

AN ABSTRACT OF THE DISSERTATION OF

Michael P. Cannon for the degree of Doctor of Education in Education presented on April 27, 2001. Title: Internal Support Systems Essential to Faculty Success in Distance Delivery Education Programs.

Abstract approved:



Joanne B. Engel

The purpose of this study is to identify the internal support systems that contributed to the success of community college faculty teaching in a distance education setting. How do those faculty who are perceived as being successful in this setting attain such stature? What are the contributing factors? If contributing factors can be identified, can they be taught and or shared with others who are admittedly not yet among these ranks? Can such information contribute to the most effective uses of the institutional resources which, in some states, are becoming more limited each year?

Eight faculty members from community colleges throughout the state of Oregon were interviewed for this study. Each participant had been identified by their dean or immediate supervisor as being successful in teaching at a distance. The interview questions were focused on issues of institutional support, more specifically, in the areas of technical support, support for course development, support for student services, and administrative support. Additional questions lent insight to each participant's level of experience, perception of their own success, and to their teaching/learning style.

Analysis of the data revealed that several of these aspects of support were indeed viewed as necessary, even imperative. Others were perceived as being something that

should be made available as an option. When all elements of support are present, the feeling of success in faculty seems to be significantly more pronounced than is the case with faculty who have experienced only a few of the elements in their institution.

The report includes recommendations for institutions about to engage in distance education, and conclusions as to the nature of effective faculty development sessions for those new to distance education.

©Copyright by Michael P. Cannon
April 27, 2001
All Rights Reserved

Internal Support Systems Essential to Faculty Success
in Distance Delivery Education Programs

by
Michael P. Cannon

A DISSERTATION

submitted to

Oregon State University

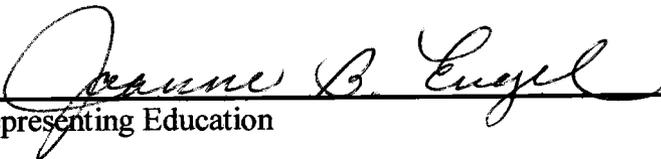
in partial fulfillment of
the requirements for the
degree of

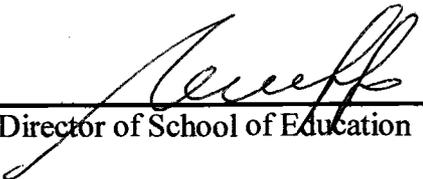
Doctor of Education

presented April 27, 2001
Commencement June 2001

Doctor of Education Dissertation of Michael P. Cannon presented on April 27, 2001

APPROVED:


Major Professor, representing Education

for 
Director of School of Education


Dean of Graduate School

I understand that my dissertation will become part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my dissertation to any reader upon request.


Michael P. Cannon, Author

Acknowledgements

In the human journey, in the quest for something higher – the application of interest and effort – there are those lending inspiration and clarity to such a mission when it is needed most; I have been fortunate in the course of my graduate studies to have known several such individuals, and ever so humbly acknowledge their role in my achievements:

- to Bob Anderson and Gerry Balaban, for their encouragement to reach further, to probe deeper into the mind of the would-be educator in search of that which we call knowledge, to understand what it is that we can and cannot truly know;
- to Gerry Balaban, whose constant support and persistent, collegial challenges have gone well beyond mere inspiration, into a realm which I can only conceptualize as 'mind-bending';
- to Ruth Stiehl and Jodi Engel, whose integrated approach to teaching at a very critical stage in this journey was simply an incomparable experience, and empowered me to reach yet further into places I had always needed to go, whether or not I was able to acknowledge it at the time;
- and especially to Jodi Engel, for her uncanny ability to zoom in on the essence of an issue and extract that which needs to be seen or heard and discard the rest, for her unique ability to embrace change, and value the developing thoughts and opinions of those who challenge that which is referred to commonly as established thinking, and for her singularly extraordinary support and encouragement throughout this entire process. Every graduate student should be so fortunate to have such an advocate and mentor.

Table of Contents

Chapter One: Introduction	1
Background.....	1
Self-Disclosure.....	4
Social Implications / Relevance of Topic.....	8
Contribution to the Field and the Purpose of the Study.....	10
Research Questions and Setting.....	11
Terms / Definitions.....	12
Limitations of Study.....	13
Chapter Two: Literature Review	14
Introduction.....	14
Technical Support.....	14
Course Development Support.....	18
Student Services Support.....	22
Administrative Support.....	25
Chapter Three: Methodology	30
Problem Statement.....	30
Location of Study.....	30
Interview as a Method of Data Acquisition.....	30
Questionnaire Development.....	30

Table of Contents, continued

Identification of Subjects.....	31
Contact with Subjects.....	31
Humanities Faculty.....	35
Hard Science Faculty.....	37
Professional Faculty.....	38
Data Analysis Methods.....	40
Chapter Four: Results.....	51
Framing Questions.....	51
Definition of Terms.....	54
Summary of Responses to Questions.....	55
Chapter Five: Discussion of Results.....	77
Introduction.....	77
Data Analysis: Discussion.....	78
Summary / Implications.....	97
Chapter Six: Recommendations and Issues for Further Study.....	102
Recommendations.....	102
Issues for Further Study.....	104
Bibliography.....	106

Table of Contents, continued

Appendices	111
Appendix A: Script of Verbal Request to Dean of Instruction / Dean of Distance Education / Vice President of Academic Affairs.....	112
Appendix B: Script of Verbal Request for Participation to Identified Faculty Candidate.....	114
Appendix C: Framing Questions.....	117
Appendix D: Informed Consent Document.....	119
Appendix E: Dragon 'Naturally Speaking' Voice Transcription Software.....	122

List of Tables

<u>Table</u>	<u>Page</u>
1: Administrative Support.....	45
2: Support for Course Development.....	46
3: Technical Support.....	48
4: Support for Student Services.....	49

Dedication

This research is humbly dedicated to the memory of my father, Dr. Edward Elijah Cannon, who instilled in me at a very early age the recognition of the need to keep asking questions and empowered me to do so, encouraged me with unflinching consistency to do whatever it was that I wanted to do as long as I did so to the very best of my ability, always conveyed the notion that contentment and the idea of a 'balanced life' would make themselves evident in the oddest ways imaginable and are a singularly proprietary matter of perspective, to whom I am forever indebted for introducing me to the Chicago blues scene at a very early age, and who has stood as a beacon in my life for as far back as I can remember; to my loving wife and life-partner, Sandy, whose encouragement and unfailing devotion throughout the entire duration of my graduate work could never be conveyed by mere words, and without whose persistent prodding – all the while with the gentlest and most understanding of smiles – I would most certainly have experienced an entirely different outcome; and to my darling daughter Christa, for whom I believe everything I do should ultimately be of benefit, who has endured – largely unbeknownst to her – voids in her childhood experiences that can never be refilled, and for whom no sacrifice or prolongation of this process has ever been too great.

It is for you, the generational breadth of my family, and by your strength and support, both living and in spirit, that I have now reached this goal.

Internal Support Systems Essential to Faculty Success in Distance Delivery Education Programs

Chapter One:

Introduction

Background

Higher education has witnessed a phenomenal growth in recent years in the area to which most educators refer as *distance education*. According to the Condition of Education 2000, published by the U.S Department of Education, National Center for Educational Statistics, the past several years have seen tremendous increases in the percentage of higher education institutions which offer some part of their curricula at a distance. Community colleges have experienced a 14% growth, from 58% in 1995 to 72% in 1998. Four-year institutions have undergone a 17% growth, from 62% in 1995 to 79% in 1998. During the same period, overall enrollments in distance education courses and programs rose by over 100% in post-secondary degree granting institutions, from 754,000 to 1.6 million (U.S. Department of Education, 2000).

The term distance education itself is one fraught with a good deal of confusion, however most educators would agree that one basic premise applies: the teacher and the learner are separated by time and space, and must accommodate that chasm – or transactional distance, as it has been referred to by Saba – usually by some technological means (Saba & Shearer, 1994). This technology can, and has, taken the form of everything from a postage stamp, the telephone, video equipment, and most recently, computer and Internet connectivity. Each application

of technology comes with its own set of unique parameters, upon which one must then overlay those of the institution, the faculty, the student population, the curriculum, etc. It is this matrix that comes a little closer to expressing the complex nature of effectively conveying content, of engaging the learner in some degree of interactivity, or of achieving the same learner outcomes as had been perhaps previously designated for an on-campus counterpart course delivery.

Practitioners and administrators alike have gotten caught in the fray of attempting to develop a title for this phenomenon which they believe accurately portrays what is happening. The notion of ‘distance education’ quite readily breaks down into the paired notions of ‘distance’ and ‘education.’ Attempts have been made to more accurately convey the intention of both terms. We have seen use of the terms ‘distance’, ‘distributed’, ‘extended’, and ‘external’ to convey the notion of the separation of the teacher and the learner. For the latter of the pair, the obvious choices are ‘education’, and ‘learning,’ but have also seen the use of more fundamental terms such as ‘course’ and ‘program.’ Each of these combinations have their merits, certainly to the institutions which employ them, and attempt to reflect the unique application of technology to the particular educational setting. For the purposes of this research effort, however, this argument is moot. Despite the chosen title, essentially the same transaction is taking place. The original and most commonly used term – ‘distance education’ – is used throughout this paper to represent the notion of education delivered to students who are separated by time and/or space from their instructor. Wherever applicable, or necessary, distinctions will be made in the event of usage of a different term.

All the while that differences in nomenclature have been discussed throughout the profession, another debate has lingered: is distance education really 'as good as' traditional face-to-face education? Can students actually learn in an environment that denies them the same advantages as face-to-face instruction, e.g., interpersonal contact, immediate feedback, ready contact with the instructor, and close and personal ties with other students? And if they do demonstrate some learning, does it even remotely resemble that which we 'know' to be true of our more traditional method of delivery? How is it, by the way, that students demonstrate their learning? What is the nature of assessment of an education, much less that of one obtained at a 'distance?' This debate has taken on a life of its own, and has become known within the circles of those who have been listening and/or watching as the 'no significant difference' phenomenon. The premise, as demonstrated by Russell, is that there has been *no significant difference* demonstrated in the outcomes of that which we have historically referred to as distance education as compared to that which has been considered traditional face-to-face education, and therefore that distance delivery is valid as a method of educating (Russell, 1999). Although this question is not addressed directly by this research, the implications of this notion can be seen and felt throughout the study, in the presentation of the data, and in the discussion that follows. For the purposed of this study, I have made the assumption that the argument regarding the validity of distance education is essentially moot.

Self-Disclosure

I bring to this research an admitted bias, in that I firmly believe that the technology of our day offers a potential advantage to a certain body of the educable public that would not otherwise be able to avail themselves of such educational opportunities. The immediately recognizable audience includes those who are, for any of a number of reasons, separated by time and space from educational opportunities; we in higher education have come to call them the ‘time- and/or place-bound’ populations of our constituency, and have, for the most part, acknowledged our need to serve them. Displaced workers, single parents, working adults, adults seeking to expand their opportunities in a new economy – all of these audiences call to a non-traditional format of education to lend them a hand, and help them ‘over the hump’ in the progression of life that has been laid before them; whether by their own hand or that of another matters little in this equation. The constituencies which community colleges and four-year institutions are committed to serve have expressed a need and a desire for opportunities that extend beyond those offered in the past, and we in higher education must rise to the call.

It is interesting to note, however, that this rise to the call may be for a variety of reasons or motivations. Among them are certainly those which would be considered altruistic, and recognizing the inherent ‘right’ of these individuals to access an education. Some may also include more pragmatic motivations, such as the need to garner more FTE (full-time equivalent, a measure intended to indicate the number of students enrolled on a full-time basis, or equivalent thereof), from which state funding is often calculated. Others apparently have the perception that

there is a profit to be made, which is likely the case with those institutions which have partnered with private corporations for the purpose of developing and delivering distance education curricula.

It is safe to state, I believe, that most research is driven to a great extent by personal conviction, or at least emanates from some point of view that is firmly held by the researcher, and this research is no exception. My own adult life experiences, many of them having had some either direct or indirect connection with higher education, have been instrumental in the development of this path that has ultimately resulted in my research direction. In the early to mid '80s, I became intimately involved in an effort to educate very rural force of Emergency Medical Technicians (EMTs) in Oregon. Very quickly, I realized how difficult it was for these incomparably dedicated individuals to achieve their needs and goals with respect to education within their field. Part of this effort included my becoming involved in teaching at the local community college on a part-time basis, and I soon felt the need to do much more that I could accomplish from that vantage point. Consequently, I made the decision to obtain a paramedic-level education, which would place me at the height of achievement in that field and therefore a much more respectable position from which to execute this mission. In order to obtain such an education, I myself had no other choice but to relocate to another part of the state for a full year; distance education opportunities were not – and still are not – abundant in this particular professional-technical field, especially at this level.

I returned to the area and heightened my level of involvement with the community college, along with a number of other region-wide efforts, to bring

educational opportunities to these people for whom I had developed the utmost respect. It was only a matter of time before I was able to secure a county government position which allowed me to oversee and direct another aspect of this most important regional effort from a very closely related vantage point.

Technology was at that time not well developed, particularly with respect to the infrastructure in that region of the country. Distance education, however, was still a pivotal component of our program. The effort to communicate training materials and programs to the outer reaches of our region took on many forms, but most of them were primitive, including physically transporting an instructor to the student population on a regular and recurring basis. Sheer size of the area required that I employ a number of individuals to assist in this approach, and I had the luxury of personally selecting those individuals who I believed would be the most effective teachers and trainers. Certain character aspects of these individuals with whom I chose to work soon rose to the surface, and became of primary concern to me in choosing and/or grooming those who would eventually be added to this exclusive cadre.

These attributes included willingness to extend themselves and to work hard for those who were willing to work to learn, the willingness and patience to share what they had learned, to hone their own knowledge to a fine edge, the willingness to work to find the most effective method of conveying this information to others. Above all, there was the recognition that these people for whom they were providing training would likely not be able to access it in any other way, and that their effort was critical to the training mission. All this equates to an attitude of a

teacher. Despite the fact that many of these individuals lacked the academic qualifications commensurate with professional educators in higher education, they possessed every bit of the appropriate attitude that is necessary for success in teaching, regardless of the level of application.

During the decade that preceded my entering this doctoral study, years which I spent both in the aforementioned setting and in another community college teaching in one of the more sophisticated professional-technical programs in the region, I learned something else about faculty attitudes. I had come in contact with a wide variety of teaching professionals, in an equally wide variety of educational settings. Whether the issue was implementing something new like distance education or revisiting the institutional policy of standardizing course syllabi, the attitude of that group appeared very clearly to be of paramount importance in the acceptance and support of such a notion. There are, of course, other variables, but without their buy-in any such venture was destined to meet with a limited degree of success. Again, it was an issue of attitude. My unofficial assessment is that those with an attitude such as described for those with whom I worked in delivering education to rural EMTs in Oregon were very closely aligned with those who would find a way to support a new idea.

For all the experiences that I had in the successful delivery of distance education, there were also those at the other end of the spectrum. These were the result, by in large, of administrative control that did not take into account or value instructor input. The issues revolved largely around the match, or lack of, the pedagogical approach with the technological delivery approach, and with the

suitability of the intended audience to the chosen delivery strategy. When faculty have directives to teach a course that is not well designed in these respects, the results can be disastrous.

Social Implications / Relevance of Topic

When we, as human beings, are confronted with the notion of entering into a new phase of our lives, with doing something that we have not done before, there is a natural tendency to want to consult with a peer, especially with one who had made that leap of faith, or has acquired some degree of experience in that new venture. Faculty in institutions of higher education are certainly no different in this respect. Faculty tend to follow faculty, and generally consult with these peers when confronted with the idea of change well before they will consider following the lead of or consulting with a group perceived to be outside their immediate culture, such as administrators. Faculty goals include becoming successful at what they do, thus it is a natural thing to want to know how others, especially other faculty who may be perceived as having been successful, have become so in doing whatever the thing is that is perceived as new. Patterns established by senior, experienced faculty will likely be emulated by those who are newer, and less experienced, while patterns set or suggested by those whose normal routine lies outside the classroom will likely be greeted with some degree of skepticism, if not simply ignored outright.

The manner in which these patterns of the more experienced practitioners are learned is worthy of some consideration. It seems a commonly accepted notion that teachers have, in general, a difficult time accepting that they themselves may

have something to learn. How is it that they will learn, then, the 'tricks of the trade' with respect to distance education? One-on-one? Peer support group sessions? In-service? Journals? Conferences? Again, many variables to this equation could be enumerated. The answer is indeed related closely to the intended outcomes of this research.

Higher education is in a transition period with respect to distance education; most institutions actively engaging in delivery of courses and programs at a distance have some degree of difficulty in convincing existing faculty to enlist in the ranks of those teaching at a distance, and can claim only a small fraction of their faculty actually do so (Cooley, 2000). Many institutions hope that, as current faculty retire, they will eventually be able to recruit new faculty who are comfortable with technology, and expect the opportunity – or at least the requirement – to teach at least part of their required load in a distance delivery format.

New professors and instructors, however, are still all over the board. They come into the profession, or perhaps to the institution, anywhere on the full spectrum of possibilities with respect to their experience and/or exposure to teaching with technology. Some have used technology extensively throughout their teacher training, while others have not even had any teacher training, much less exposure to teaching with technology (Phillippe & Patton, 2000; Technology, 2000). Higher education is at the mercy of its own hand, for the most part, with respect to this dilemma. We educate those who we intend to join the ranks of educators, and thus it is essentially our own challenge to educate those future

educators in the manner in which we hope to see them educate others. Efforts are underway to do just that, but their effects have yet to be felt to any great extent by the institutions that hope to employ this rich new field of practitioners. More importantly, higher education must find a way to effectively motivate their present faculty cadre to engage in distance teaching.

Contribution to the Field and the Purpose of the Study

The current and most immediately pressing dilemma lies with those faculty who are already teaching on the campuses across the country; there are no doubt more faculty willing to enlist in the ranks of those teaching in this manner than have already done so. What appears to be lacking, in part, is the clear notion that institutional support is available, that it is known to be meaningful and applicable to their needs, and that there are perhaps options for accessing such support.

The purpose of this study is to identify the internal support systems that contributed to the success of community college faculty teaching in a distance education setting. How do those faculty who are perceived as being successful in this setting attain such stature? What are the contributing factors? If contributing factors can be identified, can they be taught and or shared with others who are admittedly not yet among these ranks? Can such information contribute to the most effective uses of the institutional resources which, in some states, are becoming more limited each year?

Research Questions and Setting

The specific focus chosen for this study is in the area of institutional support. The intent was to gather data, through the use of personal interviews, on the perception of such support from faculty who are teaching in a distance education setting, and who are considered to be successful in their efforts. The research questions were chosen so as to illuminate the background and level of experience of the participants, and to gain insights as to their perception of various areas of institutional support, as well as their perception of their own teaching and learning style. The questions were articulated as follows:

1. Please speak briefly to your experience in distance education. What technologies have you had experience with? Do you, in general, feel that you have been successful in teaching in the distance education environment?
2. How do you feel about the level of support that this institution's administration demonstrates towards distance education?
3. What is your relationship with student services at this institution? Do you feel that your distance students have adequate access to the necessary services?
4. What has been your experience with course development process at this institution?
5. What has been your experience with technical support personnel / department at this institution?
6. Are you comfortable with your own learning style? Do you feel that your own learning style is reflected in the manner in which you have approached distance education?

