DISSERTATION

THE EFFECT OF CHANGING COURSE DELIVERY MODES AND FACULTY STATUS ON FACULTY PERFORMANCE AT A PROPRIETARY GRADUATE SCHOOL

Submitted by

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WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY DONNA A. REKAU ENTITLED THE EFFECT OF CHANGING COURSE DELIVERY MODES AND FACULTY STATUS ON FACULTY PERFORMANCE AT A PROPRIETARY GRADUATE SCHOOL BE ACCEPTED AS FULFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

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ABSTRACT OF DISSERTATION

THE EFFECT OF CHANGING COURSE DELIVERY MODES
AND FACULTY STATUS ON FACULTY PERFORMANCE
AT A PROPRIETARY GRADUATE SCHOOL

The purpose of this research was to examine whether teaching effectiveness was impacted when faculty transitioned from part-time to full-time status and when they changed their delivery method from standard course to technology-augmented delivery. Historical data were used from five terms before the change (pretest), and 5 posttest terms from 2002 through 2004. The sample included 92 part-time faculty and 10 full-time faculty who changed from part-time. The outcome measure was end of term student evaluations.

Eight ANOVAs were used to compare ratings of part-time and full-time faculty on the pretest student evaluations. Mean posttest scores on each of the eight variables from the end of term student evaluations of faculty were compared using analysis of covariance to adjust for any pretest differences. Eight 2 x 6 mixed ANOVAs were used to analyze whether ratings changed from pretest to posttest. Five full-time faculty members were interviewed regarding their perceptions of the two transitions.

The results of this study indicated there were no significant differences between part-time and full-time faculty, in part because the small number of full-time faculty

produced inadequate power. There were a few relatively statistically significant differences between the pretest period when the standard delivery method was used and the posttest period after the change was made to the technology-augmented method. Only the overall composite variable showed a consistent increase in instructor ratings post change. Faculty interviewed stated they did not feel that the transition from standard to hybrid delivery negatively impacted their teaching effectiveness, and they agreed that they would not recommend returning to the former method of standard delivery.

These findings may assist institutions as they make future curriculum design decisions and as they evaluate change projects. Additionally, this study may encourage further analysis of the cost and risk of implementing new curriculum design. The results may also impact faculty expectations of a change in teaching status from part-time to full-time.

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CHAPTER 1

INTRODUCTION

There are two factors in our modern culture that have ramifications for higher education now and in the future. The first is the rapid advance of technology and its integration into every facet of society. The second is the growing appeal of lifelong learning and continuing education. Technology has meant rapid change. Change in the workplace and in everyday life has required adults to update their skills in order to stay competitive and enrich their lives.

In order to keep up with our changing world, more and more adults are looking toward graduate school to further their education by earning a degree or pursuing continuing education interests. Adults returning to school have high expectations of their education. They demand high quality education, value for their money, and flexibility in scheduling and programming that allows them to maintain their lifestyle. These demands pose challenges for existing institutions.

There have been significant changes at Keller Graduate School of Management of DeVry University (KGSM) in the past few years. These include a change in the academic calendar, a shift in the curriculum delivery method from a standard classroom delivery mode to a hybrid (classroom and online) mode, and the first use of full-time faculty. KGSM used only part-time independent contractor faculty until 2003. There have also been changes to the training requirements of faculty to be prepared to teach in this new methodology.

At KGSM, the decision to change the academic calendar from 10- to 8-week terms was a top-down decision based on financial projections and the integration of the undergraduate and graduate schools into one data management system. However, the choice of changing the instructional delivery method from a standard in-class format to a hybrid format where 80% of the instructional time is in class and 20% online, was made to meet student demand for increased flexibility and the advancing technological environment.

In July 2003, the graduate school converted from five, 10-week sessions per year to six, 8-week sessions per year. This academic calendar conversion also prompted the use of the hybrid rather than the standard delivery method, as it made possible the delivery of some instruction hours online, allowing for fewer changes to the curriculum. For example, each course has a set of Terminal Course Objectives (TCOs). The reduction from a 10-week session to an 8-week session would have resulted in the elimination of some TCOs—and thus course content—due to time constraints if online augmentation had not been instituted.

Making this transition in delivery methods required significant time commitments and adjustment to change on the part of faculty members. Students expect faculty to use Web-based technology. The challenge to faculty is how to incorporate this technology into their teaching practices. (Kincannon, 2000)

The Purpose of the Study

The purpose of this study was to explore the instructional effectiveness of part-time faculty as compared to full-time faculty by studying the historical results of faculty evaluations completed by their students. This study was intended as an extension of the

body of research on part-time faculty in both undergraduate and graduate institutions and their effectiveness as rated by student evaluations.

Additionally, this study examined the teaching effectiveness of part-time, practitioner-oriented faculty and full-time, practitioner-oriented faculty on their ability to adjust from a standard course delivery to a hybrid course delivery. End-of-term student evaluations for the standard course delivery were compared to student evaluations in the current hybrid learning environment.

Research Questions

RQ1. Were part-time practitioner faculty members as effective as full-time practitioner faculty before the changes to the delivery system and faculty status, as determined by student evaluations?

RQ2. Were faculty who changed status from part-time to full-time and changed simultaneously to the hybrid delivery mode as effective after the change as faculty who remained part-time after the change to the hybrid mode, when post change scores were adjusted for pretest differences?

RQ3. To what extent and for how long did a change from a standard classroom teaching environment to a blended classroom and online teaching environment (hybrid) affect student evaluations of both part-time and full-time faculty?

RQ4. What were the perceptions/attitudes of the full-time faculty about the two transitions (part- to full-time and standard to hybrid)?

Delimitations

The sample to be studied was delimited to full- and part-time faculty at KGSM during the period from 2002 through 2004. Thus, the results may well not generalize to full- and part-time faculty at other institutions.

Assumptions and Limitations of the Study

One limitation of this study was that the end of term evaluation survey relies upon the students to accurately report their experience of the instructors' effectiveness. Pierce (1986) reported that the "most relevant source for assessing teacher effectiveness is the student ratings of instruction . . . just as instructor evaluations of student performance is basic to education, so is student evaluation of instruction an essential component of the educational process." (p. 12).

Another limitation of the study was the ability of the questions on the end of term evaluation to elicit information that measures instructional effectiveness. It was assumed that the end of term evaluation form actually measures instructional effectiveness. Also limiting this study was the small number (10) of full-time faculty. There were only 10 full-time faculty members at this time because KGSM had only recently started using full-time faculty. Previously, KGSM used only part-time faculty who worked as independent contractors.

Definition of Terms

Part-time Faculty

The definition of part-time faculty varies from institution to institution. Terms such as adjunct, associate, and temporary faculty are often used interchangeably to describe instructors who have status other than full-time. For the purposes of this study,

part-time faculty and adjunct faculty were used interchangeably. Also, part-time faculty were defined in accordance with the Keller Graduate School of Management of DeVry University's faculty policy manual as instructors who teach 33 credit hours or less in an academic year (July 1 through June 30).

This definition is in accordance with other researchers of part-time faculty. Milliron (1995) defined part-time faculty as "those whose employing institutions recognize them legally as less than full-time." (p. 17), whereas Gappa and Leslie (1993) defined them as "individuals who are temporary, non-tenure track faculty employed less than full-time" (p. 3).

Instructional Effectiveness

Instructional effectiveness is the product or outcome from an instructor who has subject mastery; which leads students to subject mastery; possesses the ability to instruct and explain; encourages students to think; is fair in evaluation; and demonstrates student concern (Pierce, 1986; Sutliff, 1992). In this study, instructional effectiveness or faculty performance was measured by student ratings on the end of term student evaluations.

Keller Graduate School of Management's Mission Statement

The mission of DeVry University (Appendix A) is to foster student learning through high-quality, career-oriented undergraduate and graduate programs in technology, business and management. The University delivers its programs at campuses, centers and online to meet the needs of a diverse and geographically dispersed student population.

Hybrid Delivery

Hybrid delivery is an instructional delivery method where 80% of the instruction is delivered in the classroom and 20% online. This format is currently used in every "onsite" course at KGSM. This delivery method is also referred to as "blended delivery."

eCompanion

eCompanion was an online augmentation tool supported by eCollege. This tool was previously used in all onsite graduate school courses. This format was replaced by iOptimize as the online course tool also supported by eCollege.

iOptimize

iOptimize is the 20% online portion of an onsite course delivered in a hybrid format. The online iOptimize course shells are supported by eCollege. The intent of this online portion is to support weekly onsite activities with relevant online guidance and feedback from faculty and fellow students throughout the week.

iOptimize Certification

iOptimize certification is the training program that every graduate instructor, new and continuing, must successfully complete before delivering a graduate course. This online certification program is also part of an overall training program for new instructors, Teaching Excellence Course (TEC). The online portion of this training program or iOptimize certification is referred to as TEC+ for new instructors.

Terminal Course Objectives (TCOs)

Terminal Course Objectives (TCOs) are the major topic areas that each course much cover to meet the minimum academic standards of the University. Terminal Course

Objectives are designed to provide a guideline to instructors as well as a means to insure consistency and rigorous academic standards among courses offered across the country.

Lifelong Learning

"Lifelong learning is the process by which a person acquires knowledge and skills through his/her life span, in order to maintain or improve occupational, academic, or personal development" (Sell, 1978, p. 183). DeVry University has put into place certain policies that support lifelong learning. For example, KGSM has an articulation agreement that allows DeVry undergraduate students to make a seamless transition to graduate school. The school also allows extensions to adult students so that they make take longer than 5 years to complete their degree.

Faculty Information System

The Faculty Information System (FIS) is DeVry University's Oracle database that tracks instructor activity, including end of term student evaluation scores.

Researcher's Perspective

My interest in this study began when I was selected for a task force at KGSM. The objective of this task force was to recommend an operational process to convert the graduate school to an academic calendar with six 8-week sessions as opposed to five 10-week terms. At the same time our task force was exploring this issue, the academic staff was making a delivery method conversion from a standard onsite delivery to a hybrid onsite and online combined format. These two objectives were intermingled because the hybrid delivery format, with the addition of the 20% online delivery, allowed the same contact hours and TCOs in 8 weeks as in 10.

In my 5 years with KGSM I have worked as an Associate Center Dean, a Center Dean, a Regional Manager, and currently as a Regional Director of Operations. In all of these positions I had a tremendous amount of contact with faculty. I became convinced that although end of term student evaluations were important instruments to assess an instructor's effectiveness, they should not be the only measures used. One bias as I entered this study was that KGSM relied too heavily on this measure to judge academic performance.

During the same time that I was serving on this task force and the delivery method was about to change, I was responsible for instituting a process by which we would begin hiring a small number of full-time faculty at the graduate school. Up to this point, with rare exception, we had relied solely on part-time independent contractor faculty.

Creating this process and being the head of one of the first regions to successfully hire, train, and schedule full-time faculty may result in a second bias as the researcher. I have a strong professional investment in each of the full-time faculty members' success and the continued success of the hiring/promotion process of full-time faculty.

While recognizing my potential biases, my hope is that the results of this research will increase the understanding of the effects on faculty of the sweeping changes recently made at KGSM. Through understanding these effects, I hope to be more effective in maintaining a high level of quality instruction for our students and providing better support to our faculty.

Organization of the Study

A review of the literature associated with adaptability of part-time faculty to full-time status and instruction outcomes as well as a review of the literature associated with instructor's adaptation from a standard delivery to a hybrid delivery format and instructional outcomes is reported in Chapter 2. Also included in Chapter 2 is a description of the Keller Graduate School of Management of DeVry University's mission, purpose and curriculum.

Chapter 3 is a description of the procedures, instruments, and samples used in this study. The data collected from end of term evaluation forms and their analysis will be presented in Chapter 4. A summary of this study's results as well as this researcher's conclusions and implications for further study will be reported in Chapter 5.

CHAPTER 2

LITERATURE REVIEW

The following review of literature will explore two major areas. The first is the increased demand for and use of technology in everyday life and the subsequent integration of technology into higher education classrooms as adult learners seek to update their skills and improve their job performance. Specifically, the effect of a delivery method change from a traditional classroom curriculum to a technology enhanced curriculum and its effect on faculty performance is examined. The second is the use of part-time faculty in higher education. Specific issues facing part-time faculty who become full-time faculty are addressed.

Several sections on faculty will follow, including faculty adjustment to change, faculty effectiveness, and students' evaluation of faculty. All of these sections attempt to outline general principles and how they might apply to the current change state at KGSM. Part-time versus full-time faculty and the potential differences in their teaching effectiveness are discussed. Finally, issues of change management are reviewed. These issues include faculty members' role in the decision-making process, faculty motivation or readiness to change, and potential barriers to change explored in the context of KGSM.

Introduction

There is a link between the increased interest in adult education and lifelong learning. Technological advances and the current demands of the business community have created the need for adults to constantly update their skills to stay competitive.

The current and anticipated growth of lifelong learning in the United States can be attributed to three influences: demographic factors, the rising education level of the populace, and technological change and the information explosion (Cross, 1981, pp 2-3). First are the demographic factors that resulted in larger numbers of adults in the population. Census Bureau information from 2000 indicates that adults between the ages of 20 and 44 comprise 36.9% of the total U.S. population. Adults 25 years and older who have earned a bachelor's degree or higher comprise 24.4% of the total U.S. population. (U.S. Department of Commerce, U.S. Bureau of the Census, 2001). The second influence—the rising educational level of the populace—is affected by the changing roles of women, early retirement, increased leisure time, and changing life styles. "Depending on individual circumstances, education for adults has become necessary for some, desirable for others, and more acceptable and attainable for almost everyone" (Cross, 1981, pp 2-3).

The third influence springs from technological change and the knowledge explosion. Almost any worker in the society has the problem of keeping up with new knowledge, but technological change is so fast and powerful that it wipes out entire industries and creates new ones in a single decade. People of a technological society are forced to adapt to this rapid change both in the role of consumers and producers. "The

combined impact of demographic, social, and technological change is enormous, and it will almost certainly encourage the growth of the learning society" (Cross, 1981 pp. 2-3).

Post-World War II baby boomers created increased competition in the workplace. "In the late 1940's through the 1960's admission to college was highly competitive until higher education expanded enough to accommodate this large cohort of 'boomers.'" The job market was flooded by college graduates seeking entry-level jobs resulting in the "promotion squeeze." These boomers are today's adults looking for educational alternatives to advance their career (Cross, 1981, pp. 3-9).

"Lifelong education is characterized by its flexibility and diversity in content, learning tools and techniques, and time of learning" (Dave, 1973, pp. 14-25).

Adults denied promotion in their current career may change careers midlife requiring further education (Cross, 1981). Keller has focused its mission on this group, working adults who return to school either to increase their promotional opportunity or change their career.

Faculty

Adjustment to Change

There is a tremendous amount of literature on change and change management in organizations. There is also a good deal of scholarly work on educational change. Very little research, however, focuses specifically on faculty who are actively participating in a change process in an institution of higher education.

Massy and Wilger (1998) stated the ideal institutions to profit from technology-enhanced delivery methods are those that have a high volume of students and standardized curricula where faculty are less possessive over curriculum content (p. 49).

There are two distinct views about the viability of technology-enhanced courses in the future. The first is from the advocates who believe that technology will transform higher education. They cite examples of the technological advances on campuses today (Oblinger, 1997; Oblinger & Rush, 1998).

The pundits argue that technology is dehumanizing education. That in the long run it ends up costing more in productivity. Massy and Wilger (1998) reported faculty spent more time on teaching and learning tasks (decreased productivity) in order to incorporate the new technology. Also, faculty must spend a large amount of their discretionary time in developing new approaches and then refining and improving them. (p. 51)

Massy and Wilger (1998) described three levels of information technology adoption. They suggested that long-term productivity depends on which level is adopted. The first level describes basic applications such as word processing, spreadsheets, and graphing programs. The second level describes enrichment tools, such as the ability to inject new materials with changing the basic instructional method. Examples of enrichment tools would be e-mail, Web pages, and video. The third and final level is the most comparable to this study. This level is the paradigm shift where faculty and institutions change teaching and learning methods to take full advantage of new technology (Massy & Wilger, 1998).

"The first response when faculty consider a technological innovation is to challenge the quality of technologically delivered instruction" (Wright, Marsh, & Miller, 2000, p. 108). Faculty members may question the perceived quality of technological enhancements and their ability to provide student personal attention (Clark, 1990). The

initial perception is that traditional lecture delivery methods have a measure of student-faculty interaction. Consequently, it is also presumed that any form of alternative delivery is inadequate by comparison (Oblinger, 1997).

Baxter and Miller's (1998) findings after conducting a nationwide survey of faculty who had taught or were currently teaching graduate courses on the Internet indicate that faculty generally felt prepared to teach courses via the Internet and felt that these courses were high quality and accessible.

Russell (1998) surveyed 258 research reports from 1928 to 1996 and concurred that distance learning is equally as effective as traditional instruction. These findings counter the notion that synchronous instruction is more highly regarded because of the perception that there is "real contact" between the faculty and the students (Wright et al., 2000, p. 109).

"A scarcity of research has existed with regard to comparison of the performance of students in traditional, synchronous college courses and Internet, asynchronous courses (Wright et al., 2000, p. 109). Wright et al.'s study was one of the first to compare asynchronous Internet instructional effectiveness with the same course content delivery in a traditional synchronous format. It focused on a graduate-level course and a technology-based course, comparing two groups' knowledge and satisfaction with course delivery methods.

They concluded that the asynchronous group did not appear to be more active in learning style than the synchronous group. In order to maintain success with the stated competencies, the asynchronous group has to play an active role in their own learning by taking more ownership in the content (Wright et al., 2000, p. 115). The authors

concluded, "Research has consistently shown no significant difference between delivery method and knowledge gained, as this study also indicated" (p. 116).

