12-14-2012

# Faculty Members' Perceptions of Community College Centers for Teaching and Learning: A Qualitative Study

Sandra Ann Frey
*University of Missouri-St. Louis*, sandraafrey@gmail.com

# Faculty Members' Perceptions of Community College Centers for Teaching and Learning: A Qualitative Study

Sandra A. Frey

B.S. Ed., Univiersity of Missouri – Columbia, 1980

M. Ed., University of Missouri - St. Louis, 1984

DISSERTATION

Submitted in partial fulfillment of the requirements

for the degree of Doctor of Philosophy in Education

in the Graduate School of the

University of Missouri-St. Louis, 2012

St. Louis, Missouri

Advisory Committee
Wolfgang Althof, PhD
Chair
Margaret Cohen, PhD
Kent Farnsworth, PhD
Dixie Kohn, PhD

## Abstract

The purpose of this study was to explore faculty members' perceptions of community college Centers for Teaching and Learning (CTLs); whose main purpose is to promote, facilitate, and honor excellence in teaching and learning through the support of full-time and adjunct faculty, at all career stages. A generic qualitative study with a grounded theory approach was conducted to understand faculty members' perceptions and to develop recommendations for community college CTL directors, administrators, and faculty. Focus group interviews were conducted with groups of faculty at each of three Midwestern U.S. community colleges. Faculty were placed in one of three groups; frequent interaction with the CTL, less frequent interaction, or infrequent or no interaction. Fifty-four participants were involved in this study; 51 faculty members and three CTL directors.

Five major categories emerged as a result of axial coding: CTL Director's Professionalism, CTL Atmosphere, CTL Relationship to the Institution, CTL Programming, and CTL Impact on Teaching and Perceived Impact on Student Learning. The categories were related to each other and through selective coding, a theoretical scheme emerged: the director's professionalism determines the CTL's atmosphere, programming, and relationship to the institution. Through these three avenues, the director facilitates the CTL's impact on teaching and student learning.

The findings demonstrate how CTLs can bring about a change in culture from a teacher-centered paradigm to a learner-centered paradigm. Additionally, the findings indicate that effective directors utilize a leadership style in which they reach out to others at all levels within the organization. Further, the findings support the use of professional

development, including short duration programs delivered through CTLs, to impact changes in teaching and learning at community colleges in the United States.

# Dedication

To my loving and supportive parents: Janis and Jerry Stieren

Acknowledgements

I sincerely thank my advisor, Dr. Kent Farnsworth, who recruited me for this journey, mentored me along the way, and stayed with me to the finish. Sincere thanks also go to the other committee members: Dr. Wolfgang Althof, who introduced me to qualitative methods and took on the role of advisor upon Dr. Farnsworth's retirement; Dr. Peggy Cohen who supervised my research internships and provided insight; and Dr. Dixie Kohn who graciously gave me ideas to contemplate. I also greatly appreciate the support given to me by my colleagues: Dr. Juliet Scherer, Dr. Kim Harvey, and Ms. Laura McCloskey.

Family members who cheered me on through the years include Janis and Jerry Stieren, my parents; Dan Stieren, Mike Stieren, and Mark Stieren, my brothers; Tammy Stieren, my sister-in-law; and Clayton Zak and Taylor Zak, my children. I am also appreciative of my loving husband, Dan Frey, who took on the work of running the household while I concentrated on my studies and research.

TABLE OF CONTENTS

# Chapter One: Introduction

Are institutions of higher education providing an effective learning experience for students? That question is the focus of a series of reports that began to appear in the middle of the past decade, beginning with *A Test of Leadership: Charting the Future of U.S. Higher Education* (U.S. Department of Education, 2006). The report was the product of the Commission on the Future of Higher Education, appointed by U.S. Secretary of Education during the second Bush Administration, Margaret Spellings. The commission called for institutions of higher education to employ innovative teaching methods, to move away from the traditional lecture format that puts students in a passive role and to move toward teaching methods that require students to be active learners.