Faculty from several community colleges in Oregon were interviewed for this study. The community colleges are located urban, suburban, and rural settings. Faculty were chosen based on the perception of their success in teaching in a

distance education setting, as perceived by their supervisors and/or deans. No preference was given with respect to gender, discipline, time spent teaching, region, size of institution, or anything else that I can think of.

Terms/Definitions

Every attempt has been made to be consistent with respect to terminology in this study. However, the field is still experiencing rapid growth, and is consequently still defining itself. New terminology develops on a regular basis. There is some expectation that terminology will vary to some degree from one participant to another. Data analysis should, however, accommodate these differences. Terms used in this study are as follows:

Distance education: education delivered to students who are separated by time and/or space from their instructor.

Administrative support: support from the upper level administrators of the institution, e.g., the president, vice president(s), and/or deans.

Course development support: support for the process of developing course materials for their delivery via some technological means, e.g., instructional design concepts, or pedagogical appropriateness of material for delivery via any given mode.

Student services support: support from that branch of campus or division of the institution that is typically considered to be that of student services, e.g., admissions, registration, financial aid, business office, advising, counseling, and student success strategies.

Technical support: support from technicians for maintenance of hardware, software upgrades, training on operation of various equipment and/or systems used in delivery, e.g., Internet file transfer protocols, e-mail attachments, or the use of studio microphones or overhead projector in a television studio.

Limitations of the Study

This study bears the same limitations that are common to nearly all qualitative studies. These arise particularly in the areas of generalizability, reliability, and the bias of the researcher.

The study is context dependent; as such any conclusions drawn are unique to this particular setting, and not considered to be generalizable to all other community college settings. There may be some commonalities, however, between some settings, which the reader is best suited to identify. For such cases, the implications noted in Chapter Five, and the Recommendations in Chapter Six may bear some consideration. Also of note are the suggestions for further research, included in Chapter Six.

Another factor which is somewhat dependent on the context of the study is whether it is 'fair' to expect that, given the same study was performed by another researcher in another setting, that the results bear any great deal of similarity to those of this study. Even slight differences in context may be responsible for a different set of outcomes, as may a slightly different approach or bias from the researcher. The study cannot, therefore, be considered reliable to the extent that the results produced under such even slightly different circumstances would be the same.

Finally, the bias of the researcher must be considered. This was discussed in great depth previously in Chapter One, in the section entitled Self-Disclosure, and will not be repeated here.

Chapter Two:

Literature Review

Introduction

The purpose of this study is to identify the internal support systems that contributed to the success of community college faculty teaching in a distance education setting. As these faculty move towards success, are there identifiable factors in this transition which, if nurtured, would facilitate a similar transition for those faculty who have not yet found similar success in distance teaching? Is there any resemblance to what we already know about the attitudes of faculty in community colleges towards the implementation of technology, or of change itself?

The notion of support is embedded in the concept of transition, and is therefore pivotal to this study. Faculty need and want support as they embark on ventures into territory that they view as essentially uncharted.

The literature review is organized around the four categories of support that form the core of the framing questions used in the interview process:

- technical support
- support for course development
- support for student services
- administrative support

Technical Support

It comes as no surprise that qualified technical support would be high on the list of any professional who is about to become involved in a new and highly

technical aspect of their field. The infusion of technology in the educational arena has perhaps been a classic example of such a notion. As educators faced the onset of the information age, the profession found itself faced with the increasing reality of the presence of technology, a presence that was not merely indicative of another passing fad or rage in new teaching strategies as many had predicted, but one that was and is here to stay (Millichap, 2000).

My own experience with the early stages of this evolution led me to believe that little had been contemplated beyond technical support for those of us who chose to attempt to integrate technology into the profession, and that perhaps even that element had been underestimated. In 1993, for example, as a new faculty member in an institution with a reputation for being on the cutting edge of technology, I did not even have a computer on my desk; my willingness to use one, along with my persistence in the acquisition of same, were instrumental in changing that element of the equation over time. Early adopters, as we were called, had in common the attribute of being relatively 'tech-savvy,' or at least had the ability to absorb fairly easily the jargon and concepts behind the technology in order to navigate our way through the ever-expanding realm of new applications. Even less than a decade ago, our efforts at integration of the technical applications into the academic realm were fraught with complexity, and were far from what eventually became to be known as 'user-friendly.' Text-based applications were the rule, and the now familiar help screens were completely non-existent. A good relationship with the technical support department, then, was absolutely essential if one was to succeed in any aspect of integrating technology into what we did every

day, whether it be managing a new electronic grade book or exchanging files with colleagues in another institution or state.

Many early programs in higher education that focused upon the integration of computers in the classroom, or in educational administration, realized very quickly that technical support would be absolutely indispensable. Some of the early literature suggested that technical support alone may have been viewed as sufficient to commute any such integration effort into a successful one (Holmes, 1985; Koltai & Wolf, 1984; Mangano & Corrado, 1980).

As the electronic landscape broadens, and more educational institutions make the commitment to technology's presence, an increasing number of faculty have become aware of the need to learn new skills (Murphy & Terry, 1998). Distance education has quickly become one of the focal points of the application of technology. Each aspect of technology, too, has its own set of requisite skills to which a practitioner must attend in order to be successful in course delivery using that particular strategy or technology. The knowledge required to deliver course material using a computer is vastly different from that which is required to manage a course over an audio-visual system. Faculty new to the institution may also be unfamiliar with certain technologies unique to that environment, not to mention being new to technology in general (Bialac & Morse, 1995; Garrett & Weiner, 1999). The early days of technological integration were fraught with disparate systems – no two institutions seemed to do things the same way, much less have similar equipment and/or software (Roberts, 1991).

Adjunct faculty comprise approximately 65% of total community college faculty nationwide (U.S. Department of Education, 2000), and therefore must be considered in the mix of those needing access to quality technological training sessions, especially since many of these individuals find technology to be one of their most reliable links to the campus (MacFarland, 1998). An increasing number of faculty, full-time and part-time alike, are finding that the online environment, i.e., the Internet, is a conveniently accessible and user-friendly format for obtaining the training they feel is necessary to develop and continue their integration of technology and teaching, and are thus willing to learn new skills (Schrum, 1992). Still, many of these same individuals feel that they do not receive the level of support that is appropriate to their endeavors, and often feel somewhat isolated and alone in their quest (Schrum, 1992).

The evolution of training for faculty and staff brought the realization that certain competencies ought to be met prior to engaging in such training (Grubb & Hines, 1999). This realization was accompanied by the recognition of the stratification of faculty and staff as learners themselves, and the fact that not all were at the same level with respect to technology, nor would they ever likely be so (Grubb & Hines, 1999).

Support for integration of technology eventually evolved from an activity that was provided for faculty and staff, or in some cases suggested that they would need. Faculty and administrators alike, both new and inexperienced and veterans of the institutions, began to request specific types of training. They wanted to learn about course development strategies, techniques to stimulate a higher degree of

interaction, and the appropriate application of specific technologies (Schauer, Rockwell, Fritz, & Marx, 1998).

Many institutions now offer extensive and comprehensive training programs for faculty about to engage in teaching at a distance. Faculty are assured of knowing the essentials about not only the technology that is incorporated in their teaching, but are also beginning to incorporate the pedagogically appropriate approach for that technology and the curriculum with which it is merged, bringing to the forefront the notion of course development strategies for distance education (SchWeber, Kelley, & Orr, 1998).

Technical support has been and continues to be integral to the success of distance education. The willingness of faculty to engage in and/or continue to develop distance education courses, as well as in the success of the programs of which these courses are a part, all hinge on the availability of this crucial element (Alfano, 1994; Baker, 1998).

Course Development Support

The notion of course development, or applying instruction in such a way that it facilitates student learning, has long been a critical factor for instruction. Even by the turn of the last century, systematic investigations into the manner in which humans learn, and the application of strategies for enhancing such learning, were well established throughout most of the western world (Merriam, 1991). Theorists in human learning are a well established chapter in the arena of education. Regardless of the name by which it is called – course development,

course design, instructional design, etc. – the necessity of its consideration is abundantly clear.

According to the National Center for Educational Statistics, approximately 79% of public four-year institutions and 72% of community colleges in the US participate in some form of distance education. These percentages rose steadily in the several previous years, and are expected to continue to rise over the next several, both in terms of the percentage of participation and the extent of the involvement (Parrott, 1995; U.S. Department of Education, 2000).

Well before the introduction of the Internet in education, computers have been used to deliver course material, and attention to course design was being advocated (Billings, 1984). Borge Holmberg, a mainstay of advocacy for distance education, identified careful attention to the concept of course development as a key component to the success of any distance delivered program (Holmberg, 1980; B. Holmberg, 1989b).

As the Internet became more prominent in the technological array of possible delivery strategies, researchers continued to identify course development efforts as integral to effective instruction (Clouse & Garrett, 1994; Cochenour & Reynolds, 1998). According to Willis, the factors that contribute to the quality of distance education programs include planning, instructional design and management, support for teacher-student interaction, empathy for student needs, and instructor training (Willis, 1992).

Not surprisingly, faculty attitudes figure in to the successful implementation of anything considered new in education, the implementation of technology and

distance delivery of course materials being no exception. A definite pocket of resistance exists among the faculty of most institutions that have begun the foray into the realm of distance delivery; there are those who are uncomfortable with distance education, and/or reluctant to embrace the technologies that accompany the concept. Concerns have been expressed around a variety of aspects of this trend, including the overall quality of courses, e.g., canned courses, and preservation of human contact (Monaghan, 1995; Parrott, 1995).

Educational training and development professionals are beginning to address the needs of both faculty and students, recognizing that each group must learn new skills to adapt to this environment (Everett & Grubb, 1997). Faculty, in a variety of settings in higher education, have acknowledged that a change in style is necessary to succeed in teaching at a distance (Riner & Billings, 1999). Some researchers believe that, although institutional support for course development is both desirable and optimal, faculty must excel in their field in order to be successful in their efforts to transcribe their course material into a distance delivery format (Kubala, 1998).

Of particular interest to many development professionals is the notion of interaction between the instructor and the students; two-way communication is considered imperative (B. E. Holmberg, 1989). Interaction is indeed the key to success, according to Hassenplug; students can better relate to material when some type of interaction is incorporated, with the content, instructor, or each other (Hassenplug & Harnish, 1998). Moreover, some researchers advocate the interactivity be directed specifically towards the development of a learning

community, and that “success in distance education is positively correlated with a sense of and ownership and community among the students” (Cochenour & Reynolds, 1998).

The *process* of course development for distance delivery has also been shown to have an impact on the attitudes of faculty towards the concept. In a study that closely monitored the process of curricular redesign of a course that had originally been delivered by independent study, and was being reformatted for delivery via the WWW, researchers found that the new curriculum more accurately addressed stated learner outcomes. Also, more effective use of evaluation was achieved by the incorporation of periodic formative assessments, which allowed for more enhanced student learning. Faculty with significant experience felt they had acquired worthwhile insights to the curricular design process, and even felt that they had learned techniques that might be applicable to other aspects of their teaching (Latta, Bicknell-Holmes, & Martin, 1998).

This notion may well develop into something that some researchers have recently been suggesting, i.e., that conscious efforts to design the course delivery in a distance setting may have something of a reciprocal effect on classroom delivery techniques. Coupled with the implementation of outcome-based education, student support efforts, and interaction, viewing and assessing distance education by the same criteria as all higher education institutions may actually come to pass (Shearer, 1999).

Student Services Support

While much attention has been directed over the past few decades to the delivery of course content in the distance education setting, the distance delivery of those services to which students had become accustomed in a campus setting has been quite another thing. It seems that many institutions, in their attempt to keep up with the 'gold rush' of distance delivery, simply did not consider the need for such services, or more likely, did not feel the need to invest in the development of such support functions for distance delivery programs that had not yet proven themselves (Manzo, 1995). By the mid '80s, however, the need for developing services that would contribute to student success and learner independence was becoming clearer to those institutions already immersed in distance delivery (Graff & Holmberg, 1988).

Research at the time (B. Holmberg, 1989a) suggested that those institutions which considered distance delivery to be a legitimate mode of education – as opposed to a substitute for the more conventional, face-to-face delivery – might be more student-friendly. Rather than focusing on such aspects of delivery as institutional schedules, fixed assignments, and traditional course duration, these institutions tended to demonstrate the ability and willingness to adapt to student constraints, such as work, family, and personalized student goals. Holmberg also believed that encouragement of student autonomy and independence were of paramount importance in distance education (B. Holmberg, 1989a).

Many professional development specialists are now taking into account student factors as they assist faculty and institutions in transitioning learning

materials to the “virtual environment.” Recognition of the motivators for students to engage in distance education, such as convenience of time and location, as well as their ability to develop coping mechanisms for new environments and methods, are much more common. The need for supportive faculty and institutional systems, however, remains crucial to their success (Everett & Grubb, 1997; Mortera-Gutierrez & Murphy, 2000). Student affairs professionals are becoming more proactive in both on-and off-campus program collaboration efforts, in an attempt to engage both students and faculty in more meaningful learning experiences (Fried, 1998). Moore suggests completely redesigning the distance delivery approach from a systems view, integrating all aspects of the educational experience (Moore, 1993).

Library services have risen to the challenge of distance education, and recognized the need to adopt methods of sustaining students at a distance (Dowlin & Loertscher, 1999). As such, they have emerged as a prominent player in the distance education setting. Library staff have successfully filled the roles of instructional consultant, technology coordinator, and information specialist, and have excelled over the past decades in distribution of learning materials to distance student populations, as well as facilitating the role of faculty in directing students towards materials useful for their study. They can help to match information resources to course objectives, teaching and learning styles, and subject content to facilitate more creative thinking and critical analysis among students (Ruksasuk, 1999; Schamber, 1990).

Most higher education students have appreciated the increased access to educational opportunities afforded by distance education, and have been willing to

make accommodations to the technology. Faculty, however, are less enthusiastic. Their concerns center both on the demands of teaching distance learning courses and the challenges of learning in a distance environment (Colleges, 2000). Many still perceive a lack of overall institutional support for distance students (Saba, 1999).

Training programs for faculty about to enter the distance education setting have begun to appear in many institutions, focused on these perceived shortcomings. One effective approach has been to recruit faculty with necessary interests and skills, who can not only master the technology, but also adjust their pedagogical approach to the delivery medium. The training programs can then be constructed to acquaint them with the specific elements of the institution's instructional resources and student services (SchWeber et al., 1998).

There has been a growing recognition for the need for development of the full spectrum of services to distance students, not only in those areas which help these students to be successful (Paneitz, 1997), but also in those services which make the educational experience more convenient – or in some cases just possible – to access (Cochenour & Reynolds, 1998; Ferrell, Wright, Persichitte, & Lowell, 2000). Some institutions have integrated into a single interactive environment the systems by which they deliver curricular components, communications and logistic services (Shearer & Rose, 1998). Individual states are developing comprehensive plans for distance education, which include recommendations for a full contingent of services to be made available to distance students, just as they are for on-campus students (Baker, 1997; Baker & Wolff, 1998). Some of these recommendations

suggest the solicitation of feedback from students on reasons for successes and failures of distance courses (Minich, 1996).

Finally, the issue of accreditation of those institutions which engage in distance education has become an area of intense interest. Recommendations have been heard from within the field of distance education on the need to assess distance education by the same criteria as is the rest of the institution (Shearer, 1999). As we enter the new millennium, accreditation agencies are beginning to mandate just that – distance students must be availed the same array of services as are available to their on-campus counterparts (Commissions, 2000).

Administrative Support

Implementation of a distance education program, or the integration of technology in the teaching and learning process, is essentially a process of managed change. As such, the attention of the institutional administration – the leaders – is of paramount importance (Anderson, 1993). Leaders must be involved in conceptualization of change, stay at least in touch if not thoroughly engaged throughout the implementation of the change, and demonstrate the “commitment to the proposition that the schools most important resource is the human resources that the system employ.” (Schlechty, 1991).

Distance education programs have, of course, been no exception in the need for the engagement of institutional leaders (Holmberg, 1982). The case for administrative support has been made repeatedly over the years. (Billings & et al., 1994; Garrett & Weiner, 1999; Grubb & Hines, 1999; Murphy & Terry, 1998) Examples are not infrequent in the early implementation of many institutions of

technology in teaching, however, of the less-than-enthusiastic engagement of the leadership. These examples span a significant period of time with respect to the relative 'age' of distance education and the implementation of technology in education (Hassenplug & et al., 1995; Keegan, 1984; Schrum, 1992). Just as the presence of administrative support is viewed as critical to the success of the implementation of anything new in the educational arena, the lack of such support can lead to the demise of an attempt, and result in a rather clear message being conveyed to faculty and staff that their efforts are less than valuable (Morse, Glover, & Travis, 1997).

The definition of administrative support takes on – not surprisingly – somewhat different connotations as the setting of technological implementation changes. Various authors and researchers have called for specific aspects of such support: there may be a stronger need for training faculty in the application of new technologies, or for the inclusion of financial incentives for course development (Grubb & Hines, 1999) or for greater degree of recognition of extra effort extended by some branch of the institution (Murphy & Terry, 1998). A study that focused on faculty perceptions of their own needs in development of distance education programs found that those functions of the institution that are typically provided for by the administration, e.g., technical and logistical support, compensation, etc., were ranked second only to instructional issues in their order of importance (Schauer et al., 1998). In some institutions, faculty recruiting strategies are being given special attention, in order to attract faculty who are of sufficiently high quality and who come equipped with the necessary skills and motivation for

distance education (Lynch & Corry, 1998). Simply put, however, the need is for *comprehensive* administrative support (Garrett & Weiner, 1999).

Another important perspective of support that has been expressed – not unlike much of the literature regarding the management of the change process itself, as discussed earlier – is that of moving the whole institution along the continuum of change in support for the effort (Shearer & Rose, 1998). Baker identified five factors that affected the development of distance delivery programs in higher education: technological capacity, operational and technical support, acceptance by faculty and staff, funding, and the firm commitment from the institutional leadership. Most notably, he observes that institutions that are most successful in the implementation of such programs have realized that these factors tend to be interdependent and linked as parts of a whole system, and thus devote attention to all of the factors as opposed to focusing upon them individually. He concludes that the potential for such a system is greater than the sum of its individual parts (Baker, 1998). This exemplifies the systems thinking of Wheatley, and Senge's advocacy of systems and team learning (Senge, 1990; Wheatley, 1999).

For institutions still on the verge of implementing technology and distance education programs, recommendations and guidelines for success in such a venture are plentiful. Again, the degree of inclusion of the various aspects or interpretations of administrative support noted in these monologues covers a wide spectrum. Most notable, however, are those recommendations which have emanated from state- or nationwide planning efforts.

Oregon developed a statewide plan for the implementation of distance education within the community college network, and included in the plan a comprehensive list of recommendations. These recommendations, and the success anticipated by their implementation, depend heavily on the administration of community colleges, and more specifically the presidents themselves, for leadership and follow-through on the specific elements of the plan (Baker, 1997).

The recently published Guidelines for Good Practice, issued by the American Federation of Teachers (American Federation of Teachers, 2000), addresses a number of recommendations for institutions wishing to engage in distance education. These recommendations are focused primarily on instructional issues, however, clear reference is made to the need for close attention to these practices by administrators as well, for it is the administrators who will ultimately provide for the implementation of these practices.

Also recently published are the draft Guidelines for Evaluation of Electronically Offered Degree and Certificate Programs, issued by the joint accreditation commissions for higher education in the United States (American Federation of Teachers, 2000). Of the five areas specifically targeted for attention in institutions that offer such programs, institutional context and commitment appear first on the list, and include topics such as budgetary commitment, infrastructure development, internal organizational issues, and careful attention to student success.