Barry and Runyan (1995) also noted that student achievement in an Internet format is comparable to that in a standard delivery format. They concluded that there is a distinct economic benefit to Internet delivery formats: the ability to reach a larger population. Pascarella and Terenzini (1998), too, suggested that the advent of technology enhanced classes "provide wider access, increase instructional effectiveness, offer greater flexibility to accommodate varying learning styles, and increase instructional productivity through increased number of students served" (p. 154).

Motivation

Schifter (2000) pointed to the need to examine what motivates faculty to incorporate asynchronous distance education into their teaching. He believed that administrators need to determine this level of motivation in order to prepare faculty for this transition from a standard learning environment. Boschmann (1998) identified a set of agreed upon premises for technology that influence faculty motivation. These premises include the following: (a) learning is not bound by place, time, speed, or style, (b) learning occurs when students are engaged, (c) the best tool to foster this engagement is technology, and (d) research in the area of technology enhanced learning is bona fide scholarship.

Gosling and Mintzberg (2004) discussed a broad view of why management education in general, and MBA programs in particular, need to concentrate on the interactive process. They described this view as a "radical departure" from the current state of business schools. Gosling and Mintzberg stated that schools must become more

responsive by customizing their programs. They advocated questioning curricula and teaching methods. They saw the future of management education as one that incorporates more engaging methods of learning where students are more participatory.

The motivation for faculty to change to a more interactive process, such as the use of technology-enhanced learning, is that students and faculty may reflect upon their learning as they move across sessions and modules. Themes of thinking and analysis would emerge from the interactive activities, such as threaded discussions and sharing of case examples from the student/manager's own work experiences (Gosling & Mintzberg, 2004).

Rockwell, Schauer, Fritz, and Marx (2001) reported that primary motives for faculty change to online teaching included innovative instruction, new teaching techniques, self-gratification, and professional recognition. They found a difference between junior and senior faculty members, however. Although senior faculty members indicated the motivators listed above, junior faculty members indicated concern that the increased use of technology would be an obstacle to their tenure and promotion criteria.

Senior faculty may be better prepared to recognize that the sacrifice of traditional pedagogical principles allows for new teaching and learning environments in technology that continue to support their professional beliefs and principles (Boettcher & Conrad, 1999). Researchers indicate there is concern that technology enhanced courses require additional work on the part of the faculty member and, therefore, a workload and/or pay adjustment is necessary to motivate faculty (Bower, 2001; Schifter 2000). Schifter cited an NEA study that found only 84% of faculty teaching in an online environment received course reductions.

In addition to the additional time requirements, some researchers have noted the shift in the faculty member's role from content provider to content facilitator and the requirement of faculty to use the Web as one of the primary connections between student and faculty member (Smith, Ferguson, & Caris, 2001). Faculty must learn to teach effectively with less of the visual controls, such as direct eye contact (Williams & Peters 1997).

In the early years of Web-enhanced courses there was concern that courses would become alienating to students and result in a mass-produced curriculum. As Web-enhanced course usage increased, more faculty found them to be an intellectually challenging forum where critical thinking was required of students and there was more equality between instructor and student. "Initial feelings of anonymity notwithstanding, over the course of the semester, one-to-one relationships may be emphasized more in online classes than in more traditional face-to-face settings" (Smith et al., 2001, p. 78).

These traditional motivators are not true for all faculty members however. Rockwell et al., (2000) conducted a survey of faculty where he divided the respondents by their appointments, expertise, and years of experience. Their study showed that tenured and senior level faculty members ranked issues of course load and pay as lesser concerns, while new faculty ranked them of high concern. This study concludes that for senior faculty, intrinsic or personal rewards are the primary motivators for faculty to adapt their teaching strategies to an online format (Rockwell et al., 2000).

A faculty member's status can be an important indicator of ability to adjust to technology-enhanced teaching. An administrator's ability to identify faculty status and then apply the appropriate motivators may influence the faculty's future success.

Rahman (2001) conducted a study to identify recruitment strategies to induce experienced faculty to participate in an online learning environment. He found one of the appeals of the online learning environment to senior faculty was that the environment often attracted more motivated students. Although at KGSM, students are not allowed to choose between a standard delivery and technology-enhanced format, Rahman's study indicated another positive aspect of technology-enhanced courses for faculty.

At KGSM one of the reasons cited for the conversion of all graduate courses to a hybrid format was that it provided instruction that complemented our mission statement. Rahman's (2001) study concluded that there are institutional benefits of adapting an online education format that mirrors the missions of the school and in turn enhances the interest and participation of the senior faculty. Boschmann (1998) suggested that when an institution makes technology-enhanced learning a priority and part of its mission, faculty become intrinsically motivated to adapt to new technology enhanced formats.

Some of the same motivators that have attracted students to an online learning environment may be motivating faculty. This is particularly true in using an innovative and challenging environment (Giannoni, 2003). Giannoni identified one faculty motivator as the desire to stimulate critical thinking skills.

Barriers to Program Change

Trinkhaus and Booke (1980) conducted an investigation focused on the participants, strategies, and tactics involved in curriculum change at three accredited graduate schools of business. The third business school studied was embarking on a similar type of change as KGSM: a major revision of its graduate program. The authors expected that the process in graduate business schools would be unique in higher

education. Their findings suggest that the strategies and tactics used in higher education were actually similar to those used by other organizations during times of change.

Trinkhaus and Booke (1980) observed two operating strategies at work during the change process. The first they labeled "Empirical Rational." This strategy was based on the idea that people will follow their own goal-directed self-interests, once they realize what they are. This strategy took two forms, "utopian thinking" and "research dissemination," usually employed sequentially.

The first form, "utopian thinking is a portrayal of the benefits and enhanced conditions that can be expected after a change has been affected" (Trinkhaus & Booke, 1980, p. 314). Administrative advocates of change would describe a "utopian life" in order to get the participants to "buy in." Eventually, this utopian vision should become an important part of the motivational factors contributing to the change (Trinkhaus & Booke).

The second form is "research dissemination." Once the participants' interest has been piqued, research and information are sent out and used. Those who instigated the change provide the information about how the curriculum change can be successfully accomplished, providing the faculty the method by which they can achieve their "utopia" (Trinkhaus & Booke, 1980).

The second strategy is the "Power Coercive" strategy. "This type of strategy is predicated on the belief that the involved participants will respond to the potential threat of power" (Trinkhaus & Booke, 1980, p. 314). In particular, this strategy is used when the proposed curriculum change is urgent and critical (Trinkhaus and Booke).

The two forms of the "Power Coercive" strategy noted were the "recomposition and manipulation of power elites" and the use of "political institutions" usually used sequentially (Trinkhaus & Booke, 1980, p. 314). "Recomposition and manipulation of power elites" involves changing the power forces in a way that aids in accomplishing rather than impeding the desired ends. Typically, this is accomplished by declaring a unique or emergency situation" (p. 314).

The emergency situation at KGSM was the impending transition to a new education management software system for the entire university that was based on six, 8-week terms. In order for the graduate school to convert to this system it had to change to a new academic calendar, which shortened the length of each class from 10 to 8 weeks. Therefore, the curriculum had to be rewritten, incorporating the technology augmented contact hours.

In circumstances such as these, where immediate and sweeping change is called for, traditional change procedures are set aside and ad hoc methods and groups are used. These groups are made up of powerful decision-makers who can respond quickly and provide ongoing support to the curriculum change (Trinkhaus & Booke, 1980). Again at KGSM, these groups consisted of key program directors and selected senior faculty members.

"Manipulation of power elites consisted of making the new groups and the power that had been invested in them known to the opposition. This simple display of power is usually sufficient to drain most of the enthusiasm of the restraining forces" (Trinkhaus & Booke, 1980, p. 314). At KGSM, not only were these decision-making groups displayed as powerful, the disseminating of information occurred so close to the deadline for the

impending change that little time was allowed for the opposition (some faculty members and students) to organize and present their rebuttal.

There are all types of barriers to changing programs. These include barriers at the institutional, administrative, policy, and faculty levels (Sunal et al., 2001). The culture of the institution is a strong force in the ability to make smooth transitions.

Other barriers might include faculty concentrating their efforts on the daily realities of the classroom as opposed to the long-term commitment of effecting successful change in delivery format. Instructors also may have fixed notions of what teaching and learning should be all about and they are often reluctant to challenge these notions. There is always fear associated with change.

For these reasons Sunal et al. (2001) suggested, "The place to begin to make immediate and measurable change in higher education is at the course level, addressing those barriers where personal change is possible and where lowering barrier strength or neutralization is practical." (p. 253)

Part-Time vs. Full-Time Faculty Effectiveness

Instructional effectiveness is the product or outcome from an instructor who has subject mastery, which leads students to subject mastery, possesses the ability to instruct and explain encourages students to think, is fair in evaluation, and demonstrates student concern (Pierce, 1986; Sutliff, 1992).

"Oftentimes the online delivery method is evaluated with the same criteria used for a traditional learning environment, where traditional classroom delivery is compared to online delivery, yet in many ways the two are not comparable" (Schulman & Sims,

1999, p. 97). Chang (1999) reiterated that the critical factor is using evaluation instruments that allow the effectiveness of the Web based learning to be evaluated.

A significant concern is that quality of instruction may be lower with adjunct faculty than with full-time faculty. The findings from various studies have been mixed. Banachowski (1996), after a review of the literature, concluded that "studies to support the contention that part-timers are less (or for that matter more) effective teachers than full-timers are inconclusive" (p. 58).

Studies that rely on student evaluations of part-time teachers versus full-time teachers typically indicate no significant differences between the two faculty statuses (Behrendt & Parsons, 1983; Cruise, Furst, & Klimes 1980). The question is, Are students the best judge of teachers?

The variance in teaching quality, however, does seem to be much higher among part-timers (Louziotis, 2000). Grade inflation is certainly not a new problem, although it may be getting worse as universities increase their reliance on temporary, part-time instructors. Adjunct instructors are usually hired on a term-by-term basis and are easily replaced. Therefore, they face serious pressure to earn good evaluations from students (Sonner, 2000).

The Sonner (2000) study compared grades given by adjuncts with grades given by full-time faculty at a small public university over a 2-year period. She concluded that even after allowing for other factors, grades tended to be higher in classes taught by adjunct faculty. The most likely explanation was that adjunct faculty who are employed on a term-by-term basis are hesitant to give lower grades because it may cause student complaints, resulting in the adjunct not receiving future teaching offers. Additionally,

using more part-time instructors than full-time instructors may result in even greater grade inflation. Consequently, this may add pressure on full-time faculty to give higher grades if students have come to expect them.

Schuetz (2002) conducted a survey of more than 1,500 faculty respondents from over 100 community colleges nationwide. The proportion of part-time to full-time respondents in this survey was comparable to national norms and the results found to be statistically significant. Instructional practices were defined as faculty behavior that helps students learn. When group means were analyzed, there was essentially no difference between the instructional practices of part-time and full-time instructors. However, after a closer look there were specific examples of what part-time faculty never reported doing. For example, more part-time faculty never used guest lecturers, films or taped media, laboratory experiments conducted by students, or computers and the Internet (Schuetz, 2002). Full-timers reported using collaboration techniques, group activities, and teamwork assignments in the classroom almost three times as often as part timers (27% vs. 10%, respectively; Schuetz, 2002). The study also found that part-timers were less likely to have revised their syllabus or teaching objectives in the past 3 years, less likely to have prepared replicable or multimedia instructional programs for use in the classroom, less likely to have developed extracurricular activities for students related to their fields, and less likely to have spent time planning instructions (Schuetz, 2002).

At the graduate school level, some of these outside instructional activities could be considered "luxuries," such as extracurricular activities. For example, although applicable in the community college environment, extracurricular activities may not be applicable in the graduate business school environment. However, collaborative teaching,

group activities, teamwork assignments, syllabus updates, and teaching objectives are basic techniques to insure student learning regardless of faculty status (Gappa & Leslie, 1993; Grubb, 1999; Kuh & Vesper, 1997; Tinto, 1993).

Miller, Finley, and Vancko (2000) cited a comparison of full- and part-time faculty at six community and six technical colleges in Ohio using the Educational Testing Services, Modified Student Instructional Report (MSIR) and a survey of 256 full- and part-time faculty. The results indicated that full- and part-time faculty were comparable in most dimensions of teaching effectiveness as evaluated by students. There was no statistical significance between full- and part-time faculty in the areas of course organization, planning, faculty/student interactions, communication, knowledge of subject, and enthusiasm of the instructor (Miller et al.). With respect to their examination and test practices, full-time faculty were rated significantly more effective than part-time faculty however. Students reported that full-time faculty gave examinations that more closely reflected the important aspects of the courses (Miller et al.). In overall teaching effectiveness, students did not perceive differences between full- and part-time faculty from community or business and technical colleges (Miller et al.). The study replicated the results of previous studies that examined the differences between full- and part-time teaching effectiveness.

In another study Clark (1990) concluded that final exam scores were the same for students who were taught by part-time instructors as for those taught by full-time instructors. Burgess and Samuels (1999), who conducted a pre- and posttest on students taking a basic math course, also concluded that there was no difference between the performance of students taught by adjunct and those taught by full-time instructors. Other

studies have concluded that adjuncts are committed to teaching (Freeland, 1998) and have high expectations of their students (Freeland, 1998; Rifkin, 1998).

Caprio, Dubowsky, Wanasila, Cheatwood, and Costa (1999) concluded that because many adjunct instructors do not have education backgrounds, they often rely on their past experiences as students where they sat in long lecture classes with just a mid-term and final exam and little feedback on their progress. Unless adjuncts are trained in instructional techniques, they may experiment with innovative learning techniques only to meet with enormous student resistance (Caprio et al.). There is also a good deal of literature on the use of part-time or adjunct faculty in higher education, including community colleges, traditional 4-year institutions, and graduate schools. Adjunct faculty members are widely used at many universities, in business and professional schools and in community colleges. As operating costs have increased more and more universities also have turned to part-time faculty (Sonner, 2000).

Pierce (1986) studied the effectiveness of part-time and full-time faculty in community colleges, and Sutliff (1992) conducted a study of teaching effectiveness that compared full-time faculty, graduate teaching assistants, coaches, and part-time faculty teaching physical education classes in five Tennessee state universities. A more recent study conducted by Roueche, Roueche, and Milliron (1995) explored the effectiveness of part-time faculty in American community colleges.

Roueche et al. (1995) wrote, "We cannot overemphasize or overlook the importance of part-time faculty in colleges and universities because they will continue to be an integral part of the American educational system" (p. 19). Most of the studies about part-time faculty focused on their increasing numbers and their teaching effectiveness in

arts and science courses. Limited research has been conducted on the effectiveness of part-time faculty in teaching occupational or technical courses. Even less research has been conducted on part-time faculty and their adjustment to online learning environments.

Studying part-time faculty teaching in business or technical courses is important because teacher effectiveness is believed to lead to student learning, and student learning leads to increased student achievement. Student achievement is the ultimate mission of all learning institutions.

The academic literature is replete with findings concerning the motivators and deterrents with faculty involvement in online learning formats (Bower, 2001; Chizmar & Williams, 2001; Husmann & Miller, 2001; Passmore, 2000; Van Der Velde & Rawl, 2002). Some studies have demonstrated a difference between junior and senior faculty members in terms of different motivational factors (Rockwell et al., 2001). Some of these findings may have implications for part-time versus full-time faculty as, in the KGSM environment, part-time faculty members are the junior faculty members.

Faculty adjustment to a hybrid delivery format has been examined in the context of quality management and measured outcomes compared to prior performance in a standard delivery format. Kincannon (2000) found in her study of faculty at a major level-one research institution that faculty's definition of what constituted excellent teaching did not change when a new delivery system was implemented. However, their level of satisfaction with their work, their environment, and their daily practice did. They cited that the Web-based portions of their courses decreased the spontaneity of questions

and discussion, personal interaction, feedback, flexibility, information, and example sharing as compared to the standard delivery courses (Kincannon).

It is well documented that Web augmented teaching takes a large amount of preparation time, more than face-to-face teaching (Kincannon, 2000). Most instructors cite a significant learning curve to reach the same level of competency online as they have already achieved in the classroom. They state that the key to a successful transition is becoming more familiar with the technology using already developed personal strategies that have been previously successful. Kincannon found that faculty's attitude toward teaching roles did not change when they transitioned from standard to hybrid delivery. She found that they eventually adapted strategies and technology to their own needs for that course and were able to successfully manage the change.

Resistance to Change

People resist change for many reasons. Change requires replacing what is known and familiar with ambiguity and uncertainty. We do things out of habit and when forced to change there is natural resistance. Another cause of resistance is the fear of losing something we already possess (Reichers, Wanous, & Austin, 1997; Strebel, 1996). For example, KGSM faculty who already possess a history of high end-of-term student evaluations in a standard delivery format may fear losing their good performance history and reputation by trying a new format. A final cause of resistance is an individual's belief that change is incompatible with the mission of the organization (Reichers et al.; Strebel).

There are techniques that managers and organizations can use to reduce resistance to change. These include education and communication, participation, support, negotiation, manipulation, and coercion (Kotter & Schlesinger, 1979; Lewis, 1999;

O'Connor, 1993; Wanous, Reichers, & Austin, 2000). All of these techniques were used to varying degrees with KGSM's faculty.

Education and communication with employees during the change allows employees to see the logic behind the change, even if they are uncomfortable or don't agree with the logic. In order for the communication to be effective however, there must be mutual trust and credibility already established between the parties (Lewis, 1999; O'Connor, 1993; Wanous et al., 2000). At KGSM, the communication to faculty and staff regarding the change from standard to technology-enhanced delivery began approximately one year prior to implementation and was still continuing at the time of this writing.

Although the ultimate decision to make this delivery method change was made at the highest level, some staff and faculty were invited to participate in the planning and implementation phases. This involvement reduced the resistance among the participants, but probably not to a great degree amongst the general staff and faculty population. Two specific agents of support to faculty members were the curriculum manager for the particular course and the Center Dean assigned to the individual faculty member.

