life occupies ***time*** and ***space*** when you teach online? (Probe: be ready to explain <u>again</u> what you mean by time and space).

22. Which takes more *time(or less time)* to perform your teaching duties, online or face-to-face classroom courses? Why is that so?

Academic issues & policies

23. I am aware that CC has a policy that states that a course that is designed and developed for online teaching at CC gives ownership of the course to the faculty member, but allows the College to offer the course for five years. How do you feel about this course ownership policy?

24. What are your thoughts about copyright issues in academic work that is published and available online?

25. What impact do you think online learning (asynchronous, synchronous, interactive tv.) will have on education?

26. Describe to me what are your thoughts on the release time policy at CC and how it affects online instructors?.

27. Were you satisfied with the compensation that you received for developing and/or teaching online? Explain.

28. If no, *how* do you believe you should you be compensated for developing or teaching an online course? Explain.

29. Do you feel that asynchronous learning has changed the way you teach? Explain your answer.

30. What changes in distance learning (asynchronous online learning) would improve your experience?

31. If you had anything to say to the CC administration about asynchronous learning in general or your experience with asynchronous teaching at CC, what would it be?

32. What comments or suggestions would you give to a faculty member who is thinking about teaching online (asynchronous) at CC?

33. Are there questions on other issues that you believe should be added to this interview protocol? Explain?

APPENDIX F: TABLES BASED ON THE SURVEY DATA THAT MAY BE USEFUL TO RESEACHERS

The following tables are from frequency data that were analyzed from the survey data. Some of the tables were useful in constructing the data for the interview instrument and in the comparative analysis. Other data will be important to the administrators and faculty who aided in piloting the surveys and future researchers who may be interested in replicating the study.

Table 1. Total Number of Faculty at Community College in the Fall of 2000

Full Time Faculty (tenure-track)	284 (38.7%)
Part Time Faculty (non-tenure)	30 (4.1%)
Adjuncts	420 (57.2%)
Total # of Faculty	734 (100%)

Table 2. Percentage of Faculty Who Teach Online at CC.

Full Time Faculty & Part Time Faculty	32%
Adjuncts	2%

Table 3. Number of FCH* Per Employment Level

Full Time Faculty (tenure-track)	30
Part Time Faculty (non-tenure)	30
Adjuncts	9

* FCH is the acronym for faculty contact hours.

Table 4. Frequency of Non-Online Faculty Teaching Styles

Lecture	13 (15.1%)
Lecture & Student Discussions	35 (40.7%)
Student-Centered Discussions	2 (2.3%)
All of the above	28 (32.6%)
Other	8 (9.3%)

Table 5. Average Scheduled Office Hours by the Non-Online Faculty Per Week

Scheduled Office Hours	**N=86**
1-2 hour(s)	1 (1.2%)
3-4 hours	12 (14%)
5 hours or over	73 (84.9%)

Table 6. Average Time the Non-Online Faculty Member Prepares for the Face-to-Face Classroom

Time to Prepare for a Course For Each Class	**N= 86**
Less than 1 hour	15 (17.4%)
One hour	29 (33.7%)
2-3 hours	31 (36%)
4-5 hours	5 (5.8%)
Over 5 hours	1 (1.2%)
More time needed to prepare	5 (5.8%)

Table 7. Gender of Non-Online Faculty

Gender	*Non-Online Faculty Who Responded to the Survey (N=86)*	*Non-Online Faculty From Total Sample (N=299)*
Male	47 (54.6%)	157 (52.5%)
Female	39 (45.3%)	142 (47.5%)

Table 8. Age of Non-Online Faculty

Age Groups	*Non-Online Faculty (N=86)*
Less than 25 years	---
25-35 years	8 (9.3%)
36-45 years	17 (19.8%)
46-55 years	30 (34.9%)
Over 55 years	31 (30.0%)

Table 9. Number of Years Teaching at the College Level

Number of Years Teaching	*Non- Online Faculty (N=86)*
0-1 year	2 (2.3%)
2-5 years	11 (12.8%)
6-10 years	10 (11.6%)
11-15 years	13 (15.1%)
16-20 years	14 (16.3%)
over 20 years	34 (39.5%)
no response to categories	2 (2.3%)