Unquestionably, the die has been cast for institutions entering into distance education. That the requirements levied by such a casting will evolve, along with

the technology and our understanding of how to use it, is very likely just as unquestionable. The leadership necessary to guide the way will be indispensable.

Chapter Three:

Methodology

Problem Statement

The purpose of this study is to identify the internal support systems that contributed to the success of community college faculty for teaching in a distance education setting. The following procedures were used in order to investigate this problem.

Location of Study

The subjects for this study were selected from community colleges throughout the state of Oregon. Of the eight participants, three were faculty in the humanities area, two were faculty in the hard sciences, and three were faculty in professional fields. Each has been assigned a pseudonym for the purpose of protecting his/her identity.

Interviewing as a Method of Data Acquisition

The process chosen for data acquisition was that of the personal interview. Methods and direction for this process were gleaned from prominent publications in the qualitative research domain (Holstein, 1995; Seidman, 1991).

Questionnaire Development

Questions used in the interviews were developed and based upon my own experience in both teaching in and administering distance education programs at community colleges in the state in which the study was conducted. For a more

complete account of that experience, please refer to Chapter Four, pages 51-54. The framing questions themselves are listed in Appendix C.

Identification of Subjects

In order to enlist subjects for this study, I first contacted the Dean of Distance Education, the Dean of Instruction or the Vice President of Academic Affairs. This choice was based partly on the nature of organization of the administrative strata of the given institution, and partly upon my own understanding of who might have the best knowledge of the faculty teaching in the distance education setting. After explaining the nature of the research project, the need for confidentiality, and asking for their cooperation, I requested a list of faculty at that institution who this individual felt were enthusiastic about teaching in a distance education setting. From this list, I contacted one or more faculty members, and confirmed his/her own interpretation of enthusiasm for teaching in a distance setting. Upon such confirmation, I explained the nature of the study. I then requested his/her permission to be interviewed, and if granted, went on to explain the process through which their permission must be documented. Confidentiality of identity was guaranteed to the participants; the identity of each participant remains known only to that individual and to myself. (see Appendices A, B, D)

Contact with Subjects

I interviewed a total of eight faculty for this study. The first four of these interviews were conducted face-to-face, and were scheduled without difficulty. The interviewees were asked to identify a location on their campus that would be quiet

and free from interruptions, such as telephone calls or visitors. One interviewee referred this task back to his dean, but all others willingly identified such a location. In two cases, the interviewees felt that their office provided such an environment; the closed door indicated that they were not to be interrupted by visitors, and phone calls could be forwarded to the answering machine. For the other two, a small conference room on campus met these qualifications better than did their respective offices.

The fifth through the eighth interviews were conducted over the telephone. This was initially due to inclement weather having forced cancellation of the fifth scheduled face-to-face interview. After three cancellations of this interview, I chose to arrange a telephone interview. I attempted to conduct the sixth interview in a face-to-face manner, however, personal scheduling difficulties on the part of the interviewee prevented this, and the telephone again became the method of choice. As winter set into the region, the telephone became the preferred method, as opposed to driving significant distances throughout the state in adverse winter road conditions.

The face-to-face interviews were tape-recorded using a high quality micro-cassette recording machine equipped with an internal microphone. The equipment was tested thoroughly prior to the actual interviews to ensure that microphone pickup and the resultant recordings would be of the highest possible quality, and especially to determine if an external microphone was superior to the internal device. The internal microphone was chosen, since it yielded recordings of nearly identical quality to that of the recordings that utilized the external microphone, and

my previous experience in interviewing had demonstrated that it presented a less ominous presence to the interviewee.

The telephone interviews were recorded using the same machine, with a special microphone device that patched the tape recorder directly into the telephone line. This yielded recordings far superior to those made with a suction cup style microphone designed to be attached to the telephone receiver. In both face to face and telephone interview settings, a new tape was used for each and every interview, to ensure the best possible results.

The choice of time for the interviews was always left for the interviewees to decide, and all interviews were conducted during regular daytime business hours, at a time when each participant could block out the time and feel free from interruptions. The interviews ranged in length from approximately one hour to two hours, with most of them lasting just over one hour. The variation was due to the depth to which the interviewees answered questions, and the degree to which the interviewees were able to articulate their answers. On only one occasion was the interview interrupted, by a telephone call which the interviewee felt he must answer, causing only minimal disturbance in the flow of the conversation.

Because of the precautions and preparations made with the equipment and in recording the interviews, the tapes yielded nearly perfect audio reproduction of the interviews, thus making transcription of the tapes a very straight-forward process. All interview tapes were transcribed by myself. For the first interview, I used a transcription recorder equipped with a foot switch, time-adjustable rewind-on-stop feature, and headphone capability. Time to transcribe this interview, which

lasted approximately one hour and yielded a document of 1650 words in length, was approximately four hours. This method was used primarily to create a benchmark for testing the transcription method that I used for the remainder of the interviews, which was voice-activated software in conjunction with my personal computer. The particular software chosen for this task was Naturally Speaking, version 4.0, by Dragon Systems. (see Appendix E for full description)

Voice-activated software has advanced significantly in recent years, and is now very reliable, given the operator takes the time to “train” the software properly to both his/her own style of articulation and style of writing. This process actually takes very little time, and both voice and data files can and should be updated at any time throughout the use of the software. Once this is done, the operator can speak at what most would consider a normal conversational rate, and rely on dependable transcription. Slurring of words must be avoided, but contractions, acronyms, and other customized forms of speech can all be used if called for in the transcription.

I used the same transcription recorder as was used for the first typed transcription, along with a pair of high quality headphones with a built-in boom-type microphone. The headphones were plugged into the tape recorder to listen to the playback, and the microphone connected to the computer soundcard. Using this technique, I could listen to the interview, and dictate simultaneously at nearly the same speed as the interview to which I was listening. Being careful to articulate clearly, this procedure cut the transcription time roughly in half: a one hour, 1650

word interview was transcribed in approximately two hours. This method of transcription was used for the remaining seven interviews.

This presented a much more plausible method of transcription than I had faced by either typing the interview myself, or by having them typed for me by professional transcription services, which I viewed as cost-prohibitive. The prospect of using interviews as a data-gathering process in future research is also far less foreboding that may have otherwise been the case.

All transcribed interviews were rendered into word-processed documents, and are stored on the hard drive of my personal computer. Two backup copies, using two different electronic media (1.44mb floppy disc and 100mb Zip disk) of each interview were also made. All tapes and backup discs are in the sole possession of the researcher.

A brief description of each participant, his/her experience in teaching in a distance education setting, and other relevant information follows.

Humanities Faculty

Emily had her first experience in teaching in a distance setting about five years ago, when she began delivering courses using one-way video, one-way audio technology. Since that time, she has continued to teach at a distance using some variation of video-based technology, and feels quite comfortable with this medium. In the past year, she has begun teaching some of the same courses on the web. Although she admits that she is not nearly as comfortable with this technology as she is with video, she is still willing and eager to develop courses for this mode of delivery in order to fill the needs of her students. The original course materials for

her web delivery, including the web site itself, were created by a colleague, who taught this same class over the web prior to Emily taking over the courses. She concerns herself primarily with developing and editing content, and relies heavily on technical support staff to help her with many of the processes involved in the maintenance and ongoing development of her web site.

Franz has been teaching via distance for five years. His first experience was with videotapes of campus classes, which were mailed to students. Assignments were returned to the instructor in the then-standard fashion of postal mail, inter-campus courier, etc. He also taught via one-way video, two-way audio for two years. Portions of the tapes from both of these experiences have recently been edited, combined with audio cue sheets and PowerPoint presentations, and used in streaming audio and video presentations over the web. Students now have a choice of taking the courses in either delivery method – by strictly videotape, or over the web. In the case of the web delivery, students are required to search the web for additional sites related to the material, and are thus exposed to a wider variety of material than he would ever have time to present in a face-to-face classroom situation. In either case, students communicate with their instructor via distance technologies – mostly by e-mail – and Franz feels that the interaction is far greater than it ever was in the classroom setting. Franz's entire teaching load is now comprised of distance education classes.

Dale has been teaching via distance for four years, and at the time of the interview, distance teaching constituted 60% of his teaching load. At this point, his distance education classes are a mix of delivery styles, from correspondence-style

delivery to the Internet. He give his students the choice of technologies with which they would like to communicate. This is based upon the fact that the region in which Dale teaches is not well equipped with technology, and Internet-connected computers are not nearly as common as in many other regions of the country. Additionally, students may change technologies in mid-course; if they start out using the web, for example, and find it too overwhelming, they may fall back to faxing or even mailing in assignments. Ernest feels that this approach keeps the primary focus on the course content, and allows the students' familiarity with technology to grow over time. This has in fact proven to be the case, and more students each term are using computer technology.

Hard Science Faculty

Marie teaches a lab science course exclusively on the Internet, and has been doing so for about a year. Her institution utilizes a combination of software to provide the course components. Students use the web to communicate with the instructor and with each other, as well as to take weekly quizzes. Midterm and final exams are offered either through a proctored site, or the students can come to campus. The lab component is designed to be done by the students at their homes. Marie has identified two principal hurdles for her students. The first is in understanding the nature of a distance education course and the time required. Many of her prospective students appear to enroll thinking that distance ed should be somehow easier than their campus versions, and are surprised -- even shocked -- when they learn differently. The second is procrastination; too many students seem

to put things off too long. Consequently, she often finishes the term with a smaller, but more dedicated group.

Albert teaches a lab science course in the Internet; his students complete the lab component by coming to campus once a week. Software used for this course has changed recently, from a proprietary integrated package to a combination of independent web-based components. While Albert feels that the integrated software had certain advantages over the current system, especially with respect to tracking the students' progress, the change was necessary because of rising costs of the original package. Even so, the current system is an interim measure, while the college awaits the installation and implementation of another integrated system. He has made some of the same observations as his colleague in the sciences, Marie, although they teach at different institutions. He refers to the phenomenon as a bimodal distribution of students, which he has observed in campus-based classes, but feels that the Internet delivery approach accentuates the distribution; the successful students are even more successful than the successful students in the campus classes, while the unsuccessful students tend have a greater degree of difficulty, and experience that difficulty earlier in the course than do their campus counterparts.

Professional Faculty

Blake teaches on the Internet, and has been doing so for over two years. His motivation for developing the course he is currently teaching came from his students themselves; he perceived a significant demand for access to the course that was not being met by the on-campus version alone. Because of the nature of the

course and its content, he has the flexibility to offer the course with a choice of one, two or three credits, which increases the course appeal with his student audience. The college provides a combination of software for course delivery; Blake feels that the combination allows more than adequate interaction between the students and the instructor, and between the students themselves. In fact, students have a much greater opportunity to interact in this mode than he is able to provide in his campus courses.

Pamela has her experience in distance education teaching exclusively on the Internet, and has been doing so for two years. She freely admits that she was quite apprehensive about getting into this, and says that she initially felt like a “little fish swimming out with the sharks.” Consequently, she chose to use the course package that was developed at her institution through which she can administer the content, evaluations, and also allow the students ample opportunity to interact with her and with each other, all with minimal interactivity with the technology on her part. She consciously works on incorporating a few new features each term, so as to not overwhelm either herself or her students.

Charles has had just less than a year of experience in distance teaching with technology, which has been exclusively on the Internet. Furthermore, his institution contracts with an outside provider for their online course delivery which has, like his colleague Pamela’s situation, provided him with much of the technical support functions that might otherwise have to be provided either in-house or by the faculty/instructor themselves. He also has some experience in doing individual study with students; in these cases, students would make personal arrangements to

pick up and deliver assignments, and also in the manner in which they would communicate with him. Charles feels that he has been successful with many of his students, especially those with whom he is able to establish communication and interaction about his topic, and thus engage them meaningfully in the material. Some students, for reasons not clear to him, seem to fall out of the process fairly early on, never to be heard from again. Although this concerns him, he feels that this is an issue that the institution must take to heart before it will be resolved.

Data Analysis Methods

For the purpose of managing the vast amount of data produced by the interviews, I chose to create a table of responses, using bits and quotes from the interviews that represented the essence of those responses. I proceeded by first grouping participants according to their discipline area, as mentioned previously; three of the participants were faculty in the humanities area, two in the hard sciences, and three in the professional programs. These three groups formed the columns of the table. I then divided the framing questions into support categories, omitting the first and last questions; responses to these questions did not pose the same challenges in analysis as did those responses concerning some aspect of support. These four categories became the rows of the table. This process yielded a matrix of responses, which could be viewed from either axis – the faculty groups, or the framing questions themselves. Very quickly, due to the vast amount of data, the table itself became quite large and unmanageable, causing me to divide it into four separate tables, one for each of the four main areas of support. I retained the column headings for the faculty grouping. (see Table 1 through Table 4)

The process of populating the table began by reading each interview multiple times in order to obtain a general feel for the data. Comments were entered electronically using the Microsoft Word Reviewing feature. This feature allows comments to be entered at any point in the document; the comment can either be revealed as the mouse pointer is moved over the word or phrase to which the comment is attached, or a separate window at the bottom of the screen can be opened to reveal all the comments which have been made on that particular page. Comments were entered at various points throughout the interviews, noting connections or relationships with some other interview or portion of the same interview, in much the same way as a reader might jot notes in the margin of a printed copy.

Each group of interviews, by faculty grouping, was then read for each specific question. Using a new electronic copy of the file for each interview, relevant responses were color-coded by highlighting the text. A separate version or copy of each interview was used for each question, and a separate color for each categorized response. This system allowed the data to be marked and read, and hence analyzed separately for each individual question. I chose not to use one electronic copy of each interview file for color coding of responses for each question, because all too often, information that was relevant to any given question was intermingled with the intended response to other questions. Using one electronic copy would have, in these instances, caused the color coding(s) to overlap or to become confusingly intermingled.

Once each interview was marked for a particular question, I was able to extract all highlighted text, and create another separate and distinct document that contained nothing but the relevant responses from one faculty group on one particular questions, e.g., responses from the humanities faculty with respect to technical support. Using this document, I was able to eliminate redundant comments much more easily than would have been the case by going from one interview document to the next and constantly comparing comments. Finally, essential comments were extracted from this document, using the electronic 'cut and paste' technique, and placed in the appropriate place in the appropriate table.

All of these interim files – those which contained responses to specific questions from only one group of faculty – were backed up regularly. The backup media was the same as used for the original interviews, i.e., two different types of media were used in every case, as previously mentioned, thus significantly minimizing the risk of losing any interim data due to media failure. Frequency of backups varied, dependent primarily upon the frequency at which I was able to spend time working with the data. It was not unusual, however, to make a backup after each editing session. This added only moments to each session, and a great deal of security for the work that had been accomplished during that time. Few researchers could escape the anxiety or frustration of losing the fruits of ones labor for even one nights worth of work.

While this system may sound circuitous and time consuming to those not familiar with electronic document processing, it is in fact deceptively simple, and its advantages are numerous:

- for the most part, only two or three electronic documents are ever open at one time, and these can easily either be displayed simultaneously on the same screen, or switched from one to another with one mouse click, which is far easier than shuffling stacks of pages around a desk, floor, or kitchen table (which at some point must yield to other family uses);
- cutting and pasting comments from one document to another relieves one of the burden of re-keying data, as well as eliminating the possibility of typographical errors, and if multiple screens views are displayed simultaneously, is as simple as a drag-and-drop procedure;
- color highlighting, once no longer necessary after having moved relevant sections to their respective separate documents, can easily be removed with a few mouse clicks;
- comments and responses can be found very quickly once separated into specific categories; the process, for example, of finding the complete quote of one individual, based on an extracted 'essential response' in the table, was a very straight-forward process of returning to the relevant interim document, and either scrolling down to the point at which one remembers the comment to have been made, or using the 'find text' feature found in any word processing program to locate the section at which certain key words appear;
- at the very least, this system saves a great deal of paper, requires far less space on electronic storage media than one might expect (text

documents are notoriously small files), and makes interim document storage and backup a very simple and secure procedure;

Finally, consideration was initially given to employing some of the more sophisticated electronic data management systems designed specifically for qualitative research. Upon initial investigation, these software packages , e.g., Nud.ist, NVivo, etc., had some appeal for this type of project. With further investigation, however, and anecdotal evidence from colleagues that had in fact used or attempted to use such an approach, and coupling that with the fact that these packages are relatively expensive, I was unconvinced that I would witness a significant advantage over the previously described approach.

Table 1: Administrative Support

Humanities Faculty	Hard Science Faculty	Professional Faculty
<ul style="list-style-type: none"> ▪ college is excited ▪ Financially, [not] a lot of support for us... volunteering endless hours ▪ I get a good positive feel; encouraged to be innovative & try all kind of alternatives ▪ very expensive...to build these pages...but I don't think it's an attitude of taking advantage; many of them don't even know how much time it does take to do it, having never done it before ▪ distance ed is part of larger vision to increase access ▪ the administration here has been absolutely fantastic about lending support; they've backed everything I've done ▪ they've given me the liberty, and the backing, to try it, and to try it with the understanding that some things don't work. ▪ administrative support doesn't matter too much. ongoing administration of the class (really matters): getting the tapes out, getting assignments returned ▪ logistics support is key, because the students have to be able to get a hold of somebody who is basically 9 to 5...not the case with faculty member. ▪ our administrative support extends to an overall support of the faculty member. we have general support in that way. ▪ [not] really defining goals and developing a plan of development of the overall online or distance education program. could be more administrative support of the program, more visioning. ▪ not been administrative proactivity to say what are we doing, why are we doing it, this justifies it, and we take the pressure off the faculty member who is trying . ▪ when an administrator is not doing that and it's happening anyway, the assumption is that the administrator is wanting it to happen, doesn't want to communicate it to people, you start losing your trust amongst the institution. it's a loss of communication 	<ul style="list-style-type: none"> ▪ it's minimal ▪ cutback in support staff funds (time) ▪ if the administration was backing it, they would try to find that kind of support, to continue developing the courses. ▪ support , it's not big here. ▪ kind of mixed; support for the philosophy... ▪ dedication to a stable environment for developing materials [not happened] ▪ there's the desire, but the resources aren't really there ▪ we could use more support from the college as a whole. ▪ in terms of setting up kind of a standard way of developing and delivering distance learning courses, but not dictate that this is the only way that a course will be taught or developed by distance learning 	<ul style="list-style-type: none"> ▪ well, they like it; no budget ▪ if they were going to spend money on it they would have to take sides; don't take sides very well. ▪ Some say that if there were money for it, they would develop classes. release time would make it more attractive... ▪ ...some are willing to just to let [tech support personnel] go, don't think they need them. they don't, as long as they can say that this is an improper delivery method. ▪ Teachers have a really cushy job. keep doing the same things over and over again, don't have to change. students need ed delivered differently, we have an obligation to change. that means gathering skills; easier if the administration funds that. ▪ hard to say: for the most part, they are not visible. to develop course, they will pay you some money, but I really don't see any discussion about how they can help you, or support you with clerical work or anything like that. support is maybe average, or even just a little above-average. ▪ have some user groups, on the [delivery] system... ▪ no release time, develop courses on your own time ▪ at upper levels and middle levels of administration: huge amount of support to anyone who is interested ▪ found nothing but support here; can't think of anything negative ▪ a lot of training sessions available and a lot of publicity and discussion about it.