The technique of negotiation, where something of value is exchanged to reduce resistance, was not really utilized in this change process. Also, there were no clear examples of manipulation. However, the technique of coercion was used in an indirect way (Lewis, 1999; O'Connor, 1993; Wanous et al., 2000). The graduate school set a deadline of July 1, 2003 for full compliance. By that deadline faculty had to become trained and start delivering their courses to a minimum competence level.

The alternative was not being recontracted to teach until compliance was achieved. The direct threat of loss of assignment was relatively inexpensive to the organization only because there was a large enough pool of established adjunct instructors to accommodate the loss of those who did not comply. This was also an easy way to solicit support as the individuals who wished to continue teaching had no alternative than to become trained in the technology-enhanced method (Lewis, 1999; O'Connor, 1993; Wanous et al., 2000).

Tenure

Another reason that faculty may resist change is their institution's tenure system and its real or perceived implications. The system of tenure, or lifetime employment, is sometimes misperceived as encouraging poor motivation and underproductivity in higher education (Bess, 1998). Bess argued that in the cases of poor motivation in a tenure system, it is not the tenure itself as a reward system that encourages these negative consequences, but an absence of a motivating system in the academic structure.

He drew a parallel with the corporate sector where lifetime employees and ongoing quality improvement can be synonymous. Bess (1998) suggested that an ideal tenure system provides conditions for making tenure successful: creating an environment where faculty are motivated by pride in their profession, a sense of personal responsibility, and acknowledgment of their role as stakeholders in the university.

Plater (1998) stated that the traditional view is to equate tenure with privilege. But to view tenure as privilege is to misunderstand what a university is. He suggested that tenure should be viewed as citizenship in the academic community: a shared responsibility between the individual and the institution. Each must depend on the other

to accomplish the institution's mission and purpose. Plater also found in most cases, the institution's mission and purpose remained unchanged, whereas the environment and culture of the organization were fluid. In the spirit of shared responsibility, tenured faculty must adapt to the changing institution.

In education today the competition for students is very real. This competitive environment requires that the traditional model of tenure change to allow for education that is expanded by information technology (Plater, 1998). The industry is becoming more complex and, in turn, so are the demands upon tenure and tenure-track faculty to keep up with these changes. If a faculty member is unable to adapt, a faculty member's tenure status may be in jeopardy.

Keller does not have the professional designation of tenure. The closest equivalent would be the designation of Senior Faculty status. There are some significant differences, however: Senior Faculty status in most cases can be achieved much more quickly than a tenured position. An application for Senior Faculty status may be submitted after the following requirements are met: a minimum of 10 courses taught at the graduate level where the 10 most recent have an average instructor rating (as determined by end-of-term student evaluations) of 3.3 on a 4.0 scale, participation in faculty meetings, workshops and/or professional development training annually, contribution to school-wide activities, and the recommendation of a Center Dean.

The Vice President of Academic Affairs for the Graduate School makes the final Senior Faculty selections. Once faculty members are awarded Senior Faculty status, they receive a 15% per course addition to their base compensation rate. In order to maintain

this status, however, they must annually maintain the 3.3 average instructor rating and participation criteria.

Tenure and Senior Faculty status are generally sought after as one of the highest faculty designations at traditional universities and KGSM, respectively. However, the Senior Faculty status standard level is such that it is attainable by adjunct faculty. The intent of Senior Faculty status is to encourage adjunct faculty to maintain a commitment to the university, to academic excellence, and to consistency of performance. It allows adjunct faculty the opportunity for a career track within the compensation ranks and the opportunity to contribute to such academic activities as curriculum, program, and accreditation reviews.

All full-time faculty who are currently working for KGSM had achieved the designation of Senior Faculty as adjunct faculty prior to their promotion. Senior Faculty status is rescinded if the individual does not meet the criteria annually. However, full-time faculty are terminated only for cause or for a reduction in work force. Once faculty are promoted to full-time status, they qualify for the same annual performance reviews as any staff member. Also, there is no higher designation to achieve. This is very different from professors at traditional universities who participate in scholarly pursuits that may result in tenure.

The increased use of technology in course delivery could be a barrier to an adjunct faculty's achieving Senior Faculty status. For example, if a Center Dean determines that an instructor's use of the course "shell" is inadequate, that dean will not recommend the individual for Senior Faculty status.

Students answer questions on their end of term evaluations regarding the instructor's use of technology to enhance the course. Inadequate use of technology in a course could result in a lowered evaluation score. Evaluation scores that consistently fall below the 3.3 criteria could result in corrective action and eventually termination of a full-time faculty member.

If technology-enhanced course delivery were required in a traditional university, it could become a barrier to meeting tenure criteria. At KGSM, this barrier could arise at several junctures: in the decision to recontract an adjunct faculty member, in the decision to promote an adjunct faculty member to Senior Faculty status, and in the decision to promote a Senior Faculty member to full-time faculty.

Plater (1998) advised institutions to view tenure as a strategy and not as a reward to allow for adaptation to change and maintenance of quality standards. Bess (1998) argued that tenure provides faculty the security to find different sources of motivation and adaptive change strategies. If these assumptions be true, then whether faculty are tenured, not tenured, or seeking tenure should not have a significant impact on their motivation or ability to adapt to a change such as a technology-enhanced delivery method. However, Plater (1998) and Bess (1998) suggested environments to which tenured institutions should strive. Faculty's perceptions of tenure's implications in their own institution could be quite different.

Student Evaluations

There is considerable dissent in the academic community about using student evaluations as direct measurements of faculty performance. Scriven (1995) laid out the validity standards for using student evaluations as a measure of faculty performance. The

standards are stringent and include restrictions on how and when they are administered: "They must be obtained from properly administered tests, stringently controlled data collections, and through analysis of test results" (p. 3).

Yunker and Yunker (2003) found a statistically significant negative relationship between student evaluations and student achievement. Their research supported some faculty members' concern that the heavy use of student evaluations in assessing teaching performance may contribute to grade inflation and lack of rigor. They found that strong inferences about faculty effectiveness based on student evaluations can be made only if the scores are extremely low or extremely high and also if allowances are made for the type of course being taught.

Although they concurred that the majority of past studies on student evaluations have supported their validity, Yunker and Yunker (2003) suggested that those studies had not adequately controlled for student ability and previous achievement, factors that may significantly affect the student evaluations. They further suggested that the correlation between student evaluations and student achievement may vary widely across disciplines (Yunker & Yunker).

Conclusion

In conclusion, this study examined how well faculty were able to adjust to change. The literature provided guidance as to what factors may influence faculty perceptions of change and the corresponding effects (if any) on their performance outcomes. A more thorough understanding of how a change management process affects faculty's ability to provide quality instruction may assist administrators in making better decisions for their individual institutions.

CHAPTER 3

METHOD

The purpose of this section is to present the procedures that were used by the researcher to investigate the teaching effectiveness of both adjunct and full-time faculty in several teaching situations. The first situation involved adjunct faculty who remained in adjunct status but whose course delivery format had changed from standard to hybrid delivery. The second situation was adjunct faculty members who had converted their course delivery from a standard to a hybrid format and had also changed their faculty status from adjunct to full-time.

The measure of faculty effectiveness that was used was the end of term student evaluations. The results of these measures were used to examine whether a faculty member's effectiveness changed when switching delivery methods, switching status, or both.

Keller Graduate School of Management Current Status

There were been significant changes at Keller Graduate School of Management of DeVry University (KGSM) in the past few years. These included a change in the academic calendar, a shift in the curriculum delivery method from a standard classroom delivery mode to a hybrid (classroom and online) mode, and the first use of full-time faculty. All KGSM faculty were part-time independent contractors until 2003. There

were also changes to the training requirements of faculty to be prepared to teach in this new methodology.

At KGSM, the decision to change the academic calendar from 10- to 8-week terms was a top-down decision based on financial projections and the integration of the undergraduate and graduate schools into one data management system. However, the choice of changing the instructional delivery method from a standard in class format to a hybrid format where for every 3.5 hours of in-class instructional time, 2 hours are spent online, was made to meet student demand for increased flexibility and the advancing technological environment.

A precursor to the transition from a standard course delivery to a hybrid course delivery was the use of technology (eCompanion) as augmentation to the standard classroom delivery. Technology augmented classes were used by all faculty for approximately 2 years prior to the complete conversion to the hybrid delivery format. eCompanion (a product of eCollege), which used the web to augment standard onsite instruction, consisted primarily of syllabus and note posting and the use of both individual and group e-mail.

iOptimize, (KGSM's name for an eCollege eCompanion Web site) is the online portion of the hybrid model. The iOptimize (or online) portion of these hybrid classes was similar to completely online courses in that all aspects of the course, such as syllabus, notes, document sharing, Webliography, Threaded Discussion, and chat rooms are available online.

In July 2003, the graduate school converted from five, 10-week sessions per year to six, 8-week sessions per year. This academic calendar conversion also prompted the

use of the hybrid rather than the standard delivery method, as it allowed for some instruction hours to be delivered online, allowing for fewer changes to the curriculum. For example, each course has a set of Terminal Course Objectives (TCOs). The reduction from a 10-week session to an 8-week session would have resulted in the elimination of TCOs—and thus course content—due to time constraints if online augmentation had not been instituted.

This transition from a standard to hybrid delivery method required iOptimize certification of all graduate school faculty, both part- and full-time. Additionally, it required the certification of iOptimize trainers to provide the ongoing training of new faculty and continuing education of all faculty to ensure the retention of quality teaching.

Making this transition in delivery methods required significant time commitments and adjustment to change on the part of faculty members. Students expect faculty to use Web-based technology. The challenge to faculty is how to incorporate this technology into their teaching practices (Kincannon, 2000).

General Approach

This study used primarily quantitative methods. Historical scores from end of term student evaluations were used to analyze the effect of format and/or faculty status changes. In addition, semistructured interviews with five full-time faculty were conducted.

Research Design

The overall design of this study was a quasi-experimental, two group time-series with continuous treatment design (Table 3.1). This design was chosen because historical

Table 3.1

Study Design

	Pre	Interventions	Post
Group A ($N = 92$)	$0_1\ 0_2\ 0_3\ 0_4\ 0_5$	Part-time faculty→ Part-time faculty, Hybrid format	$0_6\ 0_7\ 0_8\ 0_9\ 0_{10}$
Group B ($N = 10$)	$0_1\ 0_2\ 0_3\ 0_4\ 0_5$	Part-time faculty→ Full-time faculty, Hybrid format	$0_6\ 0_7\ 0_8\ 0_9\ 0_{10}$

data were available to provide several more pretests and posttests and because there was a small sample of full-time faculty.

Group A was a group of 92 part-time adjunct faculty members from the KGSM Chicago region. Group B was a group of 10 full-time faculty from KGSM who formerly had a similar status to Group A, the adjunct faculty. The first question was whether there was a difference between Group A and Group B before the intervention of the hybrid model as a replacement for the standard delivery model. The second question was whether Group A differed from Group B as a result of the intervention of a teaching delivery format change from standard to hybrid delivery. The third question was whether the faculty outcomes changed over time as a result of the change in delivery system. The fourth question was based on interview responses from the Group B faculty about their perceptions or attitudes about the transitions (part- to full-time and standard to hybrid) that they had experienced.

There was one main independent variable with two levels, change in faculty employment status. The two levels were remain part-time and change from part- to full-time. The pretest period was from September 1, 2002, through July 1, 2003. On July 1, 2003, the standard delivery format was changed to the hybrid delivery format for all faculty members.

The posttest period was from July 1, 2003, through July 1, 2004. An intervention that is not a variable, because it occurs for both groups, was the change in teaching delivery format from a standard delivery with 100% of the instruction occurring in the classroom, to a hybrid delivery with 80% of the instruction occurring in the classroom

and 20% occurring online. A second independent variable was change over time because each group was assessed before (pretest) and after the change in delivery format.

The dependent variable was the outcome measure, end of term student evaluation. This instrument had questions regarding instructors that comprised eight variables: instructor rating, terminal course objective (TCO) rating, practical and relevant examples, positive regard for students, instructor feedback for students, clear and structured delivery, enthusiasm, and overall composite rating.

The Sample

The sample of full-time instructors consisted of 10 full-time instructors at KGSM; 5 were previously part-time instructors who received full-time teaching positions. In order to be eligible to move into full-time faculty status, the adjunct faculty member had to have taught for KGSM a minimum of 2 years and to have achieved senior faculty status. Senior faculty status required a minimum of 10 courses taught, with minimum mean end of term evaluation score of 3.3 and contributions to school-wide activities.

Most candidates reported student advising as part of their teaching routine. However, student advising was not included as a hiring criteria because adjunct faculty are not required to advise students as part of their teaching contract. Student advising is the primary responsibility of the Center Dean at the location where the student is attending class.

Interested candidates submitted their resumes to the Academic Operations Manager. The resumes were screened, and a panel of academic managers interviewed those candidates who met the above criteria. The final candidates were recommended to the regional Vice-President for final review and approval.

The second sample was 92 part-time faculty members assigned to the graduate school. Like the full-time faculty, to be included in the study part-time faculty taught at least two sessions during the pretest and three sessions during posttest time periods and had available student course evaluation data. Some full-time faculty in the broader Keller system and about two thirds of the Chicago area part-time faculty were excluded because they did not meet the above criterion for available student evaluation data.

Instrumentation

The dependent variables were based on the end of term evaluation rating outcome measure, which had 51 questions in four major areas: demographic information, instructor approach/environment, instructional materials, and Terminal Course Objective coverage. These were completed for each course delivered and each instructor. They measured many variables. Some sample questions included the following: maintained a supportive and learning atmosphere, used practical and relevant examples when appropriate, showed enthusiasm in teaching, and seemed knowledgeable about the topics covered in class. Some of these 51 questions were unrelated to instructor performance; for example, center services or financial aid.

The end of term evaluation variables were used by KGSM in order to achieve an overall composite rating score assigned to each evaluation. Each variable area was weighted for importance. These composite rating scores were then averaged to achieve the mean composite rating score for each instructor for each class. An example of the "rating calculator" to summarize one instructor's evaluations for one course is shown in Table 3.2.

Data Collection

Historical data compiled from end of term student evaluations was used. End of term evaluations were given to every student taking every graduate course each session. They were administered in the online course shell. In week 7 of the 8-week session, the end of term evaluation appeared with an introductory page when the student loged in to their course shell. The students were encouraged to take the survey, given instructions to do so, and instructed to have their Terminal Course Objectives available in order to answer the questions more accurately. The student had the option of taking the evaluation immediately, saving the evaluation to take sometime before the end of week 7, or passing through the evaluation by leaving the answers blank and clicking "submit."

Table 3.2

Example of Calculations for Determining Instructor Rating

Variable	Weight	Rating	Composite Rating
Instructor rating	10%	3.75	0.375
Terminal Course Objectives rating	40%	3.48	1.392
Practical and relevant examples	10%	3.70	0.37
Positive regard for students	10%	3.75	0.375
Instructor feedback for students	10%	3.60	0.36
Clear and structured delivery	10%	3.70	0.37
Enthusiasm	10%	3.70	0.37
	Overall Composite Rating		3.61

Archival data regarding faculty were used. A programmer provided the database with no names or identifiers except whether the individuals were still adjunct or full-time.

Upon the Human Subjects Committee at Colorado State University and KGSM approving the study, the five full-time faculty were interviewed to determine their perceptions on the change from part-time to full-time status and standard to hybrid delivery. The five full-time faculty were recruited by telephone with a script describing the voluntary nature of the study and were assured that there were no risks to them individually. They were provided with a consent form at the time of the interview.

Data Analysis

The data were analyzed in order to answer the following four questions:

1. Were part-time practitioner faculty members as effective as full-time practitioner faculty before the changes to the delivery system and faculty status, as determined by student evaluations?
2. Were faculty who changed status from part-time to full-time and changed simultaneously to the hybrid delivery mode as effective after the change as faculty who remained part-time after the change to the hybrid mode, when post change scores were adjusted for pretest differences?
3. To what extent and for how long did a change from a standard classroom teaching environment to a blended classroom and online teaching environment (hybrid) affect student evaluations of part-time and full-time faculty?
4. What are the perceptions/attitudes of the full-time faculty about the two transitions (part to full-time and standard to hybrid)?

In order to determine whether there was an increase, decrease, or no change to an instructor's overall evaluations in both scenarios, the end of term student evaluations were used as outcomes.

The end of term student evaluation composite scores were used for analysis. Content validity was assessed by a group of experts, including the researcher's committee. Criterion and construct validity for the outcome measures were supported by the literature on student evaluations.

To test the question 1, eight ANOVAs were used to compare the part- and full-time faculty on the pretest student evaluations. To test question 2, mean posttest scores on each of the eight variables from the end of term evaluations were compared using analysis of covariance to adjust for any pretest differences. If the null hypotheses were true (not rejected), then the treatment variance divided by the error variance was close to 1. If the null hypotheses were false, the mean squares for treatments was substantially larger than the mean squares for error.

Question 3 was analyzed using eight 2 x 6 mixed ANOVAs to determine whether there was positive, negative, or no change in the means from before to after the delivery format change. Post hoc paired *t* tests were used to compare the pretest with each of the five posttest sessions. A *d* effect size measure was reported for each significant *t* test and for the 10 full-time faculty when the effect size was close to medium, i.e., 0.39 or greater.

Conclusion

This chapter presented the research protocol intended to determine whether a change in a faculty member's delivery method, status, or both affected performance as evaluated by students and staff. Future curriculum change models may use findings such as these to assess the cost and risk of implementing new curriculum design. These findings may also have implications for faculty anticipating a change in their teaching status.

CHAPTER 4

RESULTS

This chapter presents the results of this investigation of the teaching effectiveness of both adjunct and full-time faculty in several teaching situations. The first section of this chapter describes the groups and the design of the study. Each research question is then addressed.