Table 10. Years Teaching at Community College

Years Teaching at CC	*Non-Online Faculty (N=86)*
0-1 year	8 (9.3%)
2-5 years	12 (13.9%)
6-10 years	11 (12.8%)
11-15 years	15 (17.4%)
16-20 years	12 (13.9%)
over 20 years	26 (30.2%)
no response to categories	2 (2.3%)

Table 11. Computer Usage at Home by Non-Online Faculty

How often computer is used at home	**Non-Online Faculty N=86**
Never Use Computer at Home	5 (5.8%)
Once or Twice a Week	25 (29.1 %)
At Least Once a Day	56 (65.1%)

Table 12. Age Comparison of Non-Online Faculty and Online

Age Groups	*Online Faculty (N=26)*	*Non-Online Faculty (N=86)*	*Total Faculty (N=112)*
Less than 25 years	---	---	---
25-35 years	1 (3.8%)	8 (9.3%)	9 (8.0%)
36-45 years	9 (34.6%)	17 (19.8%)	26 (23.2%)
46-55 years	9 (34.6%)	30 (34.9%)	39 (34.8%)
Over 55 years	7 (26.9%)	31 (36.0%)	38 (33.9%)

Table 13. Gender Differences of Online and Non-Online Faculty

Faculty Survey Sample	*# Males*	*# Females*
Faculty Total Who Completed Survey (N=112)	56 (50%)	56 (50%)
Non-Online Faculty Who Completed Survey (N=86)	47 (54.6%)	39 (45.3%)
Online Faculty Who Completed Survey (N=26)	9 (34.6%)	17 (65.4 %)

Table 13a. Gender Differences of Online and Non-Online Faculty

Faculty Survey Sample	*# Males*	*# Females*
Total # of CC Faculty (N=299)	157 (52.2%)	142 (47.5%)
Total # of CC Faculty Who Teach Online (N=64/299)	28 (9.36%)	36 (12%)

Table 14. Years of College Teaching
Online & Non-Online Faculty (Surveyed Sample)

Number of Years Teaching	*Online Faculty (N=26)*	*Non-Online Faculty (N=86)*	*Faculty Total (N=112)*
0-1 year	---	2 (2.3%)	2 (1.8%)
2-5 years	3 (11.5%)	11 (12.8%)	14 (12.5%)
6-10 years	2 (7.7%)	10 (11.6%)	12 (10.7%)
11-15 years	6 (23.1%)	13 (15.1%)	19 (17.0%)
16-20 years	5 (19.2%)	14 (16.3%)	19 (17.0%)
Over 20 years	10 (38.5%)	34 (39.5%)	44 (39.3 %)
no response to categories	---	2(2.3%)	2 (1.8%)

Table 15. Number of Years That Surveyed Faculty Are Teaching at CC

Years Teaching at CC	*Online Faculty (N=26)*	*Non-Online Faculty (N=86)*	*Total Faculty (N=112)*
0-1 year	---	8 (9.3%)	8 (7.1%)
2-5 years	4 (15.9%)	12 (13.9%)	16 (14.3%)
6-10 years	6 (23.1%)	11 (12.8%)	17 (15.2%)
11-15 years	6 (23.1%)	15 (17.4%)	21 (18.8%)
16-20 years	4 (15.9%)	12 (13.9%)	16 (14.3%)
over 20 years	6 (23.1%)	26 (30.2%)	32 (28.6 %)
no response to categories		2 (2.3%)	2 (1.8%)

Table 16. Comparison of Technology Training

Technology Training Scale	**Online Faculty(N=26)**	**Non-Online Faculty(N=86)**
Poor 1	0	1(1.2%)
2	1 (3.8%)	6 (7.0%)
3	2 (7.7%)	15 (17.4%)
4	11 (42.3%)	39 (45.3%)
5 *Excellent*	12 (46.1%)	23 (26.74%)

Table 17. Computer Usage at Home Online vs Non-Online Faculty.