Table 2: Support for Course Development

Humanities Faculty	Hard Science Faculty	Professional Faculty
<ul style="list-style-type: none"> ▪ good tech support here ▪ overworked: don't have enough people to hold your hand ... offer classes, workshops – will do templates, do certain things for you, set up frameworks, ▪ teacher is webpage builder ▪ could get one class release time when a new class is developed ▪ all online; people think that telecourses are passé ▪ only to the extent that we go out and look for it, and find it ▪ only resource that they have is the others that have already done it. ▪ a deterrent? in the long term, it will or it does. in the short term, it's hard to say, because our faculty don't tend to embrace support very much anyway – they kind of want to go off and do it on their own. ▪ don't spend valuable resources on support, funnel that money into an additional instructor. ▪ faculty teaching center is no help at all ▪ was conversation on evaluation of courses, as they are developed ▪ represents a step beyond what we're doing with our traditional courses ▪ we're hoping for epiphanies, ▪ opportunity to critique instruction w/o being personal ▪ talk about having more instructional design workshops for all of our courses; not there yet ▪ but then again, you start trying to lay everything out, and people go, 'ah, now I see where you're heading to,' and that causes problems, too. ▪ you're not going to change [old teachers]. They're very convinced that what they are doing is the right and best possible way. ▪ professional development committee and funds to utilize at our own discretion ▪ conferences allow me to deal with the pedagogical and philosophical issues, hear pros and cons. 	<ul style="list-style-type: none"> ▪ support the first year: release time. Money was available. Now external money is not available; release time is departmental. ▪ college's push tempered by departmental funding; competition for resources. ▪ changing from being a college-supported enterprise to motivation of the individuals, and that may not be all bad. ▪ people would like to see ongoing support for the development and then shift that over to dept maint. now, no funds at all. ▪ stable/std approach for getting started, is needed here. need support on individual approaches. ▪ I think that having someone that's experienced in presenting things online...that's valuable information and should be incorporated into the training of people that are developing things online ▪ I'm not sure where they'd get that kind of [pedagogical support] except from talking with other instructors ▪ technical and developmental support are going down! ▪ the distance learning core is very supportive. And they do try to have get-togethers to discuss problems, and share ▪ [do you think that deters any of your colleagues from moving any further into distance delivery?] no, because many of my colleagues, in biology, aren't interested in developing online classes. 	<ul style="list-style-type: none"> ▪ we have two full time people... they do have some of the technology, some process pieces, & teaching experience. available to work with you one on one, in formal training sessions or as needed... ▪ tremendous help to me ▪ cover a variety of technologies: live interactive courses ▪ if I had questions about what kind of online connections can I give my students, because this is what I do in my regular campus course, ...they'd sit down and brainstorm, share what other faculty are doing, connect you with other faculty, they just acted as a resource... a real faculty-to-faculty piece that is really important. ▪ there was some outreach, to make sure that faculty knew that they were available ▪ I have been totally on my own in deciding how to present my material on the Internet...we don't get any help with that ▪ No help to develop a course as led to believe ▪ feel like I'm on my own, but my personality's that way. I like working on my own. Why I am optimistic, well, it's about the financial perspective of the college. ▪ we have to do this, otherwise college simply might not exist. a lot of students who would like an education, but can't do it because they have to work...is this better than having no opportunity at all? I think, yeah! ▪ [concept of professionally developed courses "for sale" appeals to Charles] the publishers have a lot more resources for the design of a course than I do. ▪ [The school] need[s] the FTE, and to get the FTE they need the courses. But they don't have any money - without the money, how are they going to develop it... so they're kind of stuck between the two.

Table 2: Support for Course Development, continued

Humanities Faculty	Hard Science Faculty	Professional Faculty
<ul style="list-style-type: none"> ▪ they want to be paid extra to develop new things, and my idea's that part of my job is to investigate new and trying different things, not just doing the old ▪ For some of us it's more comfortable to walk into work knowing exactly what you are going to do. For some it's: I've done that long enough, I want to try something different – and that's the distance ed people 		<ul style="list-style-type: none"> ▪ I came from the private sector... I don't need an organization to dictate or motivate me to do anything, no curriculum review process for distance ed setting. ▪ It would make a lot of sense, to teach people how to choose content for distance education but that's not happening. There is a distance learning development team, but there's nothing more than that. ▪ we have a distance learning director ...there to help us coordinate offerings. [she] doesn't have the technical skills to teach us how to put our course online. She's not a teacher, she's a manager, who in theory helps us grow our offerings, but not in the way you are describing. I think we faculty have an obligation to change our delivery method of because that's what the need is, regardless of the cost.

Table 3: Technical Support

Humanities Faculty	Hard Science Faculty	Professional Faculty
<ul style="list-style-type: none"> ▪ it's working really well. ▪ don't have to do our own, which is first and foremost ▪ one reason that we went with having a partner ▪ one of the strongest parts of our program ▪ it's understaffed ▪ that office has worked harder than really should be expected to facilitate the needs of the faculty and the students ▪ campus has been absolutely fantastic in keeping me with the technology that I need ▪ I have the latest technology on the desk ▪ very good audio visual technician here ▪ cannot think of the spots where we have come up shy ▪ part of that is that I'm willing to do distance ed ▪ [outsource provider has] been stunning about their technical support ▪ we have good support here ▪ overworked 	<ul style="list-style-type: none"> ▪ confusion over whom to deal with when something goes wrong, or doesn't work ▪ only a problem [for students] when things don't work ▪ going down! ▪ But as far as actual technical support, or support from the administration, such as "this is a valuable portion of education," I don't think we have that here. That's my feeling, anyway. We don't have that support. 	<ul style="list-style-type: none"> ▪ really strong here ▪ technology people that are available for students ▪ our support people speak English! ▪ made it pretty easy for me ▪ has not been a problem ▪ support for computer skills is pretty short around here ▪ don't have any technical support or any policy to help us develop those courses

Table 4: Support for Student Services

Humanities Faculty	Hard Science Faculty	Professional Faculty
<ul style="list-style-type: none"> ▪ online they really have the benefit of having all that stuff right in front of them on the computer screen ▪ student really has a contact point in the department of extended programs: secretary there plays logistical support, adviser, technical support ▪ no pre-registration advising inherently set up ▪ students get advising as a matter of routine before they can register ▪ One of our assumptions or hopes is that students become more aware of their learning styles ▪ the student who is good in DE format is good in the traditional format, too, because they are good no matter what ▪ work with high schools; will have more high school students. the experience they get may dictate whether they should be considering those courses, or be heading for more traditional community college setting ▪ we're seeing more HS students eager to get our classes ▪ [our provider] has pretty well already thought it through ▪ multi-modality: if they fall thru cracks from e-college, I can put them on track to get them thru the class successfully ▪ support for the delivery of any of those [modalities] has been really strong ▪ until this term we were doing an absolutely stunning job at [logistic services], and then this term, almost all my students didn't get textbooks until four weeks into term ▪ Logistics has worked really well ▪ On student success side, don't have a good screening device for students going into distance ed ▪ don't have a comp placement tool that evaluates their ability to write ▪ spend 1/3 of my time on my DL days just in contact with students, on success issues - usually a follow-up 	<ul style="list-style-type: none"> ▪ support from bookstore is unreliable ▪ wouldn't consider counseling a support portion ▪ financial aid generally pretty good, but occasional problems ▪ for this group, student services doesn't have a very big impact at all ▪ can't sense students in trouble w/ tests until after the fact ▪ evaluation is a difficult question, no matter what kind of class ▪ I try to contact them and ask them how things are going by e-mail ▪ we're still seeing a lot of phobias about computers from students that we're getting right now. ▪ two big problems are the phobias about computers, and science in general ▪ see an online class as a way of advancing themselves, but it takes a lot of time and commitment ▪ my concerns don't run too much in that direction; students must be on campus for part of the course, and can get those services at that time 	<ul style="list-style-type: none"> ▪ (tech support) about 12-16 hrs a day; I've had no problem in that area at all. ▪ haven't had students have much problem with [the registration] process. ▪ take care of [fin aid] by e-mail ▪ as part of [our intro] course we do things like study skills, learning styles, accessing resources – soon going online ▪ can't depend on the student having all of those skills ▪ I would say that the level of student services is pretty much nil. ▪ don't even know that the services exist on campus; we don't even think to ask those questions ▪ pretty much a can of worms, the way that they do [registration] ▪ student services – that something that just hasn't been discussed [in the department] ▪ Services aren't provided in the same way, and to the same degree, for distance ed students, as on the floor for those students there. And therefore, we're at risk for our accreditation. ▪ have a plan to shift our student services information into a much more dynamic comprehensive offering ▪ we believe that it is important for us to provide information, not just for distance education students, but for all students ▪ I don't believe that a lack of student services is a barrier to our instructors providing classes online. ▪ I do believe that it's a reasonable expectation of instructors to say, student services needs to be there in conjunction with the material to the online ▪ I haven't heard anyone say, I won't put class on until student services are available. I don't think that's the case

Table 4: Support for Student Services, continued

Humanities Faculty	Hard Science Faculty	Professional Faculty
<ul style="list-style-type: none"> ▪ don't have an attendance pattern that I can monitor, or body language or personal contact indicator - I've got to wait for them to contact me ▪ big difference between campus and DE classes in progress, but it all levels out an issue of how much hand-holding you should do for success ▪ bottom line is that they are responsible for initiating first contact. ▪ probably have more access to me than my campus students ▪ my office hours are right now, quite honestly, more legitimate than they've ever been ▪ a three to five day turn around on anything ▪ some research is saying you should have a 24hr turnaround. ▪ you've got to have an instructor who is a support based worker, working with the big picture look, and aware of what support is out there. ▪ it takes a community to make distance ed work. ▪ the class, the support, everything should be as invisible as possible; student should worry about content, and everything else should be as invisible as possible. ▪ they get more contact than my on-campus students ▪ they have conferences three times during the quarter ▪ haven't really heard many complaints to that effect, that students have felt that they have needed more than they can get <ul style="list-style-type: none"> ▪ I don't think that that's working particularly well, with students being able to register other places ▪ have telephone registration, able to access some of our library services from home ▪ you just have to make some accommodations [for student contact] ▪ With this distance ed, a lot of people don't have it. You're cutting out a lot of our students when you make those kinds of restrictions - it isn't open to everybody. 		

Chapter Four:

Results

The purpose of this study is to identify the internal support systems that contributed to the success of community college faculty teaching in a distance education setting.

Framing Questions

In the early 1990s, I was one of a small but exclusive team of faculty teaching in an Oregon community college in an associate degree professional technical program. Our campus-based program was of the highest quality, and had earned a reputation for excellence throughout that region of the country. Our graduates were in high demand in the profession, and the program had a very competitive admission process. Portions of our program were also offered via distance education, but this aspect of our program had yet to achieve the stature of its campus-based counterpart. While only certain elementary components of the program were offered at a distance, these courses and their associated delivery package were undergoing strenuous growing pains. This was due in part to the rapid rate of change in the development of technology used in the program delivery, but also to the manner in which the implementation of technology was managed and its potential brokered to the intended beneficiaries. Also, the professional technical arena was in the midst of an internal struggle for identity, which was the source of seemingly endless political frustration with the state regulating agencies.

Although it had never been contemplated as part of the program plan, a rather precipitous and unexpected turn of events found me very suddenly thrust into the heart of distance delivery. I had been teaching the campus-based classes, and had never imagined that I might someday be teaching the distance-delivered component of our program. I took up the challenge with almost unbridled optimism, however, thinking that I surely could make some positive contribution to this part of our program that had been plagued with problems for so long. I very quickly became thoroughly engaged in the development of new and better approaches to teaching in this manner, and eventually began to advocate for change, both within the program and the institution itself. Some aspects of the program became tremendously successful, while others remained problematic. I continued to teach distance courses for four more years, until moving on to another position in higher education.

The rapidity of the change in my overall assignment at that institution caused me to lean very heavily towards sources of support, some of which I had not previously utilized. As I developed my teaching abilities, both in the classroom and in the distance setting, I came to learn a new and deeper meaning of support, especially as it pertained to the relatively new and dynamic field of distance education. Some of these lessons came very quickly and naturally, while some were slow and almost painful. I learned about the aspects of support that, by their presence, contributed to the accomplishment of our overriding goal of delivering a high quality program to the students in our outreach areas for whom coming to campus was not an option, but were nonetheless in need of the training. I also

learned about the aspects of support that, by their absence, could bring those same noble aspirations to their proverbial knees, or at the very least, cause one a seemingly unending amount of grief in attempting to achieve them.

These lessons came to be the principles upon which I eventually founded the notion of a support matrix, from which I later formulated the interview questions used in this research. The questions are, therefore, based upon the experiences of a practicing classroom teacher who, though feeling quite comfortable in the traditional classroom environment, was moved rather abruptly into the distance teaching setting, and left essentially to figure it out alone. The principal and overriding lesson of that collective experience was that there was much to be learned in the way of providing support for faculty moving into what for most would be a new arena of teaching.

The framing questions used in this study are:

1. Please speak briefly to your experience in distance education. What technologies have you had experience with? Do you, in general, feel that you have been successful in teaching in the distance education environment?
2. How do you feel about the level of support that this institution's administration demonstrates towards distance education?
3. What is your relationship with student services at this institution? Do you feel that your distance students have adequate access to the necessary services?
4. What has been your experience with course development process at this institution?
5. What has been your experience with technical support personnel / department at this institution?

6. Are you comfortable with your own learning style? Do you feel that your own learning style is reflected in the manner in which you have approached distance education?

The responses to question #1 are covered in Chapter 3, as a part of the section that describes the participants. Responses to questions #2-6 are detailed in this chapter.

Definitions of Terms

The initial design of the study provided for the framing questions to be asked in essentially the same verbiage as they are presented above, with no further explanation or clarification of terms added. Early in the interview process, however, it became clear that there would be a range of interpretation of not only the terms used in the framing questions themselves, but also in some of the terminology used in the responses given by the participants. Although this phenomenon was not particularly surprising, given the dynamic nature of the overall field of distance education, it was not fully anticipated. Once it became apparent, consideration was given to modifying the questioning process in order to clarify some of these terms as the questions were asked. The decision was made to maintain the initial approach to the interview questions, and clarify only if and when necessary. In this way, I felt that I would minimize the potential for influencing the responses of the participants, or in any way injecting my own opinion into their intended response. There also seemed to be a greater potential for their responses being richer, in that some aspect of any given issue that had not yet surfaced, and could possibly contribute to the depth of the responses, may have more likelihood of being expressed. For each question, and for each participant, a

response appropriate to the intended meaning of the question was indeed arrived upon.

Distance education: education delivered to students who are separated by time and/or space from their instructor.

Administrative support: support from the upper level administrators of the institution, e.g., the president, vice president(s), deans, etc.

Course development support: support for the process of developing course materials for their delivery via some technological means, e.g., instructional design concepts, pedagogical appropriateness of material for delivery via any given mode, etc.

Student services support: support from that branch of campus or division of the institution that is typically considered to be that of student services, e.g., admissions, registration, financial aid, business office, advising, counseling, student success strategies, etc.

Technical support: support from technicians for maintenance of hardware, software upgrades, training on operation of various equipment and/or systems used in delivery, e.g., Internet file transfer protocols, e-mail attachments, use of studio microphones or overhead projector in a television studio, etc.

Summary of Responses to Questions

Q: How do you feel about the level of support that this institution's administration demonstrates towards distance education?

Perceptions of administrative support range from the most positive to "minimal." Most of the participants feel very good about the level of support they receive/perceive from their institutions. Most, however, are also quick to qualify the support they perceive with some sort of limitation, the most frequent being related to that of financial support.

Two of the participants have unqualified positive statements regarding their perception of administrative support, having neither any sort of negative comments

nor any qualifiers to detract from the level of support they perceive from their respective institutions.

Pamela: Well, I think both at upper levels and middle levels of administration there's been a huge amount of support to anyone who is interested in stepping into a variety of different distance learning formats... In fact, I can't think of anything negative to say about that piece of it.

Dale: The administration here has been absolutely fantastic about lending support; they've backed everything I've done. They've given me the liberty and the backing, to try it, and to try it with the understanding that some things don't work.

The most common qualifier is in the area of financial support, being mentioned prominently by five of the participants. Some are more delicate than others, however, in their expression of this viewpoint.

Emily: I think that the college is excited about distance education. I think they have been trying, within the financial constraints, which we have plenty of, to support the technology. I think we have – so I get a good positive feel from the administration about going ahead with it, and that we're encouraged to be innovative, that they would like us to try all kind of alternatives, not just distance ed, but you know, linked classes, that sort of thing. Financially, I don't think that there's a lot of support for us, I mean in terms of the actual amount of time that it takes to do this. You're still volunteering endless hours to make this happen.

Blake: Well, they like it! There is no budget for it! ...the institution is in a bind. Some people here think distance education is terrible, and others really like it. So if they were going to spend money on it they would have to take sides, and they don't take sides very well.

Another of the participants represents the opposite end of the spectrum with respect to the qualifiers that she attached to her perception of this category of support.

Marie: It's minimal. Last year, when we were first starting to put together the first quarter of the sequence, we had a grant from [gives acronym for a state organization], and the college had some support

staff to help put things together, but now that the money isn't there anymore, we're still kind of expected us to go ahead with the class, put together classes, without much support. Our faculty person who had been, oh, she was part-time, and she was pretty much a specialist of some sort, that would help when we needed help putting something together, or introducing us to the software or something like that. Or if we were having a problem with something in the web page not working, she could help with something like that. And her hours were reduced to 60 hours per quarter. That's to take care of all online classes. In our computer department – our computer support – we used to have a person who was pretty much assigned to distance learning, and he took another job, and there's still trying to decide whether or not to replace him. They put someone else kind of part-time into that position. So, support isn't – it's not big here.

One participant was actually somewhat ambivalent with respect to this category of support.

Charles: Well, it is kind of hard to say one way or the other. For the most part, they are not visible. What they do offer, is that to develop course, they will pay you some money, but I really don't see any discussion about how they can help you, or support you with clerical work or anything like that. I would say that the support is maybe average.

Finally, one participant began his account of administrative support as being less than necessary, but when the question was clarified, he went on to give a perception very different from any of his colleagues.

Franz: Okay. Well, first of all, I'm assuming you were not talking about from above, really, because administrative support, like deans wanting us to do this or that, really doesn't matter too much. What really matters is the ongoing administration of the class. ...in other words, getting the tapes out to the students, getting assignments returned and then filtered back to me – if I had to do all that, it would not happen. This course would not be – none of these courses would be in existence.

Interviewer: Well, I can really appreciate that, but I would call that something more like logistics support.

Franz: Okay, logistics support is I think the key element to the whole success of this thing... I think [the] success of the program is all riding on the backs of our logistical support. ...our administrative support extends to an overall support of the faculty member who is inclined to want to do this, to do a distance education course. So, I think we have general support ... along those lines, but of course, I'm involved as more than just an instructor. I'm involved as a coordinator in a number of different ways, and I don't see our administrative support to the degree that our administration is really defining goals and developing a plan of development of the overall online or distance education program. So I think there could be more administrative support of the program by doing more visioning of the program.

Interviewer: When you say program are you talking about the distance ed program in total or your own specific discipline? Which were you referring to?

Franz: Ah! Well, both. I mean, one of the problems within my discipline – I don't want to fault the administration, I mean they are very busy – but generally there is some kind of underground dissatisfaction, because there is the sense that, well, 'somehow he managed to get away with teaching this course online, and now he is not doing it in [a traditionally formatted] class and I'm sure that I have a student that would do better if we had a traditional offering,' you know and somehow it's been that sort of thing. So there's not been the kind of administrative proactivity to say what are we doing, why are we doing it, and this justifies it, and we take the pressure off the faculty member who is trying to do whatever they are trying to do. And so, I think it's just the next level beyond, 'hey, go for it! This is a great idea!' It's more like, 'well, how does this all work within the framework of our mission and, and is it happening the way we wanted to, and if it is, then make sure to have some kind of an internal marketing effort that says, this is the way things are going, and this is the way it needs to be done and the faculty member will be doing this.' It's just an additional level of support.