Research Questions 1-3 are discussed by addressing each of the eight variables: Instructor Rating, Terminal Course Objectives, Practical and Relevant Examples, Positive Regard for Students, Instructor Feedback, Clear and Structured Delivery, Enthusiasm, and Overall Composite Rating. The fourth Research Question is addressed by presenting the interview results of five full-time faculty members who were asked a series of open-ended questions about their experiences.

This study examined two groups: 92 part-time faculty (group A) and group B, 10 faculty from the original part-time faculty data set who had become full-time faculty at approximately the same time as the delivery method change. Of the 10 full-time faculty members in Group B, 5 were located in the Chicago metro region and 5 were outside the region. All 92 of the part-time faculty were from the Chicago metro region.

There were 295 original faculty who had some available student course evaluation data during this time period, 102 of whom met the research criteria of teaching at least two out of five terms during the pretest period and three out of five terms during the posttest period. Each group was measured on eight variables: instructor rating, terminal

course objective (TCO) rating, practical and relevant examples, positive regard for students, instructor feedback for students, clear and structured delivery, enthusiasm, and overall composite rating. The design of the study is shown schematically in Table 4.1.

The pretest period consisted of five, 10-week sessions or terms. All available pretest data for each participant were combined to produce a single baseline or pretest score for each faculty member (labeled 0 in the figures). The posttest period consisted of five, 8-week sessions, indicated as sessions 6-10 in the figures and tables that follow.

Research Questions

Research Question 1

The first research question asked: Were part-time practitioner faculty members as effective before the changes in delivery system and faculty status as practitioner faculty selected to become full-time, as determined by student evaluations?

Eight ANOVAs (analyses of variance) comparing the pretest data for the two groups are shown in Table 4.2. There were no statistically significant differences on the pretest between these two groups, only some small differences between the PT group of 92 and the FT group of 10, which, as predicted, favored the FT group. The lack of significant pretest differences between the groups could be due to the small sample size in the FT group and, thus, not enough power.

Research Question 2

The second research question asked: Were faculty who changed status from part-time to full-time and changed simultaneously to the hybrid delivery mode as effective after the change as faculty who remained part-time after the change to the hybrid mode, when post change scores were adjusted for pretest differences?

Table 4.1

Study Design

Sample	Pre	Interventions	Post
Group A ($N = 92$)	$0_1\ 0_2\ 0_3\ 0_4\ 0_5$	Part-time faculty→ Part-time faculty, Hybrid format	$0_6\ 0_7\ 0_8\ 0_9\ 0_{10}$
Group B ($N = 10$)	$0_1\ 0_2\ 0_3\ 0_4\ 0_5$	Part-time faculty→ Full-time faculty, Hybrid format	$0_6\ 0_7\ 0_8\ 0_9\ 0_{10}$

Table 4.2

Pretest Comparisons of Part-Time and Full-Time Faculty

	Part-Time Faculty Group A		Full-Time Faculty Group B				
Variable	M_A	SE_A	M_B	SE_B	*df*	*F*	*p*
Instructor Rating	3.53	.026	3.58	.078	1, 100	0.43	.515
Terminal Course Objectives (TCO)	3.46	.019	3.50	.058	1, 100	0.30	.585
Practical	3.50	.022	3.58	.068	1, 100	1.1	.297
Positive Regard	3.63	.020	3.65	.060	1, 100	0.05	.830
Feedback	3.46	.028	3.49	.084	1, 100	0.12	.732
Manner/Delivery	3.44	.029	3.53	.089	1, 100	0.91	.343
Enthusiasm	3.66	.020	3.69	.059	1, 100	0.15	.700
Composite Rating	3.37	.024	3.44	.074	1, 100	0.81	.370

To answer this question, eight ANCOVAs (analyses of covariance) were completed. The key results of those tests are shown in Table 4.3, which indicated that the part-time faculty did not differ statistically significantly from the full-time faculty on any of the eight posttest (sessions 6-10 combined) ratings, when the posttests were adjusted for pretest differences. Again, this lack of differences may be partly due to low power because the FT faculty group was so small.

Table 4.3

Analysis of Covariance Comparisons of the Part-Time and Full-Time Faculty on Each of Eight Student Ratings, Adjusted for Pretest Differences

Variable	*F*	*p*
Instructor Rating	0.90	.346
Terminal Course Objectives (TCO)	0.15	.698
Practical	0.35	.558
Regard	0.13	.718
Feedback	3.13	.080
Manner/Delivery	0.74	.390
Enthusiasm	1.08	.301
Composite Rating	0.39	.532

Research Question 3 for Each Variable Separately

The third research question asked: To what extent and for how long did a change from a standard classroom teaching environment to a blended classroom and online teaching environment (hybrid) affect student evaluations of both part-time and full-time faculty?

Instructor Rating

Table 4.4 shows the means for the baseline or pretest (average of all predelivery change terms) and for each of the posttest terms (6–10), separately for the 92 part-time and 10 full time faculty and for the mean of the two groups. Figure 4.1 shows a plot of those means.

The top of Table 4.5 indicates that for both groups combined, none of the five posttests were significantly different from the pretest (*p*s ranged from .089 to .415). The middle of Table 4.5 indicates that the 92 part-time faculty were rated significantly lower on the instructor rating during sessions 7, 8, and 10 than during the pretest. The *d*s were .36, .33, and .36, respectively, indicating that the size of the effects (or differences) were

Table 4.4

Comparison of Pre- and Posttest Means for the Instructor Rating

	Pretest	Posttest				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.53	3.46	3.40	3.41	3.51	3.39
Full-Time Faculty	3.58	3.48	3.55	3.53	3.51	3.52
Mean by Term	3.56	3.47	3.47	3.47	3.51	3.46

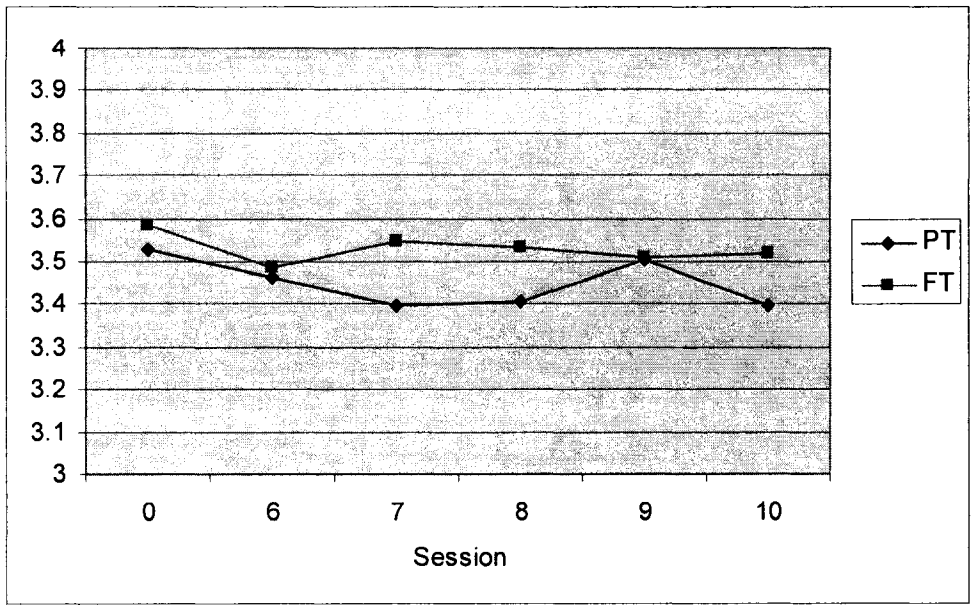

Figure 4.1. Instructor rating.

between small and medium/typical according to Cohen (1988). The bottom of Table 4.5 shows that the full-time faculty ratings were not even close to significantly different from the pretest. Thus, the full-time faculty curve shown in Figure 4.1 is essentially flat.

Terminal Course Objectives

Table 4.6 and Figure 4.2 present the means for the pretest and the five posttests on the TCOs for the part-time and full-time faculty groups. The paired *t* tests in Table 4.7 will be used to interpret the statistical significance and size of the changes over time shown in Table 4.6 and Figure 4.2.

The top of Table 4.7 shows that for all faculty in session 10 (as compared to the pretest period) the *p* was .012, indicating statistical significance. There was a difference between the baseline period and session 10. We can be quite sure that there was an

Table 4.5

Differences Between Pretest and Posttest for Instructor Ratings for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest - Term 6	-0.08	-1.34	.180	
Pretest - Term 7	-0.04	-1.45	.149	
Pretest - Term 8	-0.09	-1.47	.141	
Pretest - Term 9	-0.05	-0.82	.415	
Pretest - Term 10	-0.10	-1.70	.089	
		Part-Time Faculty		
Pretest - Term 6	-0.07	-1.77	.078	
Pretest - Term 7	-0.13	-3.48	.001*	-0.36
Pretest - Term 8	-0.12	-3.21	.001*	-0.33
Pretest - Term 9	-0.02	-0.58	.551	
Pretest - Term 10	-0.13	-3.41	.001*	-0.36
		Full-Time Faculty		
Pretest - Term 6	-0.10	-0.84	.401	
Pretest - Term 7	-0.04	-0.32	.750	
Pretest - Term 8	-0.05	-0.46	.648	
Pretest - Term 9	-0.07	-0.66	.508	
Pretest - Term 10	-0.06	-0.59	.556	

* $p < .05$.

Note. d is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

Table 4.6

Comparisons of Pretest and Posttest Means for Terminal Course Objectives

	Pretest	Posttest				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.46	3.50	3.47	3.46	3.53	3.55
Full-Time Faculty	3.50	3.50	3.56	3.60	3.54	3.69
Mean by Term	3.48	3.50	3.52	3.53	3.54	3.62

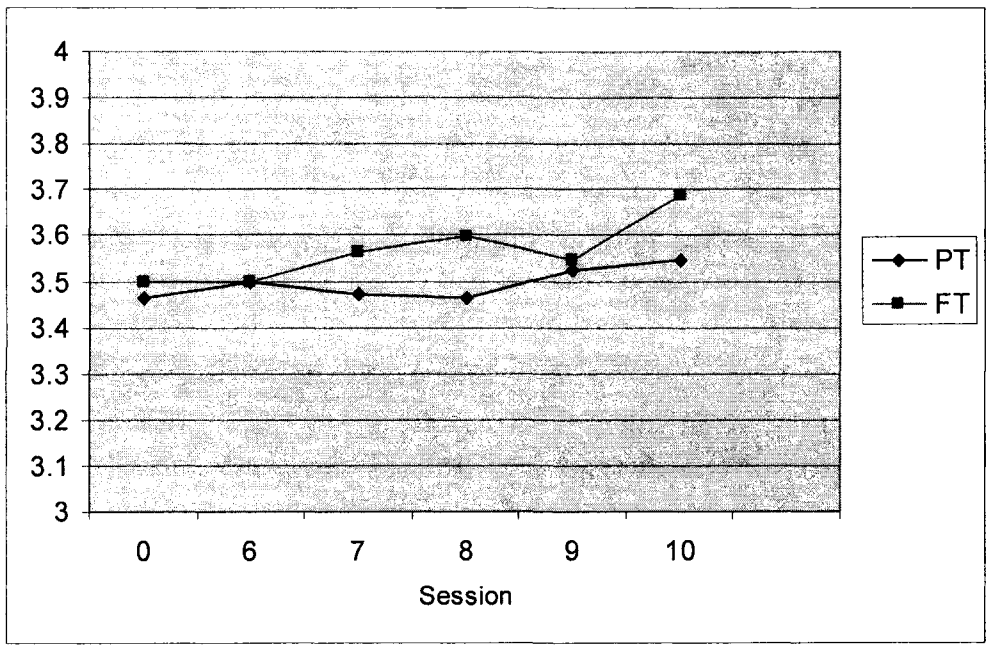

Figure 4.2. Terminal course objectives (TCOs).

Table 4.7

Differences between Pretest and Posttest Terminal Course Objectives for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest - Term 6	0.02	0.31	.756	
Pretest - Term 7	0.04	0.68	.498	
Pretest - Term 8	0.05	0.91	.363	
Pretest - Term 9	0.05	1.01	.314	
Pretest - Term 10	0.14	0.14	.012*	0.24
		Part-Time Faculty		
Pretest - Term 6	0.04	0.96	.336	
Pretest - Term 7	0.01	0.16	.871	
Pretest - Term 8	0.00	0.03	.979	
Pretest - Term 9	0.06	1.72	.087	
Pretest - Term 10	0.08	2.22	.027*	0.23
		Full-Time Faculty		
Pretest - Term 6	0.01	0.02	.986	
Pretest - Term 7	0.07	0.66	.508	
Pretest - Term 8	0.10	0.97	.333	
Pretest - Term 9	0.05	0.47	.640	
Pretest – Term 10	0.19	1.87	.062	0.59

* $p < .05$.

Note. d is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

increase between the baseline and session 10. The *d* was 0.24, indicating that the effect size (or difference) was small. The middle of Table 4.7 shows that for part-time faculty in session 10 (as compared to the pretest period) the *p* was .027, indicating statistical significance. There was a difference between the baseline period and session 10 for part-time faculty. The *d* was 0.23, indicating the size of the effect (or difference) was small. The bottom of Table 4.7 shows that for full-time faculty in session 10 (as compared to the pretest period) the *p* was .062 ($p < .25$), indicating that the difference was relatively close to statistical significance given the small sample size. The *d* of 0.59 indicates that there was a medium or typical effect size.

Practical and Relevant Examples

The means for the pretest and for each of the posttest terms (6–10), separately for the 92 part-time and 10 full time faculty and for the mean of the two groups is shown in Table 4.8. Figure 4.3 illustrates a plot of those means.

Table 4.8

Comparisons of Pretest and Posttest Means for Practical and Relevant Examples

	Pretest	Post Test				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.50	3.55	3.50	3.51	3.56	3.62
Full-Time Faculty	3.58	3.59	3.55	3.68	3.67	3.61
Mean by Term	3.54	3.57	3.52	3.60	3.62	3.62

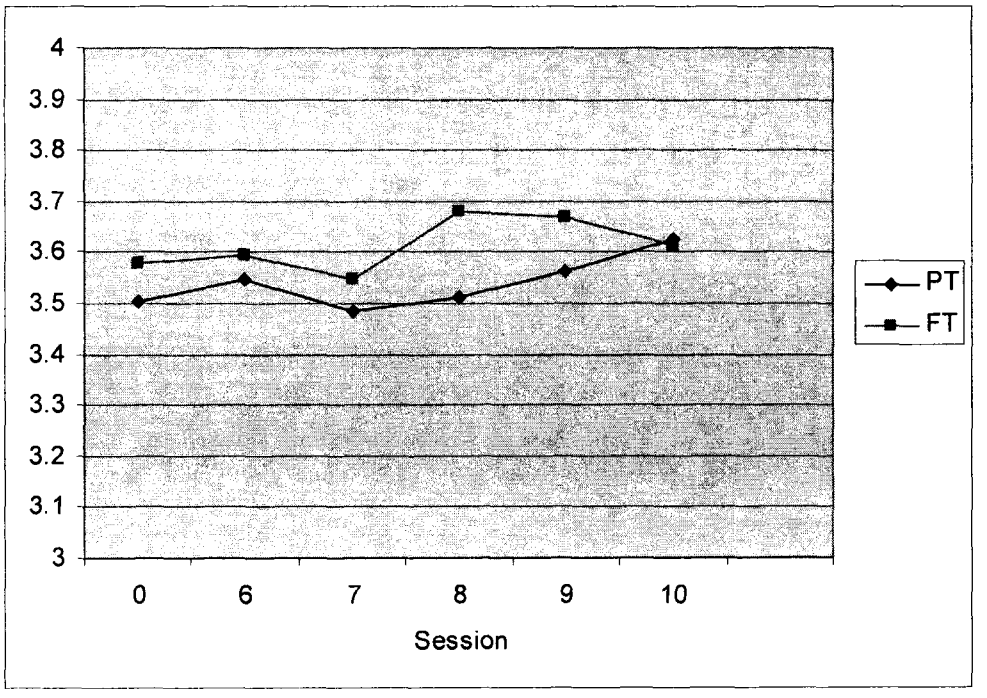

Figure 4.3. Practical and relevant examples.

The middle of Table 4.9 shows that for part-time faculty in session 10 (as compared to the pretest period) the *p* was .001, indicating statistical significance. There was a difference between the baseline period and session 10 for part-time faculty. The *d* was 0.34, indicating the size of the effect (or difference) was small to medium/typical.

Positive Regard for Students

Table 4.10 and Figure 4.4 present the means for the pretest and the five posttests for the part-time and full-time faculty groups.

Table 4.11 indicates that for all faculty and for part-time faculty, all of the *p*s were much greater than .05, indicating no statistical significance. For full-time faculty, all of the *p*s were > 0.25, indicating no statistical significance. There was no difference between the baseline period and sessions 6–10.

Table 4.9

Differences between Pretest and Posttest Practical and Relevant Examples for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest - Term 6	0.03	0.52	.601	
Pretest - Term 7	0.02	0.44	.662	
Pretest - Term 8	0.05	1.00	.320	
Pretest - Term 9	0.07	1.38	.169	
Pretest - Term 10	0.08	1.42	.155	
		Part-Time Faculty		
Pretest - Term 6	0.04	1.24	.217	
Pretest - Term 7	-0.02	-0.48	.629	
Pretest - Term 8	0.01	0.26	.798	
Pretest - Term 9	0.06	1.64	.103	
Pretest - Term 10	0.12	3.25	.001*	0.34
		Full-Time Faculty		
Pretest - Term 6	0.02	0.15	.880	
Pretest - Term 7	-0.03	-0.29	.769	
Pretest - Term 8	0.10	0.96	.335	
Pretest - Term 9	0.09	0.89	.375	
Pretest - Term 10	0.04	0.35	.726	

* $p < .05$.