Amount of Computer Usage	**Online Faculty**	**Non-Online Faculty**
Never Use Computer at Home	0	5 (5.8%)
Once or Twice a Week	3 (11.5%)	25 (29.1 %)
At Least Once a Day	23 (88.5%)	56 (65.1%)
Total	**N=26**	**N=86**

Table 18. Number of Semesters Teaching Online

Number of Semesters	Online Faculty (N=26)
0-1	8 (30.8%)
2-3	3 (11.5%)
4-5	8 (30.8%)
6-7	3 (11.5%)
Other	4 (15.4%)

Table 19. Difference of Teaching 1st Online Course vs. Traditional Course

Difference between the time it takes to develop your first online course compared to face-to-face-classroom	(N=26) Survey data
It takes the same amount of time to develop as a classroom course	2 (7.7%)
It took less time to develop course online	0
It takes more time to develop an online course	22 (84.6%)
No response to question	2 (7.7%)

Table 20. Age Groups of Online Faculty *Only*

Age Groups	*Interviewed Online Faculty (N=17)*	*Total # of Online Faculty (N=26)*
Less than 25 years	---	---
25-35 years	1 (5.8 %)	1 (3.8%)
36-45 years	4 (23.5 %)	9 (34.6%)
46-55 years	8 (47.0 %)	9 (34.6%)
Over 55 years	4 (23.5 %)	7 (26.9%)

Table 21. Gender Differences of Surveyed & Interviewed Online Faculty *Only*

Gender	*Interviewed Online Faculty (N=17)*	*Total # of Surveyed Online Faculty (N=26)*
Male	7 (41.2%)	9 (34.6%)
Female	10 (58.8%)	17 (65.4 %)

Table 22. Years of College Teaching - Surveyed & Interviewed Online Faculty *Only*

Years Teaching at the College Level	*Interviewed Online Faculty (N=17)*	*Total # of Surveyed Online Faculty (N=26)*
0-1 year	---	---
2-5 years	1 (5.9%)	3 (11.5%)
6-10 years	2 (11.8%)	2 (7.7%)
11-15 years	3 (17.6%)	6 (23.1%)
16-20 years	4 (23.5%)	5 (19.2%)
over 20 years	7 (41.2%)	10 (38.5%)

Table 23. Years Teaching at CC: Online Faculty *Only*

Years Teaching at CC	*Interviewed Online Faculty (N=17)*	*Total # of Surveyed Online Faculty (N=26)*
0-1years	---	---
2-5 years	2 (11.7%)	4 (or 15.9%)
6-10 years	4 (23.5%)	6 (or 23.1%)
11-15 years	5 (29.4%)	6 (or 23.1%)
16-20 years	2 (11.7%)	4 (or 15.9%)
over 20 years	4 (23.5%)	6 (or 23.1%)

Table 24. Response Rates of Returned Instruments N=299 Surveys and Attached Postcards Mailed

Number of Returned Surveys (non-online and online faculty)	112 (37.5%)
Number of Faculty Out of 112 That Indicated They Were *Online* Faculty	26 (23.2%)
Number of Returned Postcards (non-online & online faculty)	52 (17.4%)
Number of Faculty That Indicated on Postcard Interest in Interview (online faculty) [a.]	21 (40.4%)
Number of Faculty Interviewed Out of 21 Interested [b.]	17 (81%)
Number of Faculty Interviewed (N=17) Out of Entire Faculty Pool (N=299)	17 (5.7%)

[a.] It was indicated in the survey that faculty who were returning postcard and indicating that they wished to be interviewed, were only online faculty.

[b.] Out of the 21 faculty that indicated that they wanted to participate in the interview, only 17 were actually interviewed. A description of the interview instrument and interview procedure (Phase II) will follow after the analysis of the three-part survey (Phase I).

Table 25. Mean and Median Data of Interviewed Online Faculty

Categories	***Mean***	***Median***
Years Teaching at the College Level	18.6 years	17 years
Years Teaching at CC	15.6 years	15 years
Number of Semesters Teaching Online	5.9 semesters	4 semesters
Number of months for design & development of online course.	3. 4 months	3 months

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