Interviewer: And you are saying then, that you are not really seeing that.

Franz: That's correct. I'm seeing a general approval, maybe even a tacit approval, in certain instances, to doing this.

Interviewer: As opposed to what you would like to see as maybe an active role in lending support and being vocal about it.

Franz: Right, right! Yeah, exactly! And what that's going to do is to open Pandora's Box a little bit when you become a little more public. But the problem is, that when an administrator is not doing that and it's happening anyway, then the assumption is that the administrator is wanting it to happen, but just doesn't want to communicate it to people, and then you start losing your trust amongst the institution because they're saying, 'well, I haven't heard that this is what they want to do, but their allowing them to do it, so nobody is talking to me and they obviously aren't talking to me because they don't want to know my opinion and maybe they think that if they don't talk to me I just won't realize this stuff is happening. So I don't trust them because they don't trust me and my opinion,' and you know, on and on it goes. And it's just at loss of communication.

Interviewer: Well, that's really interesting...

Franz: And we've seen that with the online [distance education program], and we put out a communication that says 'This is our overall plan.' Well of course, people went crazy! They got very scared about whole thing, because it was big. But at least something that got out there and people could get their hands around it, and when that doesn't happen at some point, there is a hole, and that hole breeds the distrust and negativism. And so, that's why I'm thinking that we haven't really planned out some of the moves that we want to make despite the fact that we are letting those moves happen. So, that's sort of a funky support issue. But generally, our administration is totally supportive of what we are doing in the distance education formats. It's been basically, 'we love it when you do it, if you can work within your department, go for it.'

Interviewer: So they really give you free rein to do that...

Franz: That's what I see. And the primary limitations don't come from the administrators; they come from the departments themselves. Internally they say, 'Well, yes, you can do that distance education course, but how are you going to do that when you have all these other things to do? And don't forget that we have a union contract that says you get paid per course, so it's not like you can just grab a few students here at a few students there, and totally different courses, and even though you're not having to do preps with lectures because it's all online already, that doesn't matter.' You're still going against what the contract says you ought to be doing by saying, 'Yeah, I'll stack those two together and call it one course.' So, some of our flexibility is lost, and our faculty remind each other that we shouldn't take those flexibilities.

Interviewer: Wow, that's interesting...

Franz: And well, because what we doing is that we're breaking down the solidarity of the union contract. That's really subtle, but nevertheless comes out once awhile.

Interviewer: So you think that some faculty are apprehensive about distance education because of what it might do to the understanding of the contract?

Franz: Yeah. I know that there are really pro-union faculty that are that way. They won't get into it because they know somewhere along the way it will break down some of those traditional bargaining methodologies that have allowed us to get where we are. So, the models change, but we don't want to change along with it for fear that we will lose something. So we have some of those issues, and they are in transition.

Interviewer: Umhmm. But can administration help being involved those kind of things?

Franz: It's a chicken and egg problem with the administration. They'll say, 'we know we want to discuss these things' – and we just went through this – 'but if we discuss them as we move through our bargaining process, it raises so many red flags that it just the elongates our bargaining process,' and it's ridiculous. So what we've preferred to do then is go ahead and bargain along these conservative traditional ways and means, and then really tried to identify the holes in the bargaining contract where we can place all this other stuff, one way or another. And that doesn't sound like the best way to do it, you know, it sounds a little surreptitious. And then the hope is, that as we move through that process and more trust is gained because it's working, then the next time around with contract bargaining we can start to get some of those features built into the contract so that you don't have faculty going, 'well this is against the contract...' So as far as administrative support goes, I think they are doing everything there they can, it's just that it's a barrier.

Interviewer: Well it's certainly presents – and as we have recognized before here today – some evolutionary challenges.

Franz: Yeah, right. And that's all part of that planning and visioning, and sitting down the right key players in trying to work things along... I don't know, it may be an impossible task. I've not been in a situation where it works, so I can't say, other than criticize that it's

easy to allow it to happen to the extent that it happens, and then call it good. And I don't think that's fully supporting the program, I think it needs to go a step further, but the step further is a lot of wailing and gnashing of teeth, and really making some tough decisions.

Q: What has been your experience with the course development process at this institution?

The question of the participants' perception of support for course development brings a not only a wide variety of responses, but also those with a notable degree of complexity to them. To some extent, this may be due to the participants having interpreted course development support as being synonymous with – or at least difficult to separate from – technical support. Indeed, there appears to be some degree of inter-relationship between the two. Further, it appears that on some campuses, the two are not readily distinguishable. Another thread that emerges is a definite connection between the support perceived in this area with that of administrative support: financial support is an issue for many of these faculty, and they see this ultimately as the responsibility of the administration.

Only one participant could claim that her institution was providing what she perceived to be the consummate level of support – that which some might consider to be an ideal situation.

Pamela: In fact, we have two full time people that act as support for faculty who are designing online delivery, ...they cover a variety of technologies. And the advantage to that is that they do have some of the technology, some of the process pieces, as well as the teaching experience. ...they are available to work with you one on one, either in formal training sessions or as needed. And they were really a tremendous help to me in getting my first course up and running. So while I was developing the course, if I had questions about what kind of online connections can I give my students, because this is what I do in my regular campus course, and I'd like to figure out

how to translate that into a distance delivery format, they'd be available to sit down and brainstorm, share with you what other faculty are doing, connect you with other faculty. They just acted as that kind of resource. It's a huge commitment I think on the part of the college. And that's a real faculty-to-faculty piece that I think is really important.

A significant number of participants view course development support as being there for them when they need it. Emily's perspective was typical of this, as is her bringing into the picture the issue of financial support. At the same time, her perception of this support is one of several that is intertwined with the concept of technical support.

Emily: I think that we have good tech support here, ...very supportive kinds of people. They're overworked: they don't have enough people that could hold your hand through it or anything like that. They offer classes, workshops – they will do templates, do certain things for you, set up frameworks, kind of help you. But you couldn't say, "well, here's my syllabus, here's my handouts, this is the kind of thing I'd like to write, go put it up for me." The teacher is still the webpage builder. So you have to know a fair amount: if you want to do a quiz online, that's fairly complicated, you have to know the software to be able to do online testing. I think the will is there, and they have good people – there's not enough of them to really get everybody where they'd like to be with their classes. I've got a couple of classes that would be really fun to get some web pages behind them. And I'm sure there are a lot of other teachers like me, who have some things they'd like to get going, but things aren't quite there to support that yet.

Several participants, however, feel that they do not have the support they need, or would like to have, in this area. The first of these cited here is quick to point out that he feels the need to carry on with his efforts, and willingly so, regardless of the level of support that he is receiving in this area.

Charles: I have been totally on my own in deciding how to present my material on the Internet ...but I feel like, well, my personality's that way. I like working on my own. Why I am optimistic, well, it's about the financial perspective of the college. I feel like we have to

do this, otherwise college simply might not exist. I also feel that there are a lot of students out there who would like an education, but probably can't do it because they have to work, and so on. So is this something better than having no opportunity at all? I think, yeah! I guess that's why I'm probably optimistic.

Another participant feels essentially the same about the current level of support, but is also quick to qualify that perspective by noting that his institution is in transition, and that the end result of that may be a healthier position for distance education faculty. And again, financial constraints are a part of the picture.

Albert: we got quite a bit of support the first year in working to develop the course in terms of release time. Money was available that first year for quite a bit of release time to do that, and we got the first quarter done, the first year. ...currently, external money is not available to do that. So any release time is going to be departmental. The college's push for developing online courses is tempered by departmental funding of that – so that there's the competition for resources. “We'd like you to develop online courses, but there won't be any extra money for that, so find it within your own budget, and try not to cut any classes that you're doing now” is the feeling that I get, so, I have the feeling that right now we're in kind of a holding pattern of “we just don't have the money” to develop this, but “we still want to.” That, I think, is going to result in changing – a shift – from being a college-supported, pushed enterprise to motivation of the individuals that want to develop courses this way, and it's gonna have to be driven from the desire of individual faculty, perhaps individual departments, to push for development of courses, and that may not be all bad. I think what people involved in developing distance learning would like to see is ongoing support for the development, and then shift that over to departmental maintenance of these courses. But right now, I don't think that there are the funds available for the development at all.

Several participants make similar observations: the current status of course development support is directly tied to funding mechanisms, for which the administration is responsible. They view this support as either waning, or having disappeared completely.

Emily : And, as I said, the money is pretty minimal, when you're gonna develop a class. You could get release time, which'd be the wise way to go – one class release time. But it's got to be when a new class is developed, that hasn't been taught before on the web. So if you were just teaching it for the first time but other people had taught it before you on the web, then that development has already been done.

Marie: [The] cutback [of our course development specialist] is a real problem when it comes to us trying to develop class, and continue developing from one quarter to the next. And so, I see this as lack of support for the distance education program, because I think that if the administration was backing it, that they would try to find that kind of support, to help continue developing the courses.

And another observation integrates the notions of course development support, technical support, and financial support from the administration.

Blake: ...the institution says "yes, we like it," they say "distance ed, we'll support it," ...they don't have any money for it, for development of technical knowledge, and they are not engaging in a process to teach people how to decide which process is suitable for that content delivery. There's no curriculum review process to sort through it, saying "here's some courses that make a lot of sense for this kind of delivery, here's the courses that wouldn't fit into distance at setting." There's nothing that I've seen that says, "go do that, sort through your classes, and see which are the suitable classes." Which would be a mighty fine way to motivate people to consider online delivery: first let's just rule out those that won't fit, then you can rule in those that might fit, and teach you how to make that decision. Now that makes a lot of sense, and we are not doing it.

A perspective encountered with several of the participants is that support for course development is as much the responsibility of the individual faculty member to seek out this support as it is incumbent upon the institution to provide this support for them.

Dale: ...we've got that professional development committee and funds for us to utilize totally at our own discretion, to seek out curriculum development or professional development methods and means. I have been able to go to several absolutely fantastic conferences on distance education and traditional education

methodologies and philosophies and interact with people from other areas. Going to conferences has allowed me to deal with the pedagogical and philosophical issues, and hear pros and cons.

Franz: ... we have that kind of support only to the extent that we go out and look for it, and find it. ...there's no office that that material is given to and they'll go out and say "this is a course that's been requested, let's get together and we can talk about strategies, and pedagogy, and design..." ...our faculty don't tend to embrace support very much anyway – they kind of want to go off and do it on their own. There are exceptions, but... it's not something where the faculty has been proactive, saying, "we need more internal support and help." Generally what they say is, "we don't want you to spend valuable resources on support and help, we want you to funnel that money into an additional instructor."

Blake: I came from the private sector - I haven't worked for the institution forever. I have been self-employed, so if I get a sense that I could sell something, sell some skills, then I'll go sell them regardless of whether or not the institution thinks it's right. I believe that to make my way in the world, I don't need an organization to dictate or motivate me to do anything. So if I heard that there is a need, and I won't get in trouble, I won't get fired for it, and I can meet that need, and generate FTE reimbursement, then I'll go do it, regardless of whether their policy and money support is already there or not. If they said well we're going to have a policy and some financial support in a direction I don't like, then I will find work somewhere else. Does that make sense?

One interesting perspective comes with the further investigation into whether the participants feel that such support would be beneficial – or conversely, the lack of such support a deterrent – to other faculty who may be moving towards delivering distance courses.

Franz: ...there's no programmatic support, and does it act as a deterrent? I think in the long term, it will or it does. But in the short term, it's hard to say, because our faculty don't tend to embrace support very much anyway – they kind of want to go off and do it on their own.

Blake: It would make a lot of sense, to teach people how to choose content for distance education and online delivery, but that's not even happening. There is a distance learning development team, a

bunch of instructors, who have a belief in that kind of delivery method, who get together and talk about things, but there's nothing more than that.

Finally, another thread that emerges is centered around the concept of changing paradigms, particularly with respect to that of faculty roles - the comfort level of faculty in their doing what they do, and their willingness to adapt or change.

Dale: It may be – and this is how I look at it – a case of comfort and safety. For some of us it's more comfortable to know where we are going to be and what we are going to be doing, and not think about other things, in other words, walk into work knowing exactly what you are going to do. For other people it may be a case of, “OK, I've done that long enough, now I want to try something different,” and the distance ed people are probably going to be the people saying, “I want to try something different!”

Blake: I think we faculty have an obligation to change our delivery method of because that's what the need is, regardless of the cost. If you have to work hard for your job, well, I'm sorry.

Q: What is your relationship with student services at this institution? Do you feel that your distance students have adequate access to the necessary services?

The concept of support provided in the area of student services is one fraught with complexity. Even in the traditional format of course offerings, i.e., campus-based, there is a wide variety in the policies and procedures that govern the manner in which services are provided to students. For example, some institutions require many students to be advised before they may register for any classes, some require advising based upon number of credits being taken in any given term, or perhaps based upon year in school or GPA, and still others have no advising

requirement at all. With respect to financial aid, there is a wide variety of approaches with respect to the manner in which aid is applied to bookstore purchases, and in how refunds are made to students. Some faculty routinely recommend – or even require – some students to seek help in services such as study skills or test-taking strategies, while others rely entirely upon their students awareness and perception of the need for such services. Superimposed upon these policy and procedural variations is the manner in which these services and/or the rules that govern them are understood by faculty, as well as in the manner in which faculty perceive them as necessary or being in any way integral to the educational process. When one considers these variables in the setting of distance education, the degree of complexity simply seems to multiply.

Although the interview question was brief and asked only about the participant's perception of or experience with student services in their institution, responses from the participants yield three distinct areas of focus. The first is the area of student services to which I will refer as logistical services, e.g., admissions, registration, financial aid, billing and/or dealings with the institutional business office, or the bookstore. These are the services which most students must encounter in enrolling in almost any course, be it campus-based or distance delivered. The second area is one to which I will refer as student success services, e.g., advising, counseling, study skills, test-taking strategies, etc. This area includes those services which are made available to most students primarily on an as-needed basis, although policies vary between institutions on the determination of need and consequent follow-up. The third, and possibly most intriguing, is the notion of the

overall approach to student services by faculty, which includes their perception and awareness of the need for, the availability of, and functioning of these services in any educational setting, be it distance or campus-based. Comments that are reflective of this notion are woven throughout their more direct responses in regard to the aforementioned two areas, and as such, have not been extracted and reported in a separate section below, as are the other two areas of interest. They are nonetheless, I believe, readily identifiable.

Logistical services

The strongest positive statement regarding the availability of logistical services comes from a participant whose institution has chosen to contract with an outside provider for delivery of distance education courses in the online environment.

Franz: ...it's a little different for all of those online as opposed to live the traditional courses, because online they really have the benefit of having all that stuff right in front of them on the computer screen. So if they need some tutoring help, there is a link that you just click, and you send a message to someone here on-campus. ...[our provider] has pretty well already thought it through. I know we had a much more deliberate set of plans for student services [in distance education] when we went to the online [delivery]...

Interestingly, a perception in almost direct contradiction comes from a participant at the same institution.

Charles: I would say that the level of student services is pretty much nil. Some of the students taking the courses have never even been to college, or a good number of them, so they don't even know that the services exist on campus. And we don't even think to ask those questions. When it comes to registering for the course right now, I think that's pretty much a can of worms, the way that they do it. It has caused a lot of confusion, and there has got to be a better way to do it, but it's not there yet. I think that the services that would make it easy for the student are lacking.

Another perspective reflects, in part, a delivery of services that is dependent on the delivery of the content itself. The students referred to by this faculty are engaged in a program that requires them to come to campus for parts of the delivery.

Albert: ...my concerns don't run too much in that direction in terms of what I want, with regards to the course and presenting it. Certainly the students need to be able to register easily. I expect they are going to come to campus because they need to for the lab work, and therefore they would also be able to get to the bookstore, and all sorts of things. Just in the same way that any on-campus student, or part-time on-campus student would have access to those kinds of things. Because our students are not totally at a distance, or exclusively at a distance. I don't know if that's correct, but, because they need to be on campus to get thru the course anyway, they have those same kinds of campus access, perhaps not at convenient times, because they may only be able to come in during the evening to do their lab work. And I just don't know just how extensive the support is for them, and I don't really know what they would need in addition to having things work right.

Comments from other participants indicate that perhaps logistical support may vary from institution to institution, and may be dependent – to some extent – upon the degree to which their student services personnel are either willing to go for distance students, or the extent to which the system has been modified to accommodate these students who do not come to campus. At the very least, it is safe to say that there is some variation in these services.

Pamela: ...in terms of financial aid, we have attendance verifications that we have to send in. And in class they come around and you have to sign it, and they send it in. What they do is just e-mail me with a request, and I can forward it onto the financial aid office. So I just take care of everything by e-mail, and our hotlinks in place, and it just goes through without a problem.

Marie: ...a lot of students go through the bookstore. Well, I don't know if all of them do it by mail, but a handful of the students order

their books thru the bookstore by mail. And there have been some comments about, well, 'I've called three times now to the bookstore since I put my order in, and I still haven't gotten anything.'

Franz: ...the student really has a contact point in the Department of Extended Programs. So here again, the secretary there plays logistical support, adviser, technical support, all of that.

Not uncommon, however, is the observation that not too many faculty who either are teaching at a distance, or considering teaching at a distance, are concerned about the situation enough to allow it to impact their decision to teach in this manner. Blake's comments on this issue are the most representative of this phenomenon.

Blake: I don't believe that a lack of student services is a barrier to our instructors providing classes online. I do believe that it's a reasonable expectation of instructors to say, "student services need to be there in conjunction with the material to the online." I think that's reasonable expectation of them, to be able to send their students to online student services when they are offering content online. I haven't heard people say that's why they're not offering classes. I haven't heard anyone say, "I won't put class on until student services are available." I don't think that's the case.

Student Success Services

With respect to student success services, responses indicate a wide variety of availability from one institution to another. Most of the participants, however, indicate that there is little in the way of preparedness for providing this type of services to their students. Dale's response is typical.

Dale: As far as the success side, that's been a different kind of a game, cause we still don't have a good screening device for students going into distance ed. For one thing, we don't have them screened for distance ed other than kind of a self survey. Now, that is helpful, but again, sometimes the students come in with the attitude that distance ed has gotta be easier than regular [classes or course

delivery], and then shock of shocks, it's actually harder. And they weren't ready for that.

On the other end of the spectrum, Pamela feels that she and her institution are providing excellent services to her students, and it is clear that she is taking the lead role, at least with respect to her program.

Pamela: In our program here on campus, I teach what they refer to as our foundations class. It's ...kind of a pre-program preparedness course. And as part of that course we do things like study skills, learning styles, accessing resources. It's kind of one of those things like, well, how do we help students become more successful in our program? What I've just started doing this last term is beginning to work with our two support people – you know, our two faculty members who are assigned as support for technology – and working on ‘how do we do this online?’ And there are some links already available that the study skills program has put in place, some self-testing mechanisms and some other things that I'm just beginning to link up to my course. And so I can start referring students, letting them do some self-assessment, and I'm beginning to connect them to some services. The writing lab, we're beginning to look at how you can access that. Some of the assignments that I've designed in my class connect them immediately to library services. So trying to get that process in place – it's coming along. It's still in its infancy, but it's coming into being. But I am a strong advocate of having those resources available to help students be successful.