Note. *d* is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

Table 4.10

Comparisons of Pretest and Posttest Means for Positve Regard for Students

	Pretest	Posttest				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.63	3.66	3.62	3.60	3.68	3.61
Full-Time Faculty	3.65	3.66	3.63	3.57	3.71	3.74
Mean by Term	3.64	3.66	3.62	3.59	3.69	3.68

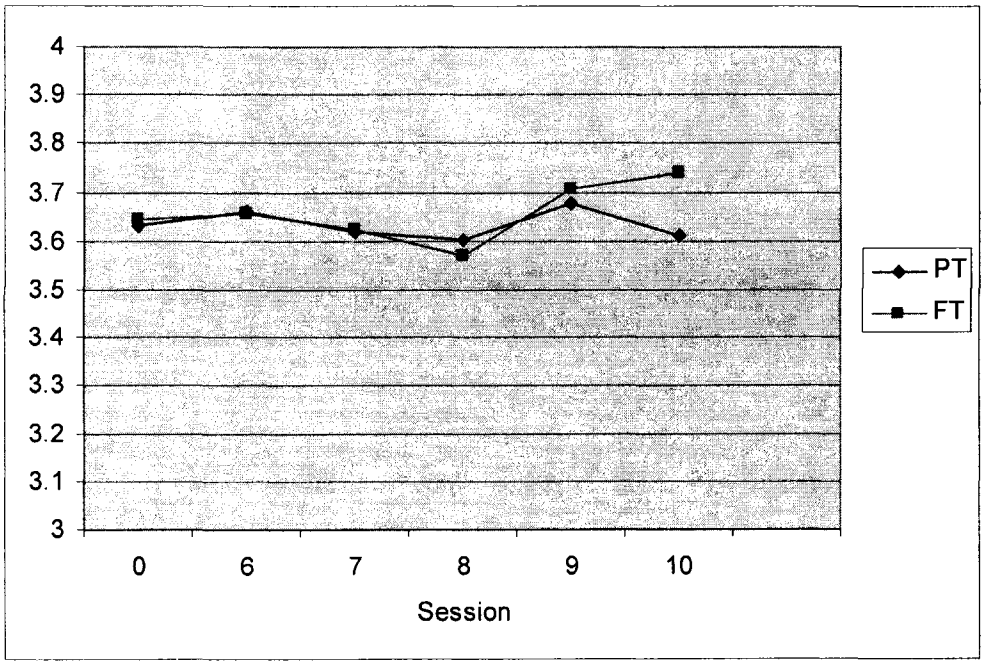

Figure 4.4. Positive regard for students.

Table 4.11

Differences between Pretest and Posttest Positive Regard for Students for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest - Term 6	0.02	0.35	.729	
Pretest - Term 7	-0.01	-0.27	.788	
Pretest - Term 8	-0.05	-0.92	.356	
Pretest - Term 9	0.05	0.93	.351	
Pretest - Term 10	0.03	0.66	.507	
		Part-Time Faculty		
Pretest - Term 6	0.03	0.77	.443	
Pretest - Term 7	-0.01	-0.27	.784	
Pretest - Term 8	-0.03	-0.79	.431	
Pretest - Term 9	0.04	1.20	.230	
Pretest - Term 10	-0.02	-0.51	.610	
		Full-Time Faculty		
Pretest - Term 6	0.01	0.12	.907	
Pretest - Term 7	-0.02	-0.19	.850	
Pretest - Term 8	-0.08	-0.71	.479	
Pretest - Term 9	0.06	0.57	.569	
Pretest - Term 10	0.09	0.89	.374	

* $p < .05$.

Note. *d* is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

Instructor Feedback

Table 4.12 shows the means for the baseline or pretest and for each of the posttest terms (6–10), separately for the 92 part-time and 10 full time faculty and for the mean of the two groups. A plot of those means is illustrated in Figure 4.5

Table 4.12

Comparisons of Pretest and Posttest Means for Instructor Feedback

	Pretest	Post Test				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.46	3.48	3.46	3.45	3.53	3.54
Full-Time Faculty	3.49	3.59	3.54	3.65	3.66	3.68
Mean by Term	3.47	3.54	3.50	3.55	3.59	3.61

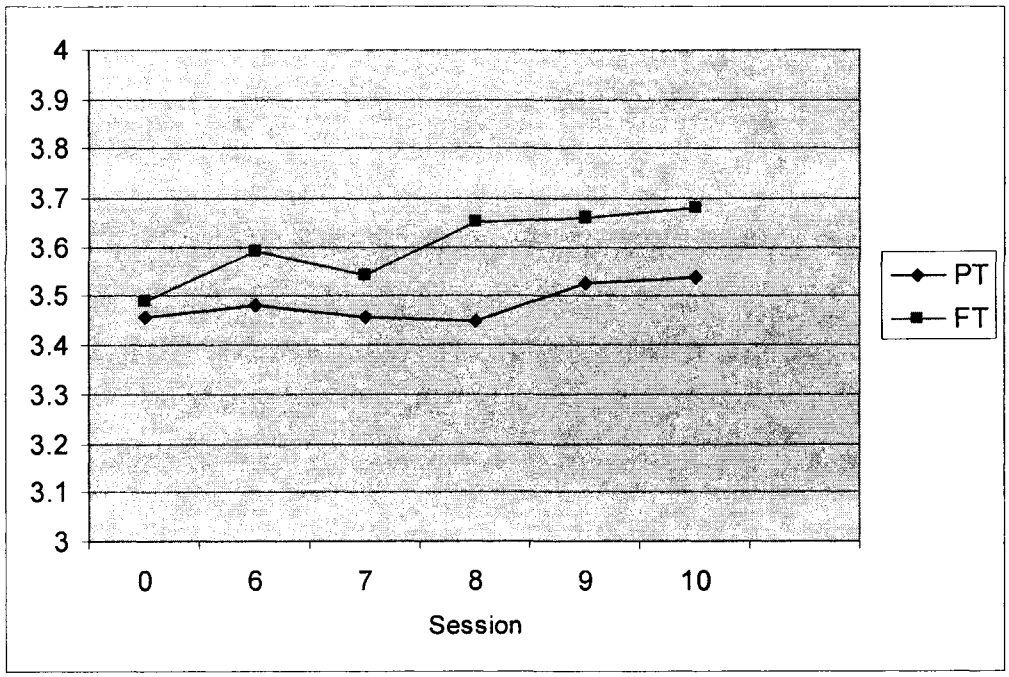

Figure 4.5. Instructor feedback.

The top of Table 4.13 shows that for all faculty in session 10 (as compared to the pretest period) the *p* was .031, indicating statistical significance. There was a difference between the baseline period and session 10. The *d* was 0.21, indicating that the effect size (or difference) was small.

The middle of Table 4.13 shows that for part-time faculty none of the posttest sessions (as compared to the pretest period) were significant, the *p*s were all >.05, indicating no statistical significance. There was no difference between the baseline period and the posttests for part-time faculty.

The bottom of Table 4.13 shows that for full-time faculty in sessions 8, 9, and 10 (as compared to the pretest period) the *p*s were .174, .158, and .107, respectively. These *p* scores indicate that the differences were relatively close to being statistically significant given the small sample size. The *d*s for session 8, 9, and 10 were 0.43, 0.45, and 0.51, respectively, indicating the size of the effects (or differences) was medium.

Clear and Structured Delivery

Table 4.14 shows the means for the pretest and for each of the posttest terms (6–10), separately for the 92 part-time and 10 full time faculty and for the average of the two groups. Figure 4.6 shows a plot of those means.

The middle of Table 4.15 indicates that for part-time faculty the *p* in session 9 was .038, indicating statistical significance. There was a statistically significant difference between the pretest period and session 9 for part-time faculty. The *d* was 0.22, indicating a small effect size.

The bottom of Table 4.15 shows the p in session 9 was .217, indicating that the difference was relatively close to statistical significance given the small sample size. The d was 0.39, indicating a small to medium/typical effect size.

Table 4.13

Differences between Pretest and Posttest Instructor Feedback for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest – Term 6	0.06	0.93	.354	
Pretest – Term 7	0.03	0.42	.675	
Pretest – Term 8	0.08	0.23	.218	
Pretest – Term 9	0.12	0.88	.060	
Pretest – Term 10	0.14	2.16	.031*	0.21
		Part-Time Faculty		
Pretest – Term 6	0.02	0.53	.593	
Pretest – Term 7	-0.00	-0.05	.960	
Pretest – Term 8	-0.01	-0.17	.867	
Pretest – Term 9	0.07	1.66	.098	
Pretest – Term 10	0.08	1.90	.058	
		Full-Time Faculty		
Pretest – Term 6	0.10	0.80	.423	
Pretest – Term 7	0.05	0.46	.644	
Pretest – Term 8	0.16	1.36	.174	0.43
Pretest – Term 9	0.16	1.41	.158	0.45
Pretest – Term 10	0.19	1.62	.107	0.51

* $p < .05$.

Note. d is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

Table 4.14

Comparisons of Pretest and Posttest Means for Clear and Structured Delivery

	Pretest	Post Test				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.44	3.48	3.46	3.46	3.53	3.50
Full-Time Faculty	3.53	3.54	3.51	3.57	3.68	3.63
Mean by Term	3.48	3.51	3.49	3.52	3.60	3.57

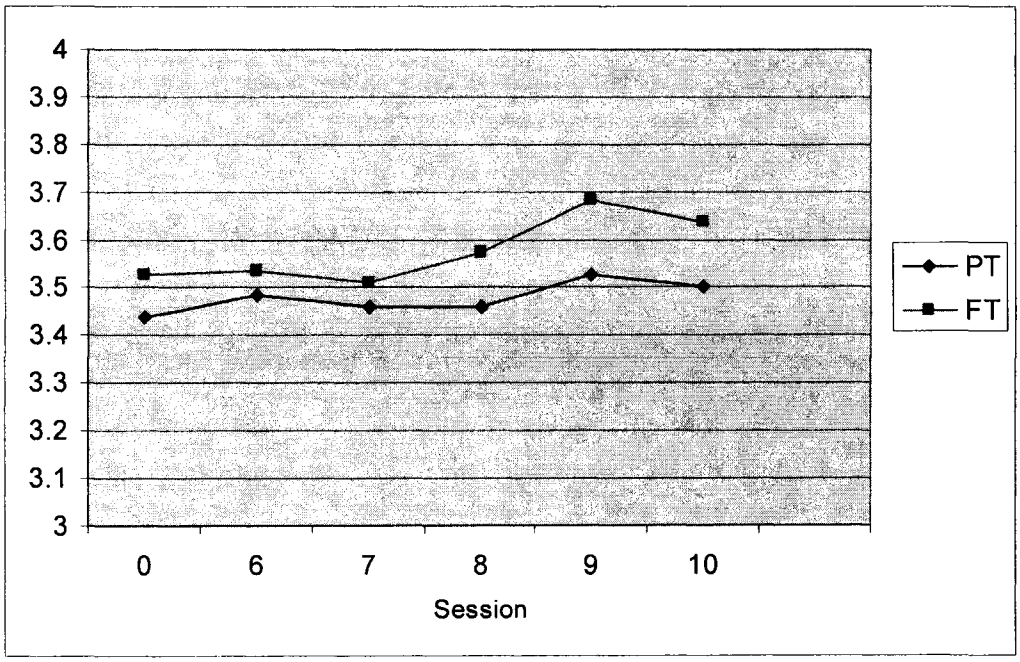

Figure 4.6. Clear and structured delivery.

Table 4.15

Differences between Pretest and Posttest Clear and Structured Delivery for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest - Term 6	0.03	0.39	.694	
Pretest - Term 7	0.02	0.04	.968	
Pretest - Term 8	0.03	0.53	.599	
Pretest - Term 9	0.12	0.85	.064	
Pretest - Term 10	0.08	1.30	.196	
		Part-Time Faculty		
Pretest - Term 6	0.04	1.08	.281	
Pretest - Term 7	0.02	0.51	.607	
Pretest - Term 8	0.02	0.52	.605	
Pretest - Term 9	0.09	2.08	.038*	0.22
Pretest - Term 10	0.06	1.44	.151	
		Full-Time Faculty		
Pretest - Term 6	0.01	0.07	.947	
Pretest - Term 7	-0.02	-0.14	.890	
Pretest - Term 8	0.05	0.38	.705	
Pretest - Term 9	0.15	1.24	.217	0.39
Pretest - Term 10	0.11	0.86	.390	

* $p < .05$.

Note. *d* is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

Enthusiasm

The baseline or pretest means for each of the posttest terms (6–10), separately for the 92 part-time and 10 full-time faculty and for the mean of the two groups are shown in Table 4.16. A plot of those means is shown in Figure 4.7.

Table 4.17 indicates that for all faculty and for part-time faculty the *p*s were > .05, indicating no statistical significance. For full-time faculty, all of the *p*s were > .25, indicating no statistical significance. There was no difference between the baseline period and sessions 6–10.

Overall Composite Rating

Table 4.18 illustrates the baseline or pretest means for each of the posttest terms (6–10), separately for the 92 part-time and 10 full-time faculty and for the average of the two groups. Figure 4.8 illustrates a plot of those means.

The top of Table 4.19 indicates that for all faculty the *p*s were statistically significant at .006, .010, .001, < .001, and < .001 respectively. There was a difference

Table 4.16

Comparisons of Pretest and Posttest Means for Enthusiasm

	Pretest	Post Test				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.66	3.68	3.64	3.65	3.71	3.65
Full-Time Faculty	3.69	3.70	3.68	3.74	3.78	3.77
Mean by Term	3.68	3.69	3.66	3.69	3.74	3.71

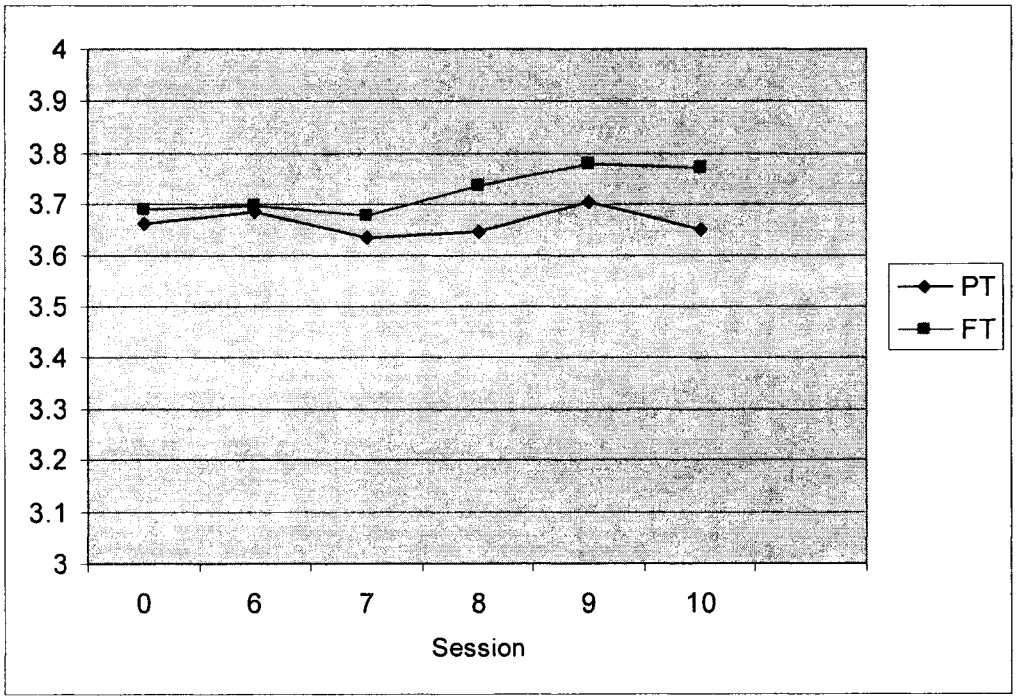

Figure 4.7. Enthusiasm.

between the pretest period and sessions 6–10 for all faculty. The *d*s were 0.27, 0.25, 0.33, 0.28, and 0.42, respectively, indicating small to medium/typical effect sizes.

The middle of Table 4.19 shows that for part-time faculty all of the *p*s were statistically significant at <.001. There was a difference between the baseline period and sessions 6-10 for part-time faculty and the effect sizes were medium.

The bottom of Table 4.19 shows that for full-time faculty the *p*s for session 6 and 7 were .215 and .171, respectively, indicating they are statistically significant. However, the *d*s for session 6 and 7 were 0.39 and 0.43, indicating small to medium/typical effect sizes.

The *p*s for full-time faculty in sessions 8, 9, and 10 were .033, .043, and .012, respectively, indicating statistical significance. The *d*s for session 8, 9,

Table 4.17

Differences between Pretest and Posttest Enthusiasm for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest - Term 6	0.01	0.27	.788	
Pretest - Term 7	0.02	0.38	.702	
Pretest - Term 8	0.01	0.29	.773	
Pretest - Term 9	0.06	1.29	.198	
Pretest - Term 10	0.04	0.72	.474	
		Part-Time Faculty		
Pretest - Term 6	0.02	0.60	.546	
Pretest - Term 7	-0.03	-0.87	.386	
Pretest - Term 8	-0.02	-0.54	.590	
Pretest - Term 9	0.04	1.22	.223	
Pretest - Term 10	-0.01	-0.34	.733	
		Full-Time Faculty		
Pretest - Term 6	0.01	0.09	.929	
Pretest - Term 7	-0.01	-0.10	.918	
Pretest - Term 8	0.05	0.49	.624	
Pretest - Term 9	0.09	0.94	.347	
Pretest - Term 10	0.08	0.88	.377	

* $p < .05$.

Note. *d* is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

Table 4.18

Comparisons of Pretest and Posttest Means for Overall Composite Rating

	Pretest	Post Test				
Comparison	0	6	7	8	9	10
Part-Time Faculty	3.37	3.54	3.50	3.51	3.57	3.57
Full-Time Faculty	3.44	3.57	3.58	3.66	3.64	3.68
Mean by Term	3.41	3.56	3.54	3.58	3.60	3.63

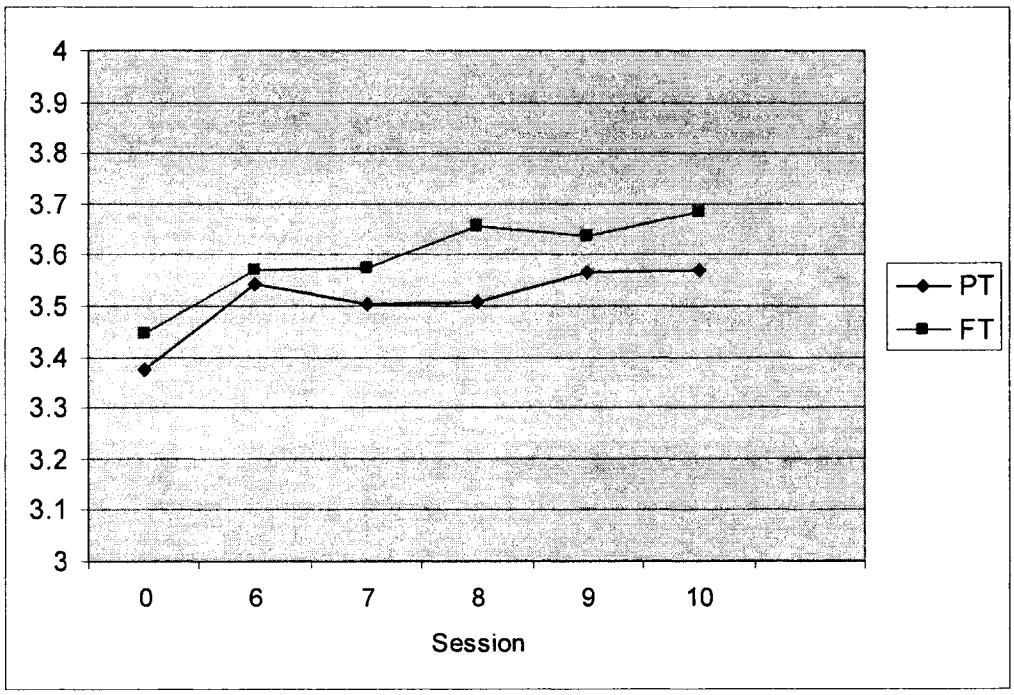

Figure 4.8. Overall composite rating.

Table 4.19

Differences between Pretest and Posttest Overall Composite for All Faculty, Part-Time Faculty, and Full-Time Faculty

Comparison	Difference	*t*	*p*	*d*
		All Faculty		
Pretest – Term 6	0.15	2.76	.006*	0.27
Pretest – Term 7	0.13	2.58	.010*	0.25
Pretest – Term 8	0.17	3.32	.001*	0.33
Pretest – Term 9	0.19	3.82	< .001*	0.38
Pretest – Term 10	0.22	4.28	< .001*	0.42
		Part-Time Faculty		
Pretest – Term 6	0.17	5.16	< .001*	0.54
Pretest – Term 7	0.13	3.91	< .001*	0.41
Pretest – Term 8	0.13	4.07	< .001*	0.42
Pretest – Term 9	0.19	5.79	< .001*	0.60
Pretest – Term 10	0.19	5.69	< .001*	0.59
		Full-Time Faculty		
Pretest – Term 6	0.13	1.24	.215	0.39
Pretest – Term 7	0.13	1.37	.171	0.43
Pretest – Term 8	0.21	2.14	.033*	0.68
Pretest – Term 9	0.19	2.03	.043*	0.62
Pretest – Term 10	0.24	2.51	.012*	0.77

* $p < .05$.

Note. *d* is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

and 10 were 0.68, 0.62, and 0.77, respectively, indicating a medium to large size of effects (or differences).

Research Question 4

The fourth research question asked: What are the perceptions/attitudes of the full-time faculty about the two transitions (part to full-time and standard to hybrid)?

Full-time Faculty Interviews

This section reports findings from my interviews with five full-time faculty members and their expectations and experiences in transitioning to a new delivery model and transitioning from part-time to full-time teaching status. They also discuss the extent to which those expectations may have changed as they gained more experience with the delivery model and in their new full-time status. Obstacles and opportunities for both the faculty member and the institution are also discussed.

The first four interview questions were whether the faculty were informed of the plan to change delivery models, how they felt about that proposed change, how well they were trained to teach in the new model, and what their experience was in subsequent terms after the change was made.

The last three questions asked the faculty member about their experience changing from part- to full-time faculty status, their experiences during the change, and their perception of their own teaching effectiveness before the transition, during the transition process, and currently.

It is important to understand the context of these experiences. Simultaneous to the change in delivery method was a change in the academic calendar, resulting in a reduction of two weeks of instructional time. The length of each session was moved from

10 to 8 weeks. The result was an academic calendar previously consisting of five sessions of 10 weeks that was now six sessions of 8 weeks.

Change in Delivery Method

Initial Expectations. All of the faculty members interviewed were informed at approximately the same time of the upcoming major shift in delivery method. Although they heard the news from several sources, the common theme was a general unease or fear of the unknown that often accompanies change. None of them knew exactly what to expect. There were several avenues of communication to the faculty members including faculty meetings, workshops, written communication pieces, and information provided by their Center Deans.

Faculty A reported that there was good information at the faculty meetings and workshops. A stated that the Dean and the various curriculum coordinators solicited input from the faculty and that there was adequate advance notice:

> Well, I thought that there was good information that was presented at a variety of faculty meetings. There was input also received from faculty. I remember faculty at one location being very enthusiastic with some of the ideas they wanted introduced. Training in the classroom. As for me, it was a sufficiently long transitional period.

Faculty member B heard about the new delivery method from colleagues:

> I heard about it from other faculty I teach with, and as usual, sometimes they were just a bit off—positive in a way that it would enhance the students' learning environment. It sounded like it would offer me more opportunity to communicate with the students . . . which I thought was very important. There was only so much time to spend with the student in the classroom and this would give you a broader ability to discuss, to talk, to think about questions before you answer.

Training. The general theme regarding training was that it was adequate. Three of the individuals considered themselves technologically savvy prior to the transition and

training. They reported having little trouble using the software with some instruction and guidance navigating the system. Two of the faculty considered themselves technologically challenged prior to the transition. They felt that more could have been done to familiarize them with the software, but they also recognized the difficulty of providing adequate training to individuals with such a diverse skill set.

In order to teach in the delivery format, all instructors were required to go through an online training program called TEC+. The Teaching Excellence Course (TEC) is the course required for all new instructors hired into the University. TEC+ is the online portion of that course designed to teach instructors how to integrate the use of software (the course shell or online portion of the course) into their traditional live classroom delivery. All existing faculty at the time of the transition had already gone through the onsite training at the time of hire. They were now all required to go through the online portion of the training (TEC+) to continue teaching in the new mode.

I asked the faculty how they felt about going through additional training, their experience in this training program, and how it affected their ability to deliver their course(s). All faculty interviewed felt the training was helpful. However, whether the training was adequate, depended on their level of comfort with technology prior to beginning the course.

Faculty A considered himself quite challenged technologically. He did not regularly work on a computer or use e-mail prior to going through training. He had been teaching for 20+ years and had experience only in a traditional live classroom setting. He commented:

> Well I must confess that I did have a mentor that assisted me quite a bit. I needed someone there with me to guide me and watch over me. She would then turn me

loose to work on different assignments. I felt pretty proficient within the first few weeks. I've developed enough confidence that I'm using other capabilities of the system now without seeking help. The training was very intensive. I had a good coordinator. He responded very well to all of our questions, all of our postings. I heard other faculty were not as pleased with their coordinator.

Initially I was apprehensive, for obvious reasons because you get set in old patterns, although I was excited about the new system. I really enjoyed the threaded discussion. I had the adrenaline flowing because I was teaching five courses at the time I was going through training, but I guess I had the additional enthusiasm. Some of the assignments we had in training, such as critiquing the articles, I don't think was as productive. I like the online discussion. Perhaps we could take a topic out of someone's expertise . . . accounting vs. HR. We were required to prepare a quiz . . . so perhaps some of the article reading or reviews could be something applicable to your own particular discipline.

Faculty D also had many years of experience teaching in a traditional classroom environment. She described herself as moderately comfortable with technology and familiar with basic software packages prior to the training. She made the following statement regarding her experience in the TEC+ training program:

> We had some training that took place probably 4-6 months before we were actually going to do it. There was a lot of information that was given to us at that time. My confidence level went up significantly for a couple of reasons. One, I've never taught online. Two, we were given a package, if you will, which was delivered, the material was delivered differently than I was used to doing it. And I think at the same time . . . we even had a book change. I reordered the course to fit the flow of how I like to deliver the material. I think it relates as much to our own particular interests as to our back up and training as well.
>
> The first time I did it, I didn't know what to do with the online stuff because it really wasn't my method of delivery. So I sort of gradually learned through some of the training programs. One chunk of learning at a time. How do I actually change the syllabus so it stays changed?
>
> I'm not sure I'm there today. I've spent some time with my CD [Center Dean]. I think one of the issues is . . . at work I have this person sitting right next to me . . . I say "Where do I find?" . . . and I write it down and I've got it. If you're at home and you've spent an hour looking for it and can't find it, you get frustrated and you just go to bed.
>
> I think there are a million little nuances as to what you do online. Just getting up that learning curve. We sat down with the grade book, . . . customized it for my

> own way of doing things. I think it's those kinds of things, if you don't have that natural bent . . . it's just a leap. I think you go forward, always try to learn more, do more. But it's not easy. I feel more confident, but I wouldn't say I'm superconfident.

The remaining faculty interviewed described a much easier time navigating TEC+. They attributed this to the fact that they were more comfortable with technology prior to going through the training program. Faculty C related:

> It's a mixed bag as to what people experience in training, it depends on the user and the user's ability and perception of technology. If they come from a technology background, they love it, they just fall right into it. At first, obviously, change is always scary . . . "I don't know if I'm going to like this." Then you say, okay, what can I do with this, how can I improve around it? Once you go through it, you're like, man, I'm glad I went through this.
>
> The training went very well because it was both visual, seeing and talking about it, but it was also hands on. That's how I learn. I like to see, hear, and then do. I see the scare, the fear in the people when I first walk in. I can identify with that. After that, they realize that there are some things I want to improve upon and alter. I think its good the way it is, I think we can do more to it to make sure it's better.

Faculty E described a similar experience. He had a fairly easy time with training. He described himself as technologically savvy prior to beginning training. He said that he had used computers extensively since 1990, so he had little fear surrounding the software. Faculty E described his training experience as follows:

> They gave me the training, the online training. He [the facilitator] was very accessible, so I could also call him and talk to him on the phone. The training helped a lot. It helped me to navigate through the course shell . . . what are the functions of each part. I just found my own way after that. Because the training is given online, the instructor doesn't see the participants and their abilities are a wide range, . . . so it's hard to say what's the appropriate training for such a broad range of participants.

Delivery in the classroom. All five individuals felt that the new delivery method provided a higher quality course delivery. None of them expressed a desire to go back to the standard delivery. All of them commented that they felt the threaded discussion tool

was the most productive in the course shell. Some faculty members' use of the online component was more extensive than others. Those that seemed more comfortable with the technology before training seemed to be using the shell more copiously than those who had trepidation beforehand.

The two faculty members who described themselves as "technologically challenged" prior to training also happen to be teaching quantitative courses; which was another reason they cited for struggling to find productive uses for the online component. At least with these interview results, the type of course taught seems to correlate with the faculty's comfort level and proficiency using the online tool.

Faculty A talked about his initial course delivery in the new modality:

> We had a lot of administrative matters I discussed initially. The students were not as proficient getting into the system as they are now. One student I remembered saying during the first term, if I wanted to take a computer course I would have taken a course online. You hardly hear that anymore. I'm trying to find practitioner oriented articles to relate to the topic. It was a little more burdensome for them initially. They also received training and there was a tutorial that they could do as well. I made some revisions as you always do when doing a new preparation or delivery. I keep polishing. Some things work better than others. The students seem more accepting as time goes on.

Faculty C described his experience as he embarked on his first hybrid course delivery:

> It was very scary, because it was something different. I was concerned not only delivering the class . . . would that change their perception of me as a faculty member, facilitator, will they actually use it? The first class was a really good shakeout. I told the students tell me, talk to me, tell me what's going on. I took the approach to be open, let the students know what is expected of them, how many posts, call the help desk, they are very good at what they do, give them a chance. I'm available, what can I do to help?

Faculty D described the reservations she experienced and the difficulty expressing herself as an instructor online during initial deliveries of courses in the new format:

> At the time I wasn't real happy. I've gotten happier. There are two things going on here. How do you like to teach? I love the classroom interaction. I really feed off of that. It's sort of the best side of me. I don't find online to be very easier to do. I feel more constrained. I feel nervous. When I type something, I always feel . . . cautious. It's hard to get my personality across and to get my teaching style across online. This time you're walking into a whole new package . . . and you didn't have a frame of reference for anything.

Faculty E was much more enthusiastic about his first courses. He embraced the technology and format quickly and seemed to carry that comfort level into the classroom:

> I loved it because it allows for adult students, working adult students, to have another tool that is asynchronistic. They don't have to be in a specific place at a specific time to get their education. I was in the same situation in the mid-90s and I had to do a lot of traveling. Working at a professional level, to travel and study is a conflict of priorities. It always forces you to choose when you don't want to choose. So having this tool online is a godsend. I wish I had this when I was a student.

Faculty E also discussed some of the conveniences associated with the course shell:

> Before iOptimize I used to hand out articles, which is masses of copies . . . very difficult to handle. Now I load everything in 'doc sharing.' So now they can go in in advance. Many students have told me that they found those articles very useful because if the concept in the classroom is unclear, the articles provide current issues they face in the news.

Online tools. Of all of the tools available in the course shell, faculty interviewed referred to threaded discussions as the most useful and productive. They all used threaded discussions more than any other tool, although to somewhat varying degrees. The second most commonly used tool was Document Sharing. All instructors used this tool to post articles and other notes. They also remarked that the students often reference these two components as the most useful learning tools. They all commented that they now make use of the online grade book, that students expect them to update this regularly and like the immediate feedback.

Faculty D, who was probably the most reticent of the faculty interviewed to use the hybrid delivery, described some of the positives of this new online component:

> There are always people in class who don't understand and you wouldn't know that because they don't ask questions. The threaded discussions are really good at getting at that. I find that very, very helpful in terms of . . . bringing out people who might not necessarily talk in class, especially in a big class.
>
> The part that I think is difficult . . . some of the students are very good online, they know how to do things I don't know how to do. Anytime you teach a class you learn what works and doesn't. If I do all the tests online, they crash and burn on the final. They've never had the pressure of . . . getting it done on time. So I changed that. The final is all in class, all problems. That's different than doing it online. Some problems are impossible to do online. I think it's also that they've done a better job in the last couple of renditions, allowing me to print out the exam to see what they did.

Faculty A described how he integrated the use of the online tools into his classroom discussions:

> Every week in the classroom, I refer back to the topic we researched online. I use the online grade book regularly. In the threaded discussion, I'll summarize what we accomplished or I'll indicate that we didn't have enough depth. I'll give them some hints or ideas where they would find some good research. I want those [online and live] not to be looked at as two disparate parts but to supplement each other.

Faculty C said that he tried to read and respond to threaded discussions every day when he could. He makes the following remarks about the threaded discussion tool:

> Key differences are we can continue conversations. A lot of time we don't have enough time in class and we can continue discussions online. I encourage the students to help others online. Jump in and help, if it's wrong I'll tell you. I've used it to help me to help the students.

Preparation time. Instructors discussed their preparation time. Preparation time was described both as time spent prior to the session preparing the course to be delivered and as time spent during the week between live classes preparing for the next meeting. Every individual interviewed commented that the preparation time for both new and

existing course increased significantly with the hybrid format. They also commented that the time spent outside of class between meetings also increased.

All faculty interviewed described the increased expectation that students would be online and active in the shell between class meetings. Each faculty expressed that the benefits of increased student learning and interaction outweighed the additional preparation time and time commitment during the session.

Faculty C described his out of class preparation time:

> It's definitely increased. Think about the standard delivery of a class, you're in there for 3 and a half hours, here's the assignments, see you next week. Now, here's the assignment, but if you have an issue or problem let's talk during the week.

Faculty D reiterates that you are always in contact with the students. There isn't time between classes when you're not involved with the students:

> That leads a whole new time dimension in how you live your life. From a personal perspective, I never have a day off. I never feel like I don't have to work at something. It's always two hours . . . so you do all the work for getting ready for class and then you do all the work for online. It's added a lot of extra work for what you're doing.

Faculty E commented that not only is there additional time during the week, there is significantly increased preparation time prior to the session. You not only have to prepare your in-class delivery, but your course shell as well:

> Even a new class of a course already loaded; just to tailor it to this particular term takes about a day or two of additional preparation.

Instructor effectiveness. Only one of the five faculty interviewed felt that they were less effective in the new hybrid format than they were previously in the standard delivery format. The reasons for this were cited as discomfort with technology and

inability to bond with the students and express instructional style and personality online. The other faculty felt they were equally if not more effective with the online tool.

Faculty D explains:

> I actually think I was more effective before just because it fit my style better. I used to get higher ratings before, that's because we now rate the online component and I haven't gotten to the level I need to be online. Part of the reason is I wasn't using the grade book. That's part of the expectation now, they'll be online and they'll be online quickly.

Other faculty, such as E, felt that they were more effective in the new format because they have more tools at their disposal and more ability to connect with the students:

> I see the benefit is the students are getting their money's worth, their value, and they are satisfied. Months later they send me e-mails that they enjoyed the value of the course. I am more effective because in the classroom I am just as effective as before. Now I have this online tool . . . I can go in during the week and add additional questions and expand the scope. It's a great tool; I don't want to do without it.