Finally, Blake makes an observation that may be representative of students' own perception of their need for these services, and the possible consequences to institutions in terms of how they are provided.

Blake: ...our web page monitor shows hits and about ten o'clock at night – all the action on our student services web site comes at about ten o'clock at night – there's thousands of them. And on that web site there's a lot of information. It's static, it's not dynamic, and it's not comprehensive. So, currently, it does not provide the same information that is provided here on the floor, by the advisers and counselors, so therefore it's arguable that we are not meeting our accreditation needs. Services aren't provided in the same way, and to the same degree, for distance ed students, as on the floor for those students there. And therefore, we're at risk for our accreditation. But we don't have a lot of distance education classes, so they can't ding

us too much. But we also have a plan to change that. We have a plan to shift our student services information into a much more dynamic comprehensive offering – and that's good.

Q: What has been your experience with technical support personnel / department at this institution?

The perception of technical support for faculty again covers the full spectrum: some feel that this is the strongest part of their program, while others feel that such support is sorely lacking. Many of the participants, however, are on the positive end of this spectrum, and each seems to have some facet of technical support that has meant the most to them, and they are not at all hesitant to point it out.

Pamela: Technical support has been really strong here. We have two people that I have as contact people, that when there are technical questions I can go immediately to. I can connect with them either by telephone, or by e-mail, and there are also technology people that are available for students that might have technology questions or problems in accessing some of the online material. And my appreciation for them has been – because I'm not a real technology person, they've evidently – and I don't know whether this was intentional of that it just happened – is that our support people here in the technology department speak English!

Franz: ...for us, it is a very key piece, and it's working really well. We basically don't have to do our own technical support, which is first and foremost – you know when you have to do your own, forget it! ...overall, I think that the student perceives that the program is Mickey Mouse if you're relying on the faculty member to do his own logistical support, or heaven forbid, technical support. But that's one reason that we went with having a partner, that hosts the site, is we wanted to present a system, that – good or bad – at least it's a consistent help desk, and technical support setup for both faculty and students. So we feel pretty good about that, and the office of extended programs works very hard to facilitate getting the course materials, and getting the proper tapes, and all that – which is a big job – getting it all out to the right students.

Dale: Now, on the technical side of it, the campus has been absolutely fantastic in keeping me with the technology that I need to do my job. There has been technical support from the computer people, putting together chatrooms so I can try that out – I then discovered that chat rooms really weren't the best method because they were synchronous, and that didn't work, but then again we had the chance to try it, and the technical support to try it. I have the latest technology on the desk so that I can try things out with fast access, even the ability to connect from home, so that I can do file transfers. They gave me a file transfer protocol program so that I can do file transfers on all my course work from home. I can virtually operate anywhere I want to, and maintain these courses – so I got technical systems that hands-down are just fantastic! We've been lucky enough on this campus to have technical support from the computer side all the way down from the Internet connection [to] our outside contractor. Also a very good audio-visual technician here, so we can videotape course materials, original course materials, create course materials on videotape, and replicate and get that out. So the tech support there has been absolutely phenomenal.

This overall positive feeling seems to break down, however, when the issue of workload for these technical staff is brought into the conversation. Some participants seem to perceive this workload as unreasonably heavy, and in some cases, attribute such a workload to the lack of quality in the support that they are – or should be – receiving. Emily's response is representative.

Emily: I think that we have good tech support here. They're always – I think that the people that we have are very good, and very supportive kinds of people. They're overworked: they don't have enough people that could hold your hand through it or anything like that. They offer classes, workshops – they will do templates, do certain things for you, set up frameworks, kind of help you. But you couldn't say, well, 'here's my syllabus, here's my handouts, this is the kind of thing I'd like to write, go put it up for me.' There's nobody that could do that sort of thing. The teacher is still the webpage builder.

Blake has a comment not only in regard to the workload of the support staff at his institution, but on his perception of the attitude of faculty and administration with respect to that type of support.

Blake: You hear a lot of talk about all the time it takes [to develop a course] – couple of months, or whatever – I don't really agree with that. I think the resistance here – they need some time and technical support. You have to do something about technology – you know, support for computer skills is pretty short around here. ...[our support person's] hours got cut to 60 hours per term. For technical support, that's not very much. ...and some [faculty] are willing to just to let them go – they don't think they need them. And they don't, as long as they can say that this is an improper delivery method. If I say, 'I'm not going to do this, this is a lousy delivery method, and it's not pedagogically sound,' then I don't need to develop the skills. Teachers have a really cushy job. We keep doing the same things over and over again and don't have to change. But those students need [material] delivered differently, so I think that we have an obligation to change. But that means gathering skills, and it makes it easier if the administration funds that – if the administration would pay for training on how to use the Internet, pay for training on online classes, and then let a person use that training.

Only one of the participants was really adamantly negative about this facet of support, and made a direct inference to the administration being responsible for ensuring that faculty have it when they need it.

Marie: Well technical support [is] going down! ...how about having the server available when the students go to it!!! And again, not replacing one technical person that we had on staff when he left, I see that is kind of a lack of support. ...as far as actual technical support, or support from the administration, such as 'this is a valuable portion of education,' I don't think we have that here. That's my feeling, anyway. We don't have that support.

Q: Are you comfortable with your own learning style? Do you feel that your own learning style is reflected in the manner in which you have approached distance education?

Without exception, each of the participants feel that his/her own learning style is reflected in the manner in which s/he teaches in the distance education setting.

Pamela: I think in terms of my teaching style, it's certainly very student centered, and I think that looking at making sure there is a variety of delivery formats, and I'm real sensitive to variations in learning and processing styles. And so in my traditional classes, what I've integrated – this is something that has been a part of my learning and growing process as a part of doing some of these courses – is making sure that I try to address various learning styles. So having, and creating the visual components, increasing the interactive components, trying to do a variety of assessment strategies. Because it's been my experience that some students assess very well in objective testing, some do subjective testing, I mean whatever the format is. And trying to give students as many opportunities to find a way to demonstrate what they've acquired as part of the process of taking the course.

Franz: ...the distance education allows all of that information to happen, and then my job can begin with a lecture leaves off, then I find it much more enjoyable, because then I can just talk with the students and do that discussion. ...and another thing, I think I come off better to the students, when I can take the time to respond to their questions. ...I can really formulate my answers.

Dale: ...[in my] discipline works well, plus it works well in my style. I tend to be a workshop based kind of a teacher, not a lecture teacher. Which means that I evaluate students, and I evaluate what they're learning based on interaction between the work, themselves, and me - a three point interaction. That fits very nicely with distance ed, because it comes down to their work and themselves, and then getting the work to me for evaluation and the feedback, and the next assignment, which is a pick up on where the last one left off. It also means that I must have everything planned out, so that I've got a long range assignments or goals that they have to accomplish, and I've got all the steps necessary in increments, small increments, for them to get from point A to point Z. And even a couple of fallbacks where they can blow it on something like L and W and still get to Z. They can literally blow through, or miss, two assignments, and still get everything done successfully. So what it's made me do, and something I've been trying to do all these years, is go back and look at what worked and what didn't. And then when I looked at what worked, why did it work. And then make sure I can replicate that process – that it wasn't just accidental.

Marie: ...the way that I teach, which is more investigative and hands on, fit's in really well with this setup and class that we put together. And the students who are actually participating appreciate the opportunity of interacting with each other, exchanging with each

other and getting information. So I think that part of it works out really well...I feel very comfortable about the way that we've set it up and my style of teaching.

In addition to commenting on their own learning styles, several of the participants offer some aspect of teaching in this manner that they feel gives them some advantage over teaching in the more traditional format.

Franz: I think that the students who tend to get going in class could be – will be – just as easily outgoing online. But there are a lot of students who in class will tend to not speak out, that are more inclined to do that because they don't see the immediate reaction to what they are saying. So I think you get a better opportunity for interaction with more of your students online. I think that's an advantage. And others have said that, too. So I like to use that.

Pamela: I think that it is putting me in a position of stretching and growing, not just in the online piece, but it's also causing me to take a look at courses I may have taught every term for several years, and reassessing how I do that in my traditional classrooms.

Blake: The beauty of [teaching] online is that, in the classroom, I've only got time to have a few people speak about a story. When I put them in the small groups, then I don't hear them all. And I don't get to teach as well, because I don't hear everything. And online, I get to see everything and everybody gets to hear everything, and they don't have to worry about running over 50 minutes. So, I think it's better, actually.

Chapter Five:

Discussion of Results

Introduction

The purpose of this study is to identify the factors that contribute to the feeling of success and enthusiasm in those faculty teaching in a distance education setting in the community college. Faculty from community colleges throughout Oregon, all of whom were perceived as successful in teaching in a distance education setting, were interviewed for the study.

The questions, which focus on several aspects of institutional support, were articulated as follows:

1. Please speak briefly to your experience in distance education. What technologies have you had experience with? Do you, in general, feel that you have been successful in teaching in the distance education environment?
2. How do you feel about the level of support that this institution's administration demonstrates towards distance education?
3. What is your relationship with student services at this institution? Do you feel that your distance students have adequate access to the necessary services?
4. What has been your experience with course development process at this institution?
5. What has been your experience with technical support personnel / department at this institution?
6. Are you comfortable with your own learning style? Do you feel that your own learning style is reflected in the manner in which you have approached distance education?

The responses to these questions provide the data that, upon analysis, lead to answers to the primary research question. Are there identifiable factors in the path to success of these individuals which may help formulate meaningful faculty development efforts for those faculty who have not yet reached such a comfort level?

The interview questions also provide an organizational basis for analysis of the data. Responses to the first question were noted in Chapter 3, as each participant was introduced, and his/her background and experience summarized. Responses to questions 2-6 are covered here in Chapter 4.

Data Analysis: Discussion

Although the framing questions in the interviews were posed to the participants in the order in which they appear above, analysis of their responses caused – or allowed – a pattern to emerge that had not been fully anticipated. Technical support became the pivotal aspect around which these faculty realized the possibility of participation in distance education. Technical support was clearly fundamental to such participation, even to the point of being considered indispensable.

Following close on the heels of technical support was support for course development. In fact, as will be elaborated upon in the section of data analysis devoted to this element, there appeared to be a significant degree of overlap between these two aspects of support.

Support in the area of student services was not necessarily closely related to or seen to follow either technical support or support for course development.

However, the pattern of some degree of dependence of student services support on administrative support is very similar to the dependence of technical and course development support on administrative support. Without clear and present administrative support, none of these other aspects of institutional support would seem to flourish.

Therefore, the order in which data regarding support are presented for discussion is in this order that emerged from analysis:

- technical support
- course development support
- support for student services
- administrative support

A discussion of the experience of each of the participants will precede this matrix of support concepts. This will be followed by a discussion of the participants responses to the last question – their perception of their own teaching and learning style with respect to distance education.

Question: Please speak briefly to your experience in distance education.

What technologies have you had experience with? Do you, in general, feel that you have been successful in teaching in the distance education environment?

Participants fell into one of two principal categories with respect to the degree of experience in teaching at a distance:

- those participants with the greatest amount of experience – approximately five years – have all had experience in teaching with

audiovisual technology, and are now becoming familiar with teaching on the Internet, and

- those participants with the least amount of experience – approximately two years – have had experience only with the Internet as a teaching technology.

Only one participant mentioned that he would consider himself to be an early adopter.

These observations seem to be related to the technology that reigns as most popular in any given period of time. Going back five or more years from today, audiovisual technology was enjoying a good deal of notoriety, particularly in Oregon community colleges. The state of Oregon offered a proprietary, satellite-based audiovisual network that had significant participation from within the community colleges. Additionally, many community colleges were videotaping entire courses, as taught in the classroom setting, and sending these out to students who could not come to campus as an early form of distance education. Teachers who entered into distance education at that time, especially in Oregon community colleges, were very likely offered few options beyond teaching in this manner.

More recently, the Internet has received so much attention, both in the media and in the setting of higher education, that many people seem to equate distance education with this technology. While it appears to be true that many students come to the community college setting expecting to have Internet access, and to have some part of their courses available on the World Wide Web, etc., it is still simply *one* of the technologies available to reach those who must – for a

number of reasons – access their education in some non-traditional format. It is possible, however, that institutions as well as students are leaning more towards the Internet as ‘the’ method of delivery. This is, however, a subject for further study, and not the primary issue here.

All participants believe that they have been successful in their distance teaching efforts; this affirmation was, in fact, a criteria for their participation in this study. All are also enthusiastic about continuing to teach in the distance environment, and about expanding their current teaching practices into new dimensions. Each of the participants spoke enthusiastically about doing something new in the near future; some have ideas on new techniques for presenting their curricula, or for engaging students with one another as well as with the instructor, for a new course that they would like to develop for distance delivery, or for the merging of different technologies that may give the students a broader opportunity to engage the material or one another. The enthusiasm that flowed from these teachers when they spoke of these opportunities was that which flows from an educator who loves what he/she does for a living. It is the commitment of a true professional, dedicated to the profession which he or she serves.

Some also spoke of challenges, but with the same approach that a dedicated teacher might be expected to take with any of the challenges that they face as part of the job, regardless of the manner in which they deliver the material. They noted problems with students who appeared to be signed up for these courses for reasons other than to learn, such as being of the mistaken impression that distance education courses should be easy. There were occasional problems with

technology, both for the instructors and for the students; these issues seemed to give rise to the same degree of concern as one might expect if students were for some reason locked out of a building, and therefore unable to get to their classroom. They spoke of these challenges, however, with a resolve to overcome them that was indeed enviable. Their enthusiasm did not wane in the face of such adversity; conversely, these challenges seemed to make them even stronger.

This gives the impression that their enthusiasm, and the degree of success that they all believe themselves to have had, is independent of the technology with which they have had the most experience, and perhaps even the number of years that they have been teaching at a distance. Perhaps this enthusiasm comes from somewhere deep within, and cannot be learned or taught. Perhaps these are simply enthusiastic teachers, and that is 'what it takes' to be successful in teaching at a distance. Perhaps, however, it comes from a sense of being supported, and that this perception of support equates to a sense of being valued for their contribution to education.

Question: What has been your experience with technical support personnel / department at this institution?

Not at all surprisingly, technical support was felt by all the participants to be necessary, perhaps even imperative. In most cases, participants felt that technical support at their respective institutions was somewhere between good and excellent. Many of these same individuals, however, expressed strong concerns about issues that had the potential to impact the quality of support. The two primary concerns expressed were that their technical support personnel have workloads that are

viewed as excessive, which is closely related to the second issue of there not being enough of such staff to adequately respond to the demands for technical support.

This perception of an imbalance between the demand for technical support and its subsequent supply can certainly be viewed from both sides. While on one hand these individuals believe that the supply is inadequate, it may also be true that the demand is inappropriate. It is entirely possible that technical support personnel appear overworked because they are answering requests for help that are not necessarily valid in the grand scheme of things; perhaps faculty and staff are too dependent on these personnel for tasks that they could and should learn to do for themselves. If this were indeed the case, or at least partly true, one possible solution might be training for faculty and staff that would include some component of technical self-sufficiency. This issue was not explored herein, but is likely one that might be subject for a study on the effective use of technical support staff.

Pamela points out something to which most anyone who has dealt with technical support can relate: her technical support personnel know how to 'speak English', as opposed to 'tech-speak.' Academics, in particular, do not react favorably to being made to feel inferior, which could easily become the case if communication is not happening on the same wavelength. Such an experience could possibly manifest in ways that would do nothing but harm to the relationship between these two sectors of the institution.

Blake's observations is interesting, in that he appears to be implying that the attitude of those faculty who are not supportive of distance education as a valid method of instruction are, at least in part, responsible for their institution not having

adequate technical support. He seems to be saying that their vocal stance against distance education may have had some impact on staffing, or perhaps on the utilization of limited resources, that resulted in these technical staff being let go, or not replaced. This might also imply some lack of administrative oversight, or plan for implementation of distance education as a part of the institutions strategic plan; if distance education is in fact a priority, and does fit into the plan to reach some part of the institution's constituency, the maintenance of an adequate technical support staff would seem to fit. Additionally, that naysayers could exert sufficient influence on employment practices may say something about the nature of the relationship between faculty and staff and the administration – as in the nature of the governance model, or of union contracts. Again, this issue was not considered herein, but would indeed be worthy of investigation.

Dale comments on having the best technology made available to him, and further seems to imply that the quality of this equipment surpasses that of many of his colleagues who have, like himself, also made requests for upgrades. Equipment purchases of the sort he refers to are significant in terms of funding required, and are likely beyond that which departments can manage within their own budgets. This gives rise to the possibility that there may be some degree of administrative support involved, at the department level or even higher. This could also be indicative of some sort of reward for his own personal commitment, either to distance education, or possibly to something broader in scope such as the institution as a whole or education in general. Again, this would be an administrative move,

but may also be reflective of their recognition of excellence in teaching in any delivery method.

The one dissenting viewpoint in this area of support came from one who appears very clearly to feel that the lack of technical support is due to a lack of administrative support. She does not diminish the value of technical support, however, but speaks pointedly to the lack of it. This is a prime example of the lack of support in some aspect of a venture having the ability to cripple that which was otherwise borne of good intentions. This is one of several instances in which this feeling surfaces.

In each case, the notion of technical support cannot be isolated, or be thought of as a service that can be provided without having an impact, or being impacted by, some other aspect of the institutional support matrix. It is indicative of a broader degree of support for distance education, necessary throughout the institution, which manifests itself – in this case – as technical support.

Question: What has been your experience with course development process at this institution?

The most emphatic expression of satisfaction with the level of support available in this area comes from a participant whose institution provides this support using practicing teachers, whose regular assignments include provision of support for those faculty within the institution who are teaching in a distance setting. It seems clear that the appeal is due not only to the fact that the support being received is of the highest quality, in the perception of this participant, but also to the fact that this is indeed peer support. These are individuals with whom

faculty can communicate comfortably on issues that might otherwise be sensitive, personal, or even constitute some degree of admission that something they've been doing in the classroom – distance or otherwise – is simply not working; hardly the sort of communication that faculty might have with someone outside their own ranks. The fact that these support personnel are actually performing this service as part of their teaching assignment also demonstrates a significant commitment to distance education on the part of the institution, i.e., the administration. It is interesting to note, however, that these individuals credited with providing course development support are also the same individuals who she feels are part of her technical support system – one of the indications that there is a blending of these two modes of support, at least in the perception of the faculty who depend on them. This particular participant appears to recognize that there are actually two different elements of support at play here, but this is not really the case with all who indicate some overlap of the two.

Other participants, when asked about course development support, respond by referring to aspects of teaching with technology that would more readily be associated with technical support – an indication that within these institutions there is perhaps little noted difference between the two. Just as quickly as these participants begin to talk about the level of support they have perceived to be available, they also begin to talk about that level being inadequate in some respect, essentially indicating that the support is not regularly available when they want or need it. This implies that they have come to accommodate, or perhaps even prefer,

the concept of optional support, or support that is available on demand, but not necessarily needed on a regular basis.

The intermittent nature of this demand – and its availability – may be essentially another point on the continuum of support, one possible end point of which is the notion observed in the previous example. At that end point, communication flows freely between the source of support and those needing it, while at a point somewhere along the continuum, there appears to be an awkwardness or hesitancy in the communication that may be related to the fact that the source of support is not of their peers. That such support is optional, then, becomes the ‘next best thing’, and these faculty might lean more on the development of their own abilities, and seek support only when they encounter a situation around which they are willing to communicate their shortcomings.