Change From Part-Time to Full-Time Status.

There were common themes consistent among the faculty interviewed about their transition from part-time to full-time status. All faculty interviewed described their transition as a positive one. Several themes emerged. Every individual mentioned appreciating the increased stability of having employee benefits, a biweekly paycheck, a stable teaching load, the decreased tax reporting responsibilities, and administrative paperwork, such as invoices. They all mentioned that they liked the connection to the school, feeling part of a larger group, having a connection to something bigger than themselves. They all mentioned that the change for them was not very dramatic, but they enjoyed being part of a larger organization and saw their full-time status as a commitment towards a long-term relationship with the institution.

Faculty A described his experience:

> For me it really wasn't a major change because for the last few years I had been doing a maximum load and doing less outside work. I had always considered myself full-time and had been with the school for so many years I felt this internal loyalty. It wasn't as much of an adjustment as if I was teaching a few courses a term. The medical and dental benefits are very nice. I had always devoted a lot of time to meeting with students and being available to them even on a part-time basis. So the amount of time has probably increased, but I don't think it's become more difficult.

For many faculty members, their part-time teaching load and their full-time minimum teaching load were very similar. All of the part-time faculty who went full-time had been designated Senior Faculty, meaning they had advanced through many courses over a period of years. Many of them were regularly teaching two, sometimes three courses per session as part-timers.

Faculty C commented that he felt little difference in the teaching load and also really appreciated the health and payroll benefits of being full-time:

> I did not feel any difference very honestly. I was teaching enough classes that the load was the same. Personally my life stressfully was less. I didn't have to worry about insurance, taking care of my family, my basic bills. Now, I went to an even consistent paycheck.

Faculty D agreed, commenting that she always tried to teach as many courses per year as she possibly could with her full-time job commitment. Part-time faculty were limited to 33 credit hours of teaching per academic year. One of the reasons that Faculty D applied to be full-time was to be able to have more flexibility in the number of courses taught. She also wanted more financial stability, or a guaranteed workload:

> I didn't notice the difference and I mean that in a very good way. I've always tried to teach as much as I could. I would be teaching two or three classes all the time anyway. So from that perspective it didn't change anything. The one part that is just easier for me, there are things you have to do when you are part-time. It is very difficult to plan your life financially when it's random. Then you always have the big tax stuff. I don't miss any of that. I like that part.

Faculty E agreed:

> Being full-time gives me a more extended workload and that gives me stability. I very much appreciate it. I don't have to go other places and deal with other systems. I really appreciate being full-time at Keller.

The individuals interviewed were also asked to describe how it felt from a professional perspective to be full-time rather than part-time. Faculty E remarked on the feeling of collegiality:

> I like being part of the group; I like being part of Keller. I want this to be a long-term career for me. I love the idea of being full-time faculty; to me it's a real honor. From a day-to-day interaction, my CD [Center Dean] takes really good care of me.

Faculty D talked about the support she received from the academic community. She described gaining strength and knowledge from her Center Dean and fellow faculty members. She commented that she feels more aware and wants to draw on those resources now that she is full-time:

> I went to the University of Chicago for my MBA; there was more emphasis on those instructors for publishing. I don't want to do that. Keller brings some really special attributes. I like the fact that we work with people who work full-time. Here's what happened in the *Wall Street Journal* today . . . let's relate that. It makes it all real for people. I'm always saying, What can you take away from class today. I asked a . . . student what's the most different about you after taking this class and she said, now I read the *Wall Street Journal.*
>
> I think it would be wonderful if we would have a quarterly meeting. . . . I think that the fact that we're so close to Chicago and the center of the organization is a benefit. It would be good to get to know each other more and to build off of those relationships. When we have a Saturday morning training session, I see people I hardly ever see, . . . I enjoy the ability to build relationships with other instructors and to learn from each other is very valuable.

Faculty E agreed that he felt more a part of the professional community as full-time faculty. He took that notion a step farther and wanted to become even more involved than some of the other interviewees:

> I don't see myself contributing in the decision-making process as an employee of the company. I have not been utilized in the full extent the school could use me. For example, I could help recruit students in the "lunch and learn" programs. No one has taken me up on that yet. I can provide this service to Keller. That would give me more of a feeling that I contributed as an employee and not just as an instructor. As an employee I'm an asset to the company and I want to be utilized to my fullest potential.
>
> I'd love to teach more. I don't want to be limited to 25 classes a year. I want to do 30. I love teaching. I can do all these other things for Keller. I have my delivery down pat and doing more [for the school] won't change that. I think the distinction is how best can I contribute to Keller as an employee. Keller is my context. The more I can contribute to Keller, the better it is for me. I don't see how that would affect my teaching effectiveness.

Faculty C also sees his place in the University as one that goes beyond how he relates in the classroom. His full-time status has just reinforced that perception. He is starting to look at ways he can help the school as a whole and help his colleagues, both part- and full-time instructors. He describes his philosophy on being part of the academic community:

> I try to be positive in my approach to everything. I try to tell the people to use the resources. The library, do you know how much you'd have to pay to get access to that stuff? I'm trying to weave that more into my classroom. I'm trying to push the whole environment . . . why not? Since I'm very persistent and pushy at times I seek out people. I talk with them, I communicate with them, and if I have an issue I let them know. I try to encourage other faculty to do that also. At first when I started, I thought I'm it; I'm just going to tell them what I know. Boy was I wrong. And students very subtly told me. At first when I came in I thought I knew everything, but I don't. I've grown a lot; they've grown a lot.
>
> I've learned a lot about learning styles and delivery of material. I've incorporated that into my lectures and that's made a huge difference. I volunteered to give a lecture for the faculty; I took it upon myself to read. I went out and did my own reading on the subject.
>
> I've seen a need, I don't personally need it, for people to complain, gripe. There needs to be a forum, this same issue I've had five other people have had it and how have they handled it? We need to get the faculty to get more of a community together . . . we don't have that camaraderie a traditional 4-year college has. I like the virtual faculty lounge but I'm not quite sure how to get that going.

Recommendations and Conclusions.

The faculty took a moment at the end of their interviews to draw conclusions about their experiences and also to make some recommendations, primarily in the area of training, for continued work in the hybrid teaching environment and with future change projects. All of them related very good experiences overall both in the teaching delivery change and their change from part- to full-time status. None of the faculty interviewed expressed a desire to return to the standard delivery.

Faculty A reflected:

> The adjustment to the new technology and the shortening of the terms came at the same time. We should probably have started this when we were still in 10-week terms. I think the transition would have been easier from standard delivery.
>
> I personally feel that with the iOptimize we are providing a much more effective work product than we did previously. That's why I would have liked to have adopted it a few years earlier. Being that I was a little bit phobic about technology initially, I felt I was given good preparation. We have to be consistent with society now. Technology is part of life and we have to keep up with our practitioner orientation that has always been such an important part of the school.

Faculty D, who was initially very phobic of technology, made some specific recommendations for individuals who had similar fears:

> I would probably recommend more training on how the software works. More of a manual on that . . . in English. Something I can look at . . . how can I change this? It's getting better because there is more stuff like that now than when we started.
>
> Once you do it, after a while you get hooked on it. I don't think I would want to go back anymore. So much of what we do today is online. There's probably a happy medium in there. Part of what I've learned in teaching is that you have to set expectations with your students. If you say you'll be online Tuesday and Wednesday, you better be there. Set the expectations up front. Here's when I'll be online, here's when I expect you to be online. I need to plan that better and I think I'm getting better at doing that.

> The students were all grouchy at the beginning but they're getting better. People come in with different expectations now than before. I wouldn't go back, we have to keep moving forward. People have made a real effort to make it easier to do.

Faculty interviewed agreed that student attitudes towards the new hybrid method are much less negative now than at the time of transition. Faculty attribute this to current students who were admitted with the expectation of a hybrid delivery as opposed to students who experienced a change in course delivery models during their program. Naturally, it is much easier now for faculty to emphasize the positives of the online tool with the current students than it was when the transition was first announced.

Generally, faculty were very positive about the hybrid teaching method and their full-time employment status. It is assumed that unhappy part-time faculty members would not have applied for a full-time position with an organization for which they felt dissatisfaction. So these comments are not unexpected. However, there were very few recommendations for change when faculty discussed the change process itself, the online tools and the training and preparation. Faculty E expressed his satisfaction:

> Every Center that I've taught at, the staff are very cooperative. They've given me every tool that I needed; they are always there and available. Number one, the training at Keller is very good. The TEC [Teaching Excellence Course] is very good. All the training I've had online is very good. The follow-up is very good. The people are very helpful; they are there to help you, to serve you. I take it very seriously. It's much more than just a job.

Summary

Table 4.20 summarizes the quantitative course evaluation data presented in the first part of the chapter. The top of the table shows that except for the composite rating; there were very few significant changes from the pretest to any posttest. Furthermore, for all of the significant differences, the effect sizes (or differences) are in the small to medium/typical range. The small effect sizes for the all faculty group indicate that there

were some weak but statistically significant results. The small effect sizes indicated for all faculty give us confidence that there is at least a little difference between the pretest period and a few of the posttest sessions, but they may not be very practically important.

The middle of Table 4.20 indicates that the statistically significant results for the instructor rating in session 7, 8, and 10 corresponded to *d*s of -0.36, -0.33, and -0.36, respectively. These sizes are small to medium/typical and indicate that the part-time faculty ratings were lower during these sessions as compared to the pretest or baseline period. These are the only data in Table 4.20 that appear to show negative differences as compared to the pretest period. Instructor ratings for part-time faculty appear to have dropped below pretest levels during these sessions.

The last variable of overall composite rating showed the most consistent findings. In all sessions compared to the baseline period, the *p*s indicated differences that were statistically significant at $p < .05$, with the exception of full-time faculty in sessions 6 and 7. Thus, almost every posttest showed an increase from the pretest and we are confident that these results are not due to chance. Even the non-significant differences of Sessions 6 and 7, as compared to the baseline period, for full-time faculty appear to be increases of small to medium/typical effect sizes, .39 and .43.

Generally, there appeared to be no difference between the part-time and full-time people as shown in the data illustrated in Research Questions 1 and 2. The last variable, overall composite rating, addressed in Research Question 3 yielded data that showed differences between the pretest and posttest session that were probably not due to chance with fairly strong effect sizes. Full-time faculty perceptions that their own teaching effectiveness remained relatively unchanged from the baseline period to the posttest

(sessions 6–10) corresponded with the apparent lack of significant differences generally illustrated in 7 of the 8 variables shown in Table 4.20.

Table 4.20

Summary of Effect Sizes of Differences Between Pretest and Each Posttest Session for All Faculty, Part-Time Faculty, and Full-Time Faculty

	Instructor	TCO	Practical	Positive Regard	Feedback	Clear	Enthus	Composite
				All Faculty				
Pre –Term 6	—	—	—	—	—	—	—	.27*
Pre –Term 7	—	—	—	—	—	—	—	.25*
Pre –Term 8	—	—	—	—	—	—	—	.33*
Pre –Term 9	—	—	—	—	—	—	—	.38*
Pre –Term 10	—	.24*	—	—	.21*	—	—	.42*
				92 Part-Time				
Pre–Term 6	—	—	—	—	—	—	—	.54*
Pre–Term 7	- .36*	—	—	—	—	—	—	.41*
Pre–Term 8	- .33*	—	—	—	—	—	—	.42*
Pre–Term 9	—	—	—	—	—	.22*	—	.60*
Pre–Term 10	- .36*	.23*	.34*	—	—	—	—	.59*
				10 Full-Time				
Pre–Term 6	—	—	—	—	—	—	—	.39
Pre–Term 7	—	—	—	—	—	—	—	.43
Pre–Term 8	—	—	—	—	.43	—	—	.68*
Pre–Term 9	—	—	—	—	.45	.39	—	.62*
Pre–Term10	—	.59	—	—	.51	—	—	.77*

* $p < .05$.

Note. d is shown for differences that are significant at $p < .05$ and for full-time faculty when $p < .25$.

A negative d value indicates that the posttest rating was lower than the pretest. Most ds were positive, indicating higher ratings after the delivery change.

CHAPTER 5

DISCUSSION

The purpose of this study was to investigate whether part-time faculty members were as effective as full-time practitioner faculty before the changes to the delivery system and faculty status, as determined by student evaluations. The study also explored whether faculty who changed status from part-time to full-time and changed simultaneously to the hybrid delivery mode were as effective as faculty who remained part-time after the change to the hybrid mode adjusting for pretest differences.

The extent and length of the effect of the change from standard classroom teaching to hybrid teaching, as measured by student evaluations of both part-time and full-time faculty, was examined. A group of five full-time faculty who had previously been part of the part-time group was then interviewed to determine their perceptions and attitudes about the two transitions (part to full-time and standard to hybrid).

Historical data were used from student end of term evaluations for each course taken from September 2002 through July 2003 for the pretest period and July 1, 2003, through July 1, 2004, for the posttest period. The first intervention was faculty status (part- or full-time). An intervention for all faculty was the change in teaching delivery format from a standard delivery with 100% of the instruction occurring in the classroom, to a hybrid delivery with 80% of the instruction occurring in the classroom and 20% occurring online. Change over time, the second independent variable, was evaluated

using group end of term evaluation data before (pretest) and after (posttest) the change in delivery format.

Discussion of Research Question 1

Eight ANOVAs (analyses of variance) were used to compare the pretest data for the two groups, part-time and future full-time faculty. The results indicated no significant differences on the pretest between these two groups. There were, however, small differences between the PT group of 92 and the FT group of 10, which as predicted favored the FT group. However, the lack of significant pretest differences between the groups could be due to the small sample size in the FT group and, thus, not enough power.

It might be anticipated that the future full-time group would have performed slightly better during this period because they were specifically selected to become full-time. It can be assumed that they were more experienced faculty and had already demonstrated a level of success by achieving senior faculty status with a minimum required mean rating of 3.3 over at least 10 previous sessions.

However, the literature does not support this assumption and may in fact support the findings of this study that minimal differences between the two groups may exist. Previous studies have not clearly indicated full-time faculties are more effective than part-time faculty (Banachowski 1996; Behrendt & Parsons, 1983; Cruise et al., 1980).

Discussion of Research Question 2

Eight ANCOVAs (analyses of covariance) were completed to examine whether faculty who changed status from part-time to full-time and changed simultaneously to the hybrid delivery mode were as effective after the change as faculty who remained part-

time after the change to the hybrid mode. The results of the analyses indicated that the part-time faculty did not differ significantly from the full-time faculty on any of the eight posttest (sessions 6–10 combined) ratings, when the posttests were adjusted for pretest differences.

The eight variables examined were instructor rating, terminal course objective (TCO) rating, practical and relevant examples, positive regard for students, instructor feedback for students, clear and structured delivery, enthusiasm, and overall composite rating Again, this lack of differences may be partly due to low power because the FT faculty group was so small.

These results speak to whether full-time faculty are any better prepared than part-time faculty to adapt to change and adjust to the use of technology in the curriculum. In the case of KGSM there are some factors in place that may have influenced these results.

Discussion of Research Question 3

Results of the student evaluations on each of the eight variables was examined to determine to what extent and for how long change from the standard to the hybrid delivery affected student evaluations of both the part-time and full-time faculty.

Instructor Rating

Only on this variable of overall instructor rating was there a decline in ratings after the change. This decline was statistically significant only for the part-time faculty in sessions 7, 8, and 10, and the size of those decreases was small to medium. For both groups combined, none of the five posttests were significantly different from the pretest. Recommendations for further study related to these results is to extend the study over time and look at a larger sample over a longer period of time to see if more powerful data

emerges with more significant differences. Because these apparent declines were not significant for full-time faculty, we cannot assume from these results that the full-time instructors were actually less effective than they were previously.

However, two of the five full-time instructors when interviewed perceived their own effectiveness as dropping slightly after the change. One instructor in particular stated that she felt her effectiveness had not regained previous levels after a year post change; however, she felt they would over time as she became more comfortable and proficient.

Other factors that may have contributed to these results were also mentioned in the faculty interviews. For example, simultaneously to this change, some publishers had changed textbooks completely or changed editions, which then required new preparation of material. This factor, where applicable, was an additional challenge in change adaptation and could have contributed to lower results.

Faculty interviewed frequently referenced students' dissatisfaction with the change. This was especially true of continuing students who had taken several classes with the standard delivery method. The instructor rating would be the most logical area for a student to express his/her general dissatisfaction with the school's decision to change the delivery method. Other variables are more specific, and do not lend themselves to a general "catch all" category as overall satisfaction with the instructor.

A decrease in ratings could be due to the instructor's own level of discomfort with the technology specifically or change in general. Only two faculty members mentioned in their interviews that they felt discomfort with technology affected their teaching performance. And only one faculty stated that this effect lasted past the first session (session 6) post change.

Terminal Course Objectives

The results for the terminal course objectives (TCOs) variable indicated that the 92 part-time faculty were rated slightly higher on the TCOs during session 10 than they were during the pretest. Also in session 10, the 10 full-time faculty were rated considerably higher on the TCO ratings than they were during the pretest, but the difference was not quite statistically significant, probably due to the small sample. These results indicate that there may have been a slight improvement over time post change.

The content of each course's TCOs were not changed in the curriculum guides from the pretest to posttest period. Therefore, it was anticipated that if any change occurred in this variable it would be slight. The fact that the results suggest a rise in ratings from the pretest to session 10 for both groups may have occurred because as the instructors became more proficient with the iOptimize tool and the students more comfortable, the coverage of each TCO was more thorough and/or more easily identified by the student in the threaded discussion, doc sharing, syllabus, etc.

Practical and Relevant Examples

The ratings on this variable appear to rise slightly from pretest to sessions 8–10. For the part-time faculty the results of session 10 were significant with a small to medium effect size. The apparent increase in this variable's ratings could be due to the fact that such iOptimize tools as doc sharing and threaded discussions encourage the posting of case studies and group discussions that may have enhanced the number and/or quality of practical and relevant examples provided by the instructor. The interaction of students in the threaded discussion by sharing their own experiences may have also positively affected students' perception of this variable.

Positive Regard for Students

None of the changes from the pretest for this variable were statistically significant, or even close to significant. Therefore, the change in delivery mode did not seem to have any effect on ratings of positive regard. There was very little change expected here. The assumption is that a faculty's regard for a student will not change by virtue of the delivery method employed. This is the one variable that speaks to the instructor's perception of the student as well as the student's perception of the instructor's behavior. If the results had been significant, one might speculate that full-time faculty ratings were higher than the part-time faculty due to better "buy in" to the change because of their new employment status. This premise is supported by the literature. Rockwell et al. (2000) concluded that for the more senior faculty (here all full-time faculty are senior faculty), intrinsic or personal rewards are the primary motivators for faculty to adopt online teaching strategies.

Instructor Feedback

Pretest to posttest ratings went up for each group but not significantly, except for all faculty combined on session 10. However, the *d* effect size values comparing the pretest with sessions 8, 9, and 10 for full-time faculty were medium (.43 to .51). Although not statistically significant, these differences were large enough to justify further study and discussion.

Faculty interviewed commented that their ability to provide feedback was greatly enhanced by the iOptimize tool. They cited the ability to have more frequent contact with students between live class meetings. They commented about the ability to provide

immediate feedback to online quizzes, threaded discussions, and other postings. The data provides some support for this instructor perception.

Besides lack of statistical significance and sample size, other factors that may have influenced these generally flat results are either the students' or the instructors' initial lack of proficiency in using the tool. This would explain the slight rise in ratings in later sessions. This would be an interesting variable to look at long-term to see if the increase in ratings continues and at what point it flattens out compared to other variables.

The reason this particular variable is especially interesting to the institution is that one of the "selling points" of using the iOptimize tool is to increase the interaction between the student and the instructor and to make these interactions timelier and more meaningful. Additional data could answer the question of whether the institution got what it "paid for" in this variable.

Clear and Structured Delivery

Ratings for both groups apparently went up from the pretest to session 9. The results for part-time were statistically significant but there was only a small effect size. The pretest to session 9 change was not statistically significant for full-time faculty, but the effect size was close to medium so this change deserves discussion.

Similar to the variable instructor feedback, these ratings increases may be due to the learning curve for both students and instructors as they become more proficient with the tool. It could be assumed that as people get more proficient they make better use of the "bells and whistles" of the program and may be posting more chapter outlines, lecture notes, Power Point slides, etc., allowing the students to follow the course content more easily.

Enthusiasm

There was essentially no change from the pretest to the posttest period for either part-time or full-time faculty ratings. These results were similar to the variable Positive Regard for Students. Similarly it could be assumed that a faculty's enthusiasm level for teaching would not change significantly due to delivery methods.

Full-time faculty interviewed did talk about their ability to exhibit enthusiasm and infuse their personality into the course as being more difficult if not impossible online. Faculty who relied heavily on these two factors to define their courses might have seen a decline in students' perception of their effectiveness, but the present data did not support this assumption.

Declines in ratings could be explained by faculty's lack of enthusiasm towards the change itself and not necessarily toward their course or their students. Consequently, full-time faculty's experience and connection to the University, like the full-time faculty under the variable positive regard for students, may show a higher enthusiasm level for the course delivery method itself.

The literature stated that if a faculty member questions the perceived gain of incorporating technology into the classroom, he or she will be less than enthusiastic in the delivery of instruction and the adoption of the new methods (Clark, 1990; Oblinger, 1997; Wright et al., 2000). Boettcher and Conrad (1999) observed that senior faculty may be better able to adapt and embrace technology in the classroom and exhibit more enthusiasm about its benefits.

Overall Composite Rating

Part-time faculty showed a significant increase in rating means from the pretest period to immediately following the change (session 6). There also appeared to be a gradual increase in ratings for both groups from session 6 through session 10. Both groups' ratings were significantly higher in sessions 8–10 than in the pretest period, and the effect sizes were at least medium.

The results of this variable may be the most interesting and encouraging to the institution because they speak to the overall student perception of the quality and value of the course delivered. Inasmuch as many of the results were significant, it is encouraging to see that all ratings seemed to be higher than the pretest period and, most interestingly, the increase in ratings for both groups seemed to occur by the first session (session 6) after the change.

The assumption might have been that an initial decrease in ratings was inevitable as the students and faculty adjusted to the new model. However, this did not appear to be the case. This might imply that the communication plan and the training provided had been at least adequate to make the transition without compromising a great deal of quality. These results need to be replicated by other studies to see whether the impact was in fact due to the communication and training provided or to some other factor or to an anomaly if the data cannot be replicated. This implication is confirmed by the comments made in the faculty interviews. All faculty stated that they believed they were delivering a better overall product in the classroom.

Keller has extensive curriculum guides for each course. These guides were rewritten to incorporate the hybrid delivery method prior to the change. Faculty feedback

was extensively incorporated. Faculty received the same thoroughness of material in the new hybrid model as they had in the standard delivery model.

Massy and Wilger (1998) discussed how important it was for institutions incorporating technology-enhanced delivery methods to use standardized curriculum to ease the transition. If this information is not provided, faculty spend so much time adapting the curriculum that they are less likely to spend the time enhancing their teaching skills in the new format. The faculty interviews confirmed that the curriculum guides provided suggestions and sample materials for using each component of the online tool including the document sharing and threaded discussion that were helpful in preparing the courses in the hybrid format.

Another factor that the faculty referenced in their interviews that may have influenced the conclusions of Research Question 3 was the communication and training provided to the faculty prior to the change. Communication and training began approximately one year prior to the change. These two factors are often cited in the literature as contributing to the chance for success in implementing a new program. (Lewis, 1999; O'Connor, 1993; Wanous et al., 2000).

Discussion of Research Question 4

Five of the full-time faculty members who had transitioned from part-time to full-time status and standard to hybrid delivery methods were interviewed to determine their perceptions/attitudes towards these transitions. They described a general unease or fear of the unknown that often accompanies change. There are references to this unease in the literature. Wright et al. (2000) talked about the initial reaction of faculty when faced with

the prospect of a major change. The first reaction is to question the perceived quality and need for the technological enhancements (Clark, 1990).

All of the faculty interviewed felt that the training was adequate. Three of the faculty considered themselves technologically proficient prior to the change. They reported little trouble adjusting. Two faculty referred to themselves as technologically challenged prior to the change. They wished that more training would have been provided while they learned to navigate the software.

All five individuals felt that the new delivery method provided a higher quality course delivery. None of them expressed a desire to go back to the standard delivery. Of the online tools, they all found the threaded discussion tool the most useful. Those that seemed more comfortable with the technology before training seemed to be using the shell more copiously than those who had trepidations beforehand.

Every individual interviewed commented that the preparation time for both new and existing courses increased significantly with the hybrid format. They also commented that the time spent outside of class between meetings also increased. Each faculty expressed that the benefits of increased student learning and interaction outweighed the additional preparation time and time commitment during the session.

The literature confirms these observations and looks at preparation time as a possible demotivator. There is concern that technology enhanced courses require additional work on the part of the faculty member (Bower, 2001; Schifter 2000). Additionally, there is a period of adjustment while faculty learn to adjust their teaching style (Williams & Peters, 1997).

Four of the five instructors interviewed felt they were more effective in the hybrid delivery mode. The one instructor who felt she was less effective felt that it was her own discomfort with technology and inability to express herself online. Oblinger (1997) discussed this experience in the literature and explained the reason as a presumption that alternative delivery is inadequate by comparison to traditional methods.

All faculty interviewed described their transition from part-time to full-time status as a positive one. Each individual appreciated the increased stability of having employee benefits, a biweekly paycheck, a stable teaching load, the decreased tax reporting responsibilities and administrative paperwork, such as invoices. They all liked the connection to the school, feeling part of a larger group, having a connection to something bigger than themselves. None of the faculty described the change in status as dramatic for them personally.

Limitations of the Findings

There are several limitations of the findings of this study. The sample size of 92 part-time faculty and 10 full-time faculty was too small to have enough power. Although the school's pool of part-time faculty approximates 300, to qualify for inclusion in this study faculty had to meet the criteria of having available course evaluation data in a least two terms in the pretest and three sessions in the posttest period. This reduced the number of part-time faculty studied to 92 and full-time faculty to 10.

Keller's mission statement is to provide practitioner-focused education. Therefore, most of the faculty teach part-time and work full-time in their field. Only recently has the school begun using full-time faculty. This is why there were available

data for only 10 full-time faculty nationwide and five full-time faculty locally who made the transition from part-time to full-time status during the time period studied.

Another limitation was being unable to match faculty on pretest criteria, such as use of technology. Although this question is referenced on the questionnaire, it speaks to the student's comfort/use of technology and not the faculty member's. Data were not collected on either the student's perception of the faculty member's use of technology or the faculty's self-assessment of their comfort/proficiency with technology. If these data had been available, it might have been possible to pair faculty and proficiency, thereby increasing the power of the data.

Summary of Findings

The goal of this research was to explore how faculty adjust to change and if this change affects their teaching performance. It was hard to find statistical significance in the results involving the 10 full-time faculty. The sample size was not large enough to test effectively the difference between part-time and full-time faculty on sessions 6–10. Thus, there were no statistically significant differences between full-time and part-time faculty.

The eight variables examined in this study allowed the researcher to determine what aspects of the instructors' teaching, if any, were affected by their change from part-time to full-time status and change of delivery mode. Of the eight variables examined, only instructor rating showed a significant decline after the change, and then only for part-time faculty on sessions 7, 8, and 10. All of the other seven variables showed no change or a slight increase from the pretest to some posttest sessions. For several

variables, both part-time and full-time faculty had substantially higher ratings by session 10 than in the pretest period.

Implications for Practice

Faculty interviewed commented that communication and training conducted at least a year prior to change was crucial to making a smooth transition. Some additional training could be added to accommodate faculty who had limited to no experience with technology and/or were uncomfortable using technology as part of their course. Although additional training was provided to faculty in workshops post change, these were not mandatory events and were presented informally. A more formal, required follow-up training for all, and remedial training for those who need additional help, could be provided post change and for a period of time longer than a year.

In order to make training more meaningful, future research needs to be done on what type of training is most effective for those uncomfortable with technology, specifically integrating technology in the classroom. Similarly, research should investigate what an ideal communication plan would look like to properly prepare faculty so they are motivated and skilled to successfully make the change. Schifter (2000) talked about the importance of finding out what motivates faculty and using that information to prepare faculty for making transitions.

The results of this study indicate that a change in delivery method might be accomplished without significant negative impact on faculty performance outcomes if there be adequate planning, communication, and training. For future change projects, institutions may want to solicit feedback from faculty prior to the change on their perceived ability to successful adapt to the proposed new environment.

Faculty feedback results may guide different aspects of future projects, such as specific training modules, speed of implementation, and follow-up activities. The institution would decide how often to assess how the change implementation was going and how often they would make those assessments. Faculty feedback combined with student feedback over a longer period of time post change might indicate a need for additional follow-up activities, such as faculty retraining or curriculum retooling.

Examining the specific variables a change program may have affected could suggest a modification of the training program, curriculum, or faculty behavior. Institutions implementing future curriculum change models may use these findings to assess the cost and risk of implementing new curriculum design.

These findings may also have implications for faculty anticipating a change in their teaching status. Faculty may not have considered the tangible advantages, such as employee benefits and tax and payroll implications, which all the faculty interviewed in this study cited as strong indicators of their satisfaction with full-time status. Faculty may be encouraged to think about potential changes in their academic life in terms of collegiality and institutional culture when faced with the opportunity to move from part-time to full-time status. Conversely, the may also consider the possibility that there may be no demonstrable change in these areas as the faculty interviewed in this study indicated.

Institutions could recognize what faculty indicate are satisfiers and motivators to change their employment status and use this information to attract and promote faculty. Understanding what is truly important to faculty, and not just what the institution perceives is important to faculty, might help institutions to better meet faculty needs.

Personal Conclusion

Rapid advances in information technology present a challenge to higher education that must be acknowledged. Burke (1994) observed that graduate students are demanding to learn job skills that can be carried from the classroom into the workplace. Traditional classroom lecture learning isn't the only alternative for the learning styles or the busy schedules of today's graduate student. Students expect to be taught the skills and knowledge to use technology well.

The demands of these students must be met by higher education in general, and faculty in particular, to survive and be relevant. Faculty must learn to adapt their teaching style to incorporate technology into the classrooms. Institutions must be proactive in keeping curriculum and delivery methods timely and relevant. It is imperative that they support their faculty in these changes in order to keep the quality of instruction high and provide competitive value to the student.

Recommendations for Future Research

In this study I have assumed that the lack of a difference between full-time and part-time faculty was due at least in part to the small sample size and consequent lack of power. However, that is not necessarily the case and the assumption should be tested by repeating the study with an extension in length of time and sample size. An increased sample size is possible over time as the school grows and additional full-time faculty members are added in order to further examine the transition from part-time to full-time status. For some of the data, effect sizes were at least medium even though the results were not statistically significant. Increasing the sample size to even 15 or 20 might have increased the number of statistically significant results.

A longer longitudinal study could be done to examine these same groups over time post change to assess the long-term effectiveness of the hybrid delivery model. Such a study design could help answer questions about whether students were more forgiving or stringent the first session (session 6) after the change. Whether student ratings changed as they had more exposure to other faculty for comparison purposes over time and, therefore, their level of expectation rose over time could also be addressed. Another area for examination is whether students were less rigorous in their evaluations by session 10 because as the sessions progressed more of the classes were comprised of students who were admitted under the new methodology.

A larger sample size allows for the separation of part-time faculty and full-time faculty over time to determine who adapted better or more quickly. This would help identify areas for training in the future as well as whether the training for part-time and full-time faculty can be the same or needs to be different for each group.

The design of this study did not address the questions of whether a one step change process or a graduated/gradual change plan would be more effective. One area for future research would be a comparative study of KGSM's change process with changes at other institutions conducting gradual change over time. These findings could help institutions considering such a project decide which approach is less disruptive, which faculty prefer, and which produces more positive outcomes.

Conclusion

The goal of this research was to explore how faculty adjust to change and if this change affects their teaching performance. It was hard to find statistical significance in the results involving the 10 full-time faculty. The sample size was not large enough to

test effectively the difference between part-time and full-time faculty and whether full-time faculty varied over time from pretest to sessions 6–10. Thus, there were no statistically significant differences between full-time and part-time faculty.

From these results KGSM would probably qualify this change project a success. Faculty outcomes did not appear to be negatively impacted overall. On specific variables, apparent initial negative impacts may be shown to correct themselves over time.

Faculty interviewed indicated overall satisfaction in both the change in delivery method and the change in their employment status from part-time to full-time. All faculty indicated that they believed the change was a positive one and would not recommend going back to the previous standard delivery method. Faculty were enthusiastic about the additional employee benefits of full-time status and that this status change reflected only positively on their teaching abilities.

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APPENDIX A

University Mission and Purposes
The mission of DeVry University is to foster student learning through high-quality, career-oriented undergraduate and graduate programs in technology, business and management. The University delivers its programs at campuses, centers and online to meet the needs of a diverse and geographically dispersed student population.

We are also dedicated to the following purposes:

- to offer an applications-oriented undergraduate education with a balance of general education and specialized coursework to help students gain the knowledge, skills and credentials needed to meet current and future challenges of a global economy.

- to offer practitioner-oriented graduate management education that focuses on the applied management concepts and skills required for success in a global economy.

- to provide a curriculum developed, tested and continually improved through regular outcomes assessment and consultation by our faculty and administrators with business leaders and other educators.

- to continually examine the evolving needs of students and employers for career-oriented higher education programs as a basis for development of additional programs.

- to promote teaching excellence through comprehensive faculty training and professional development activities.

- to provide an interactive and collaborative educational environment that strengthens learning and contributes to lifelong educational growth.

- to provide student services that contribute to academic success, personal development and career potential.

- to offer career development services appropriate to the needs of students, graduates, and employers.

University Values
In striving to accomplish our educational mission and purposes, we adhere to the following values reflecting the standards of service and conduct to which we have committed ourselves:

- student success – Fostering student success is the underlying principle that guides DeVry University's decision-making and institutional activities.

- excellence in teaching – Engaging faculty who embrace continual improvement in their subject matter expertise, pedagogical effectiveness and appropriate use of technology advances teaching excellence and promotes student learning.

- academic standards – Upholding academic standards and ensuring academic integrity are paramount in ensuring the value of graduates' degrees.

- academic freedom – Encouraging faculty and staff to engage in appropriate scholarly activities and in free exploration of ideas is essential to maintaining the intellectual vitality of the institution.

- educational relevance – Offering technical and business programs that provide career enhancement, promote responsible citizenship and encourage lifelong learning supports the University's mission.

- organizational integrity – Involving the institution's members in the development of policies, and consistent application of policies and procedures to interdepartmental relationships, is required to maintain institutional stability and effectiveness.

- responsive student services – Providing support services in a helpful and caring manner to students fosters learning and supports academic success.

- building on diversity – Maintaining an institutional culture that draws strength from the varied perspectives and backgrounds of its students, faculty and staff helps DeVry University achieve its educational and strategic goals.

APPENDIX B

Faculty Interview Questions

What were you told about KGSM's transition to a technology-enhanced course delivery effective with the July, 2003 term?

How did you feel about this change in course delivery method?

How did you feel about the iOptimize training (TEC+)?

What was your experience the first term you taught in the technology-enhanced format?

What was your experience in subsequent terms taught in the technology-enhanced format?

* Describe your experience changing from part- to full-time faculty status.

* Describe your experience since becoming a full-time faculty member.

Describe your teaching effectiveness before the transition, during the transition process, and currently.

*Note – These two questions to full-time faculty only.