Another closely related element of this notion is that, although most faculty in community college setting have had no formal training as educators, their propensity for being open to the idea that they may have something to learn about the teaching and learning process is, in my experience, not one that many faculty tend to act upon. This may be for reasons other than their feeling outside the bounds of a need for any help with designing the most effective methods of conveying course content, but nonetheless lends credence to the notion of this sort of help being made available as an option, as opposed to being required.

Still, the notion of optional support for course development seems appealing to many of these participants, whatever the reason. Indeed, several of our participants have indicated less than a continuing need for this sort of help. It is not

unreasonable to assume that this feeling might be held by a significant portion of any institution's faculty.

Several participants also noted current financial constraints when referring to this support; funding that was once available to them for spending their time on course development is no longer there. Apparently there was, in the recent history of several of these participants engagement with distance education, state assistance that specifically targeted distance course development in distance education. This assistance was in the form of grant funds, of which many of these institutions availed themselves. These funds were largely applied to release time for course development, or perhaps in the form of stipends for the same. The funds were available for a finite period, and now that the period has ended, most of these institutions seem not to have found a way to continue development or to replace funds that once inspired this activity. Again, this is viewed by some as a lack of administrative commitment.

Certainly, there is the recognition that the administration must grapple with a host of budgetary issues, of which distance education course development – or any other aspect of support for distance education – makes up only a fraction compared to the entire financial picture of the institution. One participant observes that “if the administration were to pay us extra for everything we do, that'd get pretty expensive pretty quick.” This is corroborated to some degree by another participant, who notes that as finances fade away, and departments have to pick up funding – if indeed they are able to do so – that the institutions may see more of

this development done solely by those faculty who are motivated to do it for another reason, “and that may not be all bad.”

Adding even more fuel to this fire, yet another participant feels that faculty have an obligation to change, to learn new things, to “work hard at their job,” regardless of the cost. This cost to which he is referring could be construed as either the cost to the individual, in terms of their effort that is over and above what they have been in the habit of doing day in and day out, or to the institution, which is responsible for leading the process of change. I believe he is referring to both.

Question: What is your relationship with student services at this institution?

Do you feel that your distance students have adequate access to the necessary services?

Most participants view the delivery of logistical services as not being too very problematic, at least for themselves and the students with whom they deal as part of their classes. Although each of these institutions approach these services and their delivery very differently, it seems to work, and not impede to any great degree the progress of the course of study that students are pursuing.

Some participants demonstrate a tendency to equate the delivery of student services in the distance setting to that with the delivery of these services in the campus-based setting, i.e., faculty seem to view this as the responsibility of the student to take care of details such as getting admitted and/or registered, arranging for their financial aid, or taking care of the billing process. In their traditional roles on campus, faculty rarely need to get involved in either the provision of these services or in any follow-through that may be required for any of them. There are

exceptions, of course, in that most faculty get some sort of roster that is generated by the registrar for each course of those students who have paid and are in fact enrolled, and also often need to verify attendance in a course for the purposes of finalizing a financial aid award. These procedures, however, usually amount to little more than something akin to taking attendance. This being the case, it is not too surprising that these faculty do not tend to concern themselves with the acquisition of these same services in a distance setting.

Just as faculty expect these services to be available to their campus-based students, there is probably the expectation that they are made equally available to their distance students. On the other hand, if these students are accessing the course material from a distance, and do not ever come to campus, the provision of these services to them by some distance delivery technology may easily make the difference in their very participation in the course. It may even be argued that these services provide the foundation upon which courses and programs are delivered at a distance; if these services are not available to distance students, there would be no point in even offering any content, since the students would not be able to get registered, pay the tuition, etc., unless they went to the campus to do so. Going to the campus is simply not possible for many distance students; in fact, the distance that separates them from the campus is the reason that many of them access this mode of educational delivery in the first place. If distance is not an obstacle, perhaps it is the obstacle of time; a student living in the vicinity of the campus may still not be able to get there during those hours when these services are available.

This could be for a number of reasons, but again, many students do in fact find themselves in this dilemma of being time-bound.

Perhaps it is not for faculty to determine the manner in which logistical services are made available to their students. This may be – and without any great stretch of the imagination – an issue for another branch of the institution to grapple with. It can be safely stated, however, that the lack of such services would certainly interfere with their gaining enrollments in many of their courses. This may not be much of an issue on campus, where courses can easily fill up before all those who want or need them can get enrolled. In a distance setting, however, enrollment numbers may more often make the difference in the course being delivered or cancelled. Tending to these logistic services, ensuring their availability to students in this setting, would certainly be in the best interest of all involved.

An issue not explored in this study, but one which may have an increasingly stronger impact on the survivability of distance education, is the notion of the entrepreneurial model in higher education. As funding models undergo changes, and state coffers find fewer dollars to augment the budgets of higher education institutions, distance education is seen by many as an opportunity to reach well beyond the limits imposed by geopolitical borders and garner as many new students as possible, especially if retention of tuition dollars is possible. This is just what many institutions in Oregon are doing, but it requires something that most faculty are not accustomed to having to do in order to gain enrollments – advertising. Many students, or potential students, are ‘shopping’ for the course or program that best fits their particular needs, and may well make their decision on factors that

extend beyond the typical academic factors of course content, instructor, etc. The availability and ease of use of necessary services – these same logistic services – may figure significantly into the decision-making process for these people. To ignore that issue is simply to ignore potential enrollments, and limit the institution to the same population of constituents as that which they have traditionally served, which may not be sufficient to warrant the continued development of distance education programs. Taking this notion one step further, this may be a factor in the less-than-positive attitude taken towards distance education by some institutions; less-than-aggressive enrollment management in distance education courses or programs could easily become a factor in their perceived lack of success, and therefore their perceived need in the spectrum of offerings of an institution. Again, this was not a factor considered within the confines of this study, but would indeed warrant further investigation.

Only a few of these participants acknowledged a need for student success services, or were aware of the manner in which their students could access them, if indeed they were even available. This does not appear, however, to be significantly different from the situation that exists on most campuses. The historical disconnect between – or perhaps more accurately the lack of integration of – the academic branch and the student services branch that has plagued higher education for some time seems to have carried over into the distance setting. Those faculty that are aware of these services on campus, or towards which they might direct a student for whom they perceived a need for these services, are very likely going to be similarly attuned if they find themselves teaching at a distance. This does not address what

may be the fundamental obstacle to delivery of services to distance students; the conscious integration of the academic sector and the services sector within the institution as a whole would come closer to a solution, and allow students in a distance setting the best advantage and opportunity to become successful in their quest for an education.

Two participants made observations that are worthy of note, and consideration in the approach to distance student services. The first has to do with the need for an adequate screening tool, to help students assess whether or not they are suited to the distance learning environment. This is being done with some significant degree of success at some institutions across the country. Not only do some of these institutions screen students prior to their entry into a distance education course, or provide some type of self-assessment to help them do so themselves, but in some cases, follow-up courses that allow them to hone their technological and distance learning skills are available to help the student understand and make the most of some of the mechanisms involved in distance learning. Such an approach may bear close examination for those institutions engaging in distance education, impacting student retention, success rates, or any other parameter upon which the success of distance education may be gauged.

The second observation has to do with the issue of having all the services that are available to campus students available to the distance student population as well. This may not be simply desirable, but indeed very necessary, as regional and national accreditation agencies continue to develop standards for distance

education, most of which include, at least in their draft forms, just such a requirement.

Question: How do you feel about the level of support that this institution's administration demonstrates towards distance education?

Each of the other three questions in the interview process that have to do with support have yielded responses which demonstrate a very close connection with the concept of administrative support. Although there is some acknowledgement on the part of a few of the participants of a good deal of support from their respective administrations, in many cases participants feel that their administration has been lacking in some respect in their visible and/or vocal support, which manifests in their not having the needed support in other areas. Much of this is directly related to the issue financial support, which translates into nearly every other aspect of support that may be needed in distance education setting; adequate technical support personnel, stipends or release time for course development, and quite possibly, progress in developing a full array of student services for distance students – all of these require financial resources, and can be traced back to the role of institutional administration.

One participant raises the notion of the administration's inability to 'take sides', which is essentially an issue of leadership. This is an issue that is fundamental to that of inadequate funding; it comes closer to the notion of establishing priorities, and the willingness to stand behind them. This participant seems to be saying that the administration must take an active leadership role if distance education is ever going to be truly successful in that institution.

Another participant elaborates quite nicely upon the notion of active leadership, covering his perception of what happens when the institutional leadership is not forward and vocal, and what is possible if they were to do so. His final assessment is somewhat graphic, referring to the process as “a lot of wailing and gnashing of teeth,” and although it need not always be so, it can indeed be just that way. The ultimate question, he seems to be saying, is whether it is worth it to the institution to take that path – to take a stand, make distance education an obvious priority, and be willing to defend this stance to the board or to the faculty union, or any other institutionally related organization that may question or challenge the priority.

All of these individuals are pointing to the same notion: is distance education truly a priority for the institution? Have they the belief that it will pay dividends back to the college, and make a significant contribution to its mission? If so, then the priority should be demonstrated by the actions of the administration. If not, then the effort is ill-spent.

Question: Are you comfortable with your own learning style? Do you feel that your own learning style is reflected in the manner in which you have approached distance education?

Not surprisingly, all of the participants are quite comfortable with their own learning styles, and believe that their teaching reflects the same. An obvious and recurring theme with all of these participants is that of being very student centered. The teaching style that they embody is focused on students actively engaging the course material and the learning experience; their students do not simply listen to or

read about a topic, but interact with each other, with the instructor, and get intimately involved in the learning process – if they are to be successful. This is a very deliberate approach to the teaching and learning process on the part of all of these teaching professionals, and has obviously been so throughout their teaching careers – not something that just happened to fall out of their having become involved in distance education.

This would seem to make a statement – loud and clear – about the faculty who get involved with distance education, and may actually serve to help separate out those who should become involved, and those who should not. If one considers that the success of any educational venture involves some degree of balance – or perhaps interplay – between the teacher, the student, and the curriculum, then it follows that, in the distance education setting, there are the ‘shoulds and should-nots’ of any of these elements. Perhaps, with respect to faculty, this might be a good criteria upon which to base, or at least to be considered as a part of, the decision to move into distance education.

Finally, only one participant had anything to add when asked if there were any other element of support, any other consideration that had not been brought out in the interview process, which might have had some bearing on their feeling of success or enthusiasm for distance education. In her response, this individual talked about the notion of feeling overwhelmed with all there seemed to be to learn with respect to teaching in this manner, and the apprehension that she felt when she first considered moving into the field. In short, her apprehension for this was overcome with the assistance of the faculty team who were assigned by her institution as

support for faculty new to distance education; their persistent message was that it was perfectly acceptable to start into teaching at a distance gradually, doing what one can and doing it well, and increasing the scope of operation as one moves along. She felt that this was a particularly important message to convey to other new faculty, and that this type of support had been invaluable to her as she has worked through the 'growing pains' of this new aspect of her profession.

Consequently, she has approached her teaching with technology as an incremental growth process, adding in a few new 'tricks' each term; her repertoire grows impressively at the same rate, without the stress or risk of burnout that might otherwise accompany the steep learning curve that many feel this effort to be.

Summary and Implications

Are there identifiable factors in the path to success of these individuals which may help formulate meaningful faculty development efforts for those faculty who have not yet reached such a comfort level? Are these support systems described herein truly necessary? Has the presence of such support contributed to their success and enthusiasm? Conversely, would the absence of such support have impeded their success and/or enthusiasm? Are these elements of support of any value to those who may want to teach at a distance, but have not yet entered the field? Would their absence impede the potential success or enthusiasm of others who have not yet entered the field?

That technical support is critical to successful any distance education program is evident from the summation of the responses of the participants. Without it, few would venture in to distance education, much less find success.

There were those interviewed for this study who had little of it, but found ways to manage, primarily due to some propensity on their own part for technology. While it may be true that more educators are coming into the field having had some experience with technology, this can hardly be depended upon from those faculty who have yet to join the ranks of distance educators. Another important aspect of this issue is the demand placed upon the technical support personnel by the institution as a whole, of which distance education is very likely only a part. A more important aspect of this issue may indeed be the true need for such support, which then raises the issue of the balance between supply and demand.

It is clear from the responses focused on support for course development that those who have such support are empowered by its availability, and that the presence of such support has made them feel far more comfortable with teaching at a distance than may have been the case if this support had not been available. Those who have not experienced it, or who have confused the notion with that of technical support, seem to be getting along without it; perhaps they have never really entertained the notion of what it would be like to have such support made readily available to them. For as much as this support may be made available to new faculty entering distance teaching, its absence would not likely spell doom for their efforts. This notion is very much entwined, however, with that of faculty being open to learning about teaching and learning, which is not an issue unique to distance education. Pedagogical and androgogical considerations appear to be an issue regardless of the mode of delivery.

The provision of logistical student services seems a straight-forward issue; if the logistical support is not there, student enrollments are likely to suffer, if not simply cease to exist. For the participants of this study, however, such services seem to be of concern only when they fail – not much proactive thought, on the part of the faculty, seems to go into the equation of their availability or delivery. Concerns of faculty in this area probably parallel their propensity to be concerned about it in any delivery mode, be it distance or campus-based.

As for success services, the issue seems to lie deeper within the culture of higher education. An awareness of the benefit of a closer relationship between the academic and student services branches of the campus must be raised before distance education will see any real change – unless accreditation issues force the hand, and this may indeed be what it takes. As with logistical services, the presence or absence of these services are likely not an area of concern for new faculty unless they had some tendency to be familiar with them in the traditional setting.

With respect to administrative support, there is little question that the key to provision of all these support services lies with the institutional leadership. As some of the participants observed, the best of situations is possible only with proactive leadership – an administration that has a clear vision of where the institution is going, where distance education fits into the strategic plan, and what they are willing to do to achieve their goals. A visible and vocal administration would certainly serve to encourage and motivate faculty to be successful in this field.

There appears to be clear evidence for a higher possible degree of success when these elements of support are considered as a system, rather than as individual and separate identities that can be either present or absent with no noticeable effect on the other elements. Faculty who had all of these elements in place, and for whom they seemed to be integrated, were at the top of the ladder with respect to their enthusiasm. Others, who perhaps had only a few of them in place, seemed to be hanging on somewhere short of the top, and although still perceived as having achieved some degree of success in their field, were still not brimming with enthusiasm.

Could this indicate some correlation, that perhaps higher degrees of enthusiasm are connected in some way with a complete and integrated systems approach to support? Administrative support ties all of these elements together, clearly, but they have unique and individual relationships as well. Support for student services cannot exist and flourish without the cooperation of technical support. A course cannot expect to receive the full benefit of continuous improvement with respect to its pedagogical approach if technical support personnel are less than completely understanding and supportive of the faculty's need to do so, and if the faculty themselves are not attuned to the benefits of sound pedagogical and androgogical approaches. The most appropriate pedagogical approach, if it is indeed in the best interest of student success, may well include an integrated avenue to student success services which is easily accessible by students within the context of the course interface. Certainly the design of the course itself could include, or at least consider, a recognition of such possibilities. Again,

administrative support is at once the glue that holds all of this together, the engine that drives it all, and the beacon that lights the way. Encouragement to proceed, clearing the path such that unimpeded progress is possible, and rewarding excellence in performance and delivery, all are necessary elements of a successful program, and hence enthusiastic faculty.

Chapter Six:

Recommendations and Issues for Further Study

Recommendations

The principal research question has been whether factors perceived by these faculty in their success in teaching in a distance education setting could indeed be identified, and whether such factors would in fact be useful in the shaping of a faculty development plan for faculty who have not yet engaged teaching in this manner. In light of the analysis of data gathered as a result of this research, the following recommendations are offered to those institutions, particularly community colleges, which may be in the position of attempting to help current faculty transition into teaching in a distance setting:

- Faculty who are new to distance education should be availed of development opportunities that lead to and contribute to their success in teaching at a distance. Such opportunities could conceivably be offered in a variety of configurations so as to meet institutional preferences, but should nonetheless be made available.
- Faculty development should include an awareness of the options for technical support. In addition, the institution would do well to make faculty aware of what constitutes a valid request for such support, and what is expected of them to be able to provide for themselves, as well as possibly evaluating the nature and validity of such requests throughout the institution.

- Faculty development should include an awareness of the options for and benefits of distance education course development. The ideal situation is to have such support available through other faculty who understand the technology, and have had experience with it, as well as having had experience with instructional design for distance education.
- Faculty development should include an awareness of the system of support that is available through student services for the distance education constituency. Both logistical and success services should be covered, as well as the means by which students are able to access such services in the distance setting.
- Faculty development should include an awareness of the position of the institution with respect to distance education, and how it fits into their strategic plan for meeting the mission of the institution; this awareness should be a specific component of the development sessions, as well as an obvious driver for them.
- All elements of support should be developed in a comprehensive manner, and the relationship(s) between and among these elements of support should be made clear to faculty.

Distance education has the potential, in this age of information, to allow more citizens to realize their goals and aspirations than ever before. Faculty are undeniably critical to the success of distance education; their success in fact equates with the success of any overarching mission. Support of such faculty efforts is

equally and undeniably necessary, as it constitutes a statement of the institution as to the value of these faculty. To recognize such value is to inspire success.

Issues for Further Study

Several issues have emerged during the course of the conduct of this study which may warrant further investigation. These are highlighted here for those who may be so inclined to follow such a path, and are mentioned strictly as notions that might be pursued, as opposed to formulated research questions.

World Wide Web and Distance Delivery

This issue arose as tangential to the discussion that centered around the level of experience of the participants involved in this study, and the technologies with which they had the most experience. The question not well explored is whether the Internet – particularly the World Wide Web – is emerging as the preferred method of delivery for distance delivered course material in higher education, or if perhaps other less prominent technologies still have a place in packaging and delivery of educational programs. (see discussion on p. 81)

Supply vs. Demand of Technical Support

This issue emerged as a critical element of the basic need for technical support, and the subsequent availability of it. Most participants felt that technical support was adequate when they received, it, but that it simply was not available to the extent that they thought it should be available. The question that might be explored is whether the nature of requests for technical support within any given institution is indeed valid for the level of self sufficiency that might be expected of

higher education professionals. Are these technicians providing support that might be alleviated with a comprehensive training program for faculty and staff such that the demand for technical support might be balanced with its potential for supply? (see discussion on p. 83)

Entrepreneurial Approach as a Survival Strategy

As funding models for higher education undergo change, most institutions are finding themselves faced with the need to develop new sources of revenue. Distance education offers, to some, the opportunity to reach beyond their previously identified borders into a realm that may provide increased enrollments, and the revenues that might be expected to accompany them. What are the cost factors that come along with the venture into distance education? Are increased revenues from tuition and fees sufficient to offset the cost of course and program development, and the deployment of technology necessary to support them? Conversely, are such costs viewed as a deterrent to entering into the realm of distance delivery at all? Is there, in fact, an accurate model of determining what the real costs of delivering distance education really are? These are but a few of the questions that might emanate from the notion of the entrepreneurial model of higher education as it applies to distance delivery. (see discussion on p. 91)

Bibliography

Alfano, K. (1994). Recent Strategies for Faculty Development. ERIC Digest. U.S.; California: ERIC Clearinghouse for Community Colleges, Los Angeles CA.

American Federation of Teachers, Higher Education Program and Policy Council (2000). Distance Education: Guidelines for Good Practice (36-0693).

Anderson, B. L. (1993). The Stages of Systemic Change. Educational Leadership, 14-17.

Baker, R. (1997). Strategic Plan of the Oregon Community Colleges for Distance Learning. U.S.; Oregon: Oregon Community Colleges, Salem.

Baker, R. L. (1998). Factor Patterns That Foster or Impede Distance Education in Washington State Community and Technical Colleges. U.S.; Oregon.

Baker, R. L., & Wolff, S. J. (1998). Distance Education Consortia: The Northwest Experience. U.S.; Oregon.

Bialac, R. N., & Morse, G. E. (1995). Distance Learning: Issues for the Experienced Teacher as a Novice in the Virtual Classroom. ED, Education at a Distance, 9(2), J3-J6.

Billings, D., & et al. (1994). Faculty Perceptions of Teaching on Television: One School's Experience. Journal of Professional Nursing, 10(5), 307-312.

Billings, D. M. (1984). Computer Assisted Instruction Courseware Development: An Instructional Design Approach. Collegiate Microcomputer, 2(1), 41-50.

CEO Forum on Educational Technology (2000). Teacher preparation Star chart: A self assessment tool for colleges of education.

Clouse, R. W., & Garrett, L. N. (1994). Case Analysis: An Instructional Tool. Journal of Educational Technology Systems, 23(1), 39-51.

Cochenour, J. J., & Reynolds, C. (1998). Integrating Computer Technologies in Distance Learning as Part of Teacher Preparation and Inservice: Guidelines for Success. U.S.; Wyoming.

Commissions, Regional Accrediting (2000). Guidelines for the Evaluation of Electronically Offered Degree and Certificate Programs - Draft.

Cooley, N. a. J., Michelle A. (2000). Beyond Teacher Bashing: Practical, Philosophical, and Pedagogical Influences on Educators' Use of Educational Technologies. The Technology Source, July/August 2000.

Dowlin, K. E., & Loertscher, D. (1999). Web-Based Instruction for Continuing Education Students: A Report on the San Jose State University Virtual Library School Program and Its Potential for Web-Based Instruction for Continuing Education. U.S.; California.

Everett, D. R., & Grubb, A. (1997). Facilitating Learner Adjustment to the Distance Learning Environment. U.S.; Kentucky: Morehead State Univ. KY.

Ferrell, K. A., Wright, C., Persichitte, K. A., & Lowell, N. (2000). Capitalizing Distance Technologies To Benefit Rural Children and Youth with Visual Disabilities. U.S.; Colorado.

Florida State Board of Community Colleges, (2000). Distance Learning in the Community Colleges: A Look at the Online and Teleclass Experience. A Level 1 Review. U.S.; Florida: Florida State Board of Community Colleges Tallahassee.

Fried, J. (1998). Steps to Creative Campus Collaboration. Invited Paper. U.S.; District of Columbia: National Association of Student Personnel Administrators Inc.

Garrett, L. N., & Weiner, B. J. (1999). Keys to Success in Delivering Distance Learning on the Internet. Distance Education Report, 3(4), 6-7.

Graff, K. E., & Holmberg, B. E. (1988). International Study on Distance Education: A Project Report. West Germany: FernUniversitat Hagen (West Germany). Zentrales Inst. fur Fernstudienforschung Arbeitsbereich.

Grubb, A., & Hines, P. (1999). Innovative On-Line Instructional Strategies: Faculty Members as Distance Learners. U.S.; Georgia.

Hassenplug, C., & et al. (1995). A Statewide Study of Factors Related to the Successful Implementation of GSAMS Credit Courses at Technical Institutes. U.S.; Georgia: Georgia Univ. Athens. Dept. of Occupational Studies.

Hassenplug, C. A., & Harnish, D. (1998). The Nature and Importance of Interaction in Distance Education Credit Classes at Technical Institutes. Community College Journal of Research and Practice, 22(6), 591-605.

Holmberg, B. (1980). Aspects of Distance Education. Comparative Education, 16(2), 107-119.

Holmberg, B. (1982). Recent Research into Distance Education [Volume I and Volume II]. West Germany: FernUniversität Hagen (West Germany). Zentrales Inst. für Fernstudienforschung Arbeitsbereich.

Holmberg, B. (1989a). The Concept, Basic Character and Development Potentials of Distance Education. West Germany.

Holmberg, B. (1989b). The Concepts and Applications of Distance Education and Open Learning. West Germany.

Holmberg, B. E. (1989). Mediated Communication as a Component of Distance Education. West Germany: FernUniversität Hagen (West Germany). Zentrales Inst. für Fernstudienforschung Arbeitsbereich.

Holmes, W. H. (1985). Technological Support for Community Colleges in America: A Concept Paper. U.S.; Washington: Spokane Community Coll. WA.

Holstein, J., Gubrium, J. (1995). The Active Interview. Thousand Oaks, CA: Sage.

Keegan, D. J. (1984). The Administration of Student Support Services at the Open University. Journal of Educational Administration, 22(1), 83-96.

Koltai, L., & Wolf, D. B. (1984). Critical Issues Facing the Community College. U.S.; California.

Kubala, T. (1998). Teaching on the Internet. Visions: The Journal of Applied Research for the Florida Association of Community Colleges, 2(1), 44-46.

Latta, G. F., Bicknell-Holmes, T., & Martin, S. (1998). Improving Academic Rigor through Curriculum Redesign. U.S.; Nebraska.

Lynch, W., & Corry, M. (1998). Faculty Recruitment, Training, and Compensation for Distance Education. U.S.; District of Columbia.

MacFarland, T. W. (1998). Assessment of an Internet Training Program for Distance Education Adjunct Faculty. U.S.; Florida.

Mangano, J. A., & Corrado, T. J. (1980). Toward a Taxonomy of Adult Two-Year College Student Needs. U.S.; New York.

Manzo, D. A. (1995). Provision of Academic Support Services to Adults in Distance Education Programs. U.S.; Pennsylvania.

Merriam, S. a. C., R. (1991). Learning in Adulthood: Jossey Bass.

- Millichap, N. (2000). How Using Technology Affects the Learning Process and Faculty Behavior. The Technology Source, May/June 2000.
- Minich, E. L. (1996). Using Student Feedback To Improve Distance Education. U.S.; Florida: Florida Community Coll. Jacksonville.
- Monaghan, P. (1995). Technology and the Unions: Faculty Labor Leaders Air Hopes and Concerns as Colleges Enter the Electronic Era. Chronicle of Higher Education.
- Moore, M. G. (1993). Is Teaching Like Flying? A Total Systems View of Distance Education. American Journal of Distance Education, 7(1), 1-10.
- Morse, G. E., Glover, H., & Travis, J. (1997). Survey of Distance Education Utilization in Information Systems Departments. U.S.; Georgia.
- Mortera-Gutierrez, F., & Murphy, K. (2000). Instructor Interactions in Distance Education Environments: A Case Study. Mexico.
- Murphy, T. H., & Terry, H. R., Jr. (1998). Faculty Needs Associated with Agricultural Distance Education. Journal of Agricultural Education, 39(1), 17-27.
- Paneitz, B. (1997). Community College Students' Perceptions of Student Services Provided When Enrolled in Telecourses. U.S.; Colorado.
- Parrott, S. (1995). Future Learning: Distance Education in Community Colleges. ERIC Digest. U.S.; California: ERIC Clearinghouse for Community Colleges Los Angeles CA.
- Phillippe, K. A. E., & Patton, M. (2000). National Profile of Community Colleges: Trends & Statistics. 3D Edition. U.S.; District of Columbia: American Association of Community Colleges Washington DC.
- Riner, M. E., & Billings, D. M. (1999). Faculty Development for Teaching in a Changing Health Care Environment: A Statewide Needs Assessment. Journal of Nursing Education, 38(9), 427-429.
- Roberts, S. (1991). Brain Waves. Compute, 13(9).
- Ruksasuk, N. (1999). Library and Information Science Distance Education in Thailand in the Next Decade. Thailand.
- Russell, T. L. (1999). The no significant difference phenomenon: as reported in 355 research reports, summaries and papers. North Carolina: North Carolina State University.

Saba, F., & Shearer, R. L. (1994). Verifying Key Theoretical Concepts in a Dynamic Model of Distance Education. American Journal of Distance Education, 8(1), 36-59.

Saba, F. E. (1999). New Academic Year Starts with Controversy over the Use of Technology. Distance Education Report, 3(21), 1-2.

Schamber, L. (1990). Distance Education and the Changing Role of the Library Media Specialist. ERIC Digest. U.S.; New York: ERIC Clearinghouse on Information Resources Syracuse NY.

Schauer, J., Rockwell, S. K., Fritz, S., & Marx, D. (1998). Education, Assistance, and Support Needed for Distance Delivery: Faculty and Administrators' Perceptions. U.S.; Nebraska.

Schlechty, P. C. (1991). Schools for the twenty-first century : Leadership imperatives for educational reform. San Francisco: Jossey-Bass.

Schrum, L. (1992). Information Age Innovations: A Case Study of Online Professional Development. U.S.; Oregon.

SchWeber, C., Kelley, K. B., & Orr, G. J. (1998). Training, and Retaining, Faculty for Online Courses: Challenges and Strategies. U.S.; Maryland.

Seidman, I. (1991). Interviewing in Qualitative Research: a Guide for Researchers in Education and the Social Sciences. New York, NY: Teachers College Press.

Senge, P. M. (1990). The fifth discipline: mastering the five practices of the learning organization: Doubleday.

Shearer, R. L. (1999). Accreditation of Distance Learning in Higher Education. Distance Education Report, 3(4), 5.

Shearer, R. L., & Rose, B. (1998). CMC Environments Designed To Facilitate Multiple Levels of Interaction. U.S.; Pennsylvania.

U.S. Department of Education, National Center for Educational Statistics (2000). The Condition of Education 2000. Available: <http://nces.ed.gov/>.

Wheatley, M. J. (1999). Leadership and the new science : discovering order in a chaotic world (2nd ed.). San Francisco: Berrett-Koehler Publishers.

Willis, B. (1992). Effective Distance Education: A Primer for Faculty and Administrators. Monograph Series in Distance Education No. 2. U.S.; Alaska: Alaska Univ. System Fairbanks.

Appendices

**Appendix A:
Script of Verbal Request to
Dean of Instruction /
Dean of Distance Education /
Vice President of Academic Affairs**

**Script of Verbal Request to Dean of Instruction / Dean of Distance Education /
Vice President of Academic Affairs**

Good (day, morning, afternoon...) Dr./Mr./Ms. ----; thank you for allowing me a few moments of your time today to outline for you a research plan that I think will benefit all of us involved in community colleges and distance education.

I am a doctoral candidate at Oregon State University, in the Community College Leadership Program. I am currently laying the groundwork for my dissertation. The intended outcome of this study is to identify factors that may be applied to effective faculty development efforts for distance education faculty.

Your institution has been engaged in distance education courses/programs. What I would hope is that you could identify for me the faculty in your institution who are enthusiastic about teaching in a distance education setting. I would then like your permission to use that list to make initial contact, and determine if any of them they would be willing to be interviewed about their perceptions of their own success in that endeavor.

These interviews would involve a block of no more than two hours of your faculty's time, and would be arranged so as to impose minimal inconvenience to them or any of your staff. I would not ask that any of the faculty sacrifice any class time, or time otherwise dedicated to institutional functions, meetings, etc. I would also hope that we could arrange to conduct the interviews in a location that would be both comfortable for the interviewees, and free from any unnecessary interruptions, e.g., phone calls, etc.

There is the possibility of having to re-contact some or all of the interviewees; that would only happen, however, in the event that some theme emerges from the sum of all the interviews conducted that had not been adequately covered in the initial process.

And finally, I would like to assure that the president of the college is aware of this process. In the interest of professional confidentiality, however, I would like to be able to assure the faculty involved of complete anonymity. To meet that need, what I'd hope to secure would be a letter from your president, or his/her designee, indicating that he/she is aware of the fact that these interviews are being conducted, but that he/she can respect the need for anonymity. Do you believe that this is possible, and would you be willing to help arrange that for me?

As soon as I have the letter from your president, I will be able to begin contacting faculty and arranging the interviews. I will coordinate with your office, or with whomever you may designate, on the physical details of the interviews, such as room availability, etc.

Thank you so much for your cooperation. Good day.

**Appendix B:
Script of Verbal Request for Participation
to Identified Faculty Candidate**

Script of Verbal Request for Participation to Identified Faculty Candidate

Good (day, morning, afternoon.....) Dr./Ms./Mr. ----; thank you for allowing me a moment of your time today to outline for you a research plan that I think will benefit all of us involved in community colleges and distance education.

I recently contacted Dean ____, and asked her/him to identify faculty in this institution who have been involved in teaching in the distance education setting as potential participants in a study that I am conducting in conjunction with my doctoral thesis. Your name was suggested as one such faculty.

First of all, I'd like to confirm with you that you do in fact perceive your attitude towards teaching in a distance education setting to be one of enthusiasm. Do you believe that such a perception is accurate?

If not:

I apologize for the misunderstanding, and I'm sorry if this had caused you any inconvenience. Thank you for your time.

If so:

As a part of this study, I would like to conduct an interview with you that would last no more than two hours. During that interview, I would be asking you to describe certain experiences with distance education, both good and bad, but that have ultimately led you to your current positive feelings about teaching with this new medium.

Should you agree to this interview, you can be assured that maintaining your anonymity is of paramount importance to me. Your participation in this process will be known only to myself. Your dean has agreed that I will not have to reveal the names of the participants in this project. The interview will be recorded, to allow for complete transcription of your comments. Any and all comments made by you during the interview process will be used in the compilation of data, but will not be attributed directly to you. Your identity will, as I said, remain strictly confidential.

There is the possibility that some theme may emerge from the sum of the initial interviews that I had not anticipated, and feel is relevant to the nature of the study. In that event, you may be contacted for your permission for a follow-up contact and interview. You would, of course, have the same options that you do now to either accept or reject that opportunity.

If you are agreeable to this thus far, I'd like you to read through these documents. One is a description of the study, and the other is a permission form required by the university in order to have you participate. Each form is essentially self-explanatory, but I would be happy to clarify any information contained in them, or

answer any questions that may arise. Are you willing to go forward with this process?

Reading of both the Attachment to the Application for Approval of the OSU Institutional Review Board (ORB) for the Protection of Human Subjects and the Informed Consent document, and signing of the Informed Consent document, would culminate the process of faculty acceptance of terms of research project; signed and returned forms necessary to proceed with interview.

**Appendix C:
Framing Questions**

Framing Questions

1. Please speak briefly to your experience in distance education. What technologies have you had experience with? Do you, in general, feel that you have been successful in teaching in the distance education environment?
2. How do you feel about the level of support that this institution's administration demonstrates towards distance education?
3. What is your relationship with student services at this institution? Do you feel that your distance students have adequate access to the necessary services?
4. What has been your experience with course development process at this institution?
5. What has been your experience with technical support personnel / department at this institution?
6. Are you comfortable with your own learning style? Do you feel that your own learning is reflected in the manner in which you have approached distance education?

Appendix D:
Informed Consent Document

INFORMED CONSENT DOCUMENT

A. Title of the Research Project

Community College Faculty Attitudes and Perspectives in Distance Education

B. Investigators

Joanne B. Engel, PhD, Professor, School of Education, Oregon State University, Corvallis, OR.

Michael P. Cannon, MEd, Director, Eastern Oregon Collaborative Colleges Center, La Grande, OR.

C. Purpose of Research Project

This research project will attempt to identify transitional factors as community college faculty become involved in teaching distance education courses. Factors so identified may be applied to faculty development training which may help ease the transition for faculty who have yet to engage in distance education.

D. Procedures. I understand that as a participant in this study the following things will happen:

1. Pre-study Screening. Candidates for this study will be solicited first through the office of the Dean of Instruction, or the Dean of Distance Education (or equivalent). This office will be asked to identify faculty who have taught in the distance education setting, A maximum of eight candidates will be selected to participate.

2. What participants will do during the study. Candidates chosen through the procedure outlined in item 1 above will be invited to participate in a personal interview. This interview will be conducted by the researcher, and will be in a setting chosen at the mutual consent of the institution and the consenting faculty. The setting will be chosen for it's comfort, and for it's ability to effectively screen out distractions.

During the interview, participants will be asked a series of pre-selected questions concerning their perceptions of teaching in the distance education setting. The researcher will ensure that each of the participants have an opportunity to speak to each and every issue.

The interview session will last a maximum of two hours.

Participants may be contacted at some point after the interview if it is necessary, in the opinion of the researcher, to clarify any points made during the interview. This contact, if indeed necessary, will be either by phone or in person.

3. Foreseeable risks and discomforts. Some participants may be asked to speak to those factors which have caused them some difficulty in their efforts to deliver distance education courses. This may involve reference to individuals or departments within the institution who may take offense at such implications. Precautions will be taken to assure that anonymity to all participants with respect to the comments made within the interview.

No individual will be identified by name or by institution, nor will any affiliation to specific courses or programs be made. Further, no individual or institution will be identified in the report of the research.

4. Benefits to be expected from the research. Comments from the participants may become the basis for distance education faculty development efforts.

5. Alternative procedures or course of treatment. n/a

E. Confidentiality. No individual will be identified by name or by institution, nor will any affiliation to specific courses or programs be made in the report of the research.

F. Compensation for Injury. n/a

G. Voluntary Participation Statement. I understand that participation in this study is completely voluntary. I may withdraw from the project at any time without penalty.

H. If You Have Questions. I understand that any questions I have about the research study or specific procedures should be directed to:

Michael P. Cannon

1-541-562-5440

Joanne B. Engel

1-541-737-5989

My signature below indicates that I have read and that I understand the procedures described above and give my informed consent to participate in this study. I understand that I will receive a signed copy of this consent form.

Signature of Participant	Name of Participant (please print)
Date signed	
Participant's present address	Participant's phone number
Signature of Principal Investigator (optional)	Date Signed

Appendix E:
Dragon 'Naturally Speaking'
Voice Transcription Software

Dragon 'Naturally Speaking' Voice Transcription Software

The voice activated software package used in this project was Naturally Speaking, ver 4.0, by Dragon Systems. Purchase price at the time was approximately \$80, although since then, prices have dropped to the \$50 range. A version 5.0 has also been released, which appears to offer several enhancements over the previous version.

Before putting the software to use, the user must create a profile of both writing styles and voice patterns. Creation of a writing style profile is as simple as pointing the software to the directory where you store documents. If you write using significantly different styles, e.g., professional vs. colloquial, be sure to include those documents written in the style in which you intend to dictate. The more documents that are included in the formation of this base, the better the software will 'understand' your dictation. The voice profile is created initially by the user reading a passage presented by the software during the setup phase, which takes approximately five minutes. After initial creation, the profile is updated each time the software is used.

The software can be set to integrate with most common desktop applications, e.g., word processing, e-mail, etc. In other words, these applications can be opened, Naturally Speaking activated within that application, and the user can dictate directly in these applications. The option is to dictate using the software's own 'screen', then 'cut and paste' the dictated text into the intended final application. Both approaches are reliable.

The transcription process for taped interviews is relatively straight-forward. A transcription recorder is best although not absolutely necessary. Using such a device, the user can control the tape with a foot switch, as well as having control over tape speed. This allows the tape to be slowed down slightly for possible increased clarity, or sped up during a section that the user simply needs to review. Additionally, most recorders of this type will 'back up' the tape by a second or two each time the tape is stopped, allowing the last few words to be repeated. Since the software can only understand one voice during any given session, it is necessary to dictate the entire content of the interview, both interviewee and interviewer. Using headphones to listen to the interview, and a good quality microphone to dictate back to the software, this is easily accomplished, and the software only 'hears' one voice.

The final measure of the accuracy of the dictation lies in the style of user; slurring of speech, trailing off at the end of the sentence, etc., will result in more errors. On the other hand, clear and articulate voices are transcribed with an impressively high degree of accuracy.