The federal government is not the only source of pressure on institutions of higher education to provide students with active learning experiences. A number of major foundations have entered into the discussion, including the Lumina Foundation and its 2010 report, *A Stronger Nation through Higher Education* (Lumina, 2010). Achieving the Dream, a program founded by the Lumina Foundation, cites Patrick Henry Community College's use of cooperative learning as an example of "what works" (Achieving the Dream, 2009). Accrediting bodies are also requiring institutions to show that effective teaching is an institutional priority with The Higher Learning Commission stating that "openness to innovative practices that enhance learning" (Higher Learning Commission, 2003, p.3.1-4) is an example of evidence that effective teaching is valued and supported. State governments also are putting pressure on colleges and universities to engage students actively. In Missouri, as a result of the passage of Senate Bill 389, the Missouri Department of Higher Education has developed a plan, *Imperatives for Change*, for

improving institutions of higher education in the state. An Indicator in that plan requires institutions to track and report on students' participation in "high impact learning activities" (Missouri Department of Higher Education, 2009).

Why are these various bodies pushing for the change to active engagement of learners? Advances in learning theory resulting from a large body of research on learning affirm "that learners learn best by doing, by working on real problems in real environments; … that human ability is much more complex and diverse than is suggested by one-dimensional measures of intelligence… that there are significant differences in learning styles of individuals" (O'Banion, 1997, p. 81). A greater percentage of the U.S. population is being educated beyond high school than in the past and the new student body brings with it diversity in prior experiences, learning style preferences and levels of academic preparation. Actively engaging these students in the learning process facilitates their learning and mastery of stated learning outcomes at the course, program, and general education levels.

The aforementioned report by the Lumina Foundation (2010) calls for the nation to move the percentage of adults 25-34 with an associates or bachelors degree from 39% to 60% by the year 2025, a "big goal" that will require dramatically different approaches to teaching and learning. Kay McClenney who directs the Community College Survey of Student Engagement (CCSSE) notes that "the assignments, courses and programs we now have in place are designed to produce exactly the results they are now producing" (Farnsworth, 2010). The corollary to this observation is that if we are to achieve dramatically different results, teaching and learning will need to change dramatically.

The call to engage students actively is in contrast to the lecture format which institutions of higher education have long relied on to transmit information to students. Across the country, the need to improve teaching in institutions of higher education is widely recognized (Lyons, McIntosh & Kysilka, 2003). To address this need, seventy-one percent of research universities have a center that provides information about effective teaching methods to professors by making information available through a teaching-learning development unit, more commonly referred to as a Center for Teaching and Learning (Kuhlenschmidt, 2011). The Professional and Organizational Development Network in Higher Education (2006) notes that "During the last 10 – 15 years, most research universities have created teaching centers; few do not yet have one and there are increasing numbers at comprehensive universities, liberal arts, and community colleges." The term community college refers to "any institution regionally accredited to award the associate in arts or the associate in science as its highest degree" (Cohen & Brawer, 2003, p.5). Currently, seventeen percent of associate degree-granting institutions have a Center for Teaching and Learning (Kuhlenschmidt).

The centers are known by a variety of names: Center for Teaching and Learning, Center for Teaching Excellence, Teaching and Learning Center, etc., but the work of the centers is largely the same. The centers provide support to faculty members related to their teaching role. This support is intended to assist professors as they react to the demands of today's higher education climate, a climate that requires them to employ innovative methods to generate students who have mastered expected learning outcomes. For the purposes of this study, Center for Teaching and Learning (CTL) was defined as an office on campus, staffed by a director, whose main purpose is to promote, facilitate,

and honor excellence in teaching and learning through the support of full-time and adjunct faculty, at all career stages.

CTLs provide faculty development which for the purposes of this study is defined as efforts at improving individual faculty members' skills, courses, and curriculum and interrelationships within the institution. In current practice, the term faculty development is used interchangeably with the terms professional development, organizational development, and the scholarship of teaching and learning (Ouellett, 2010).Theoretical models for faculty development are numerous, with most models including a series of steps that either begin with efforts to change faculty conceptions about teaching and learning and end with changes in teaching practices (Ho, Watkins & Kelly, 2001), or begin with efforts to change teaching practices and end with changes in faculty conceptions about teaching and learning (Guskey, 1986). Consensus does not exist on which approach best facilitates teaching changes that result in increased student learning, suggesting that models of organizational change are also applicable to research on Centers for Teaching and Learning. The Stages of Change Theory presented by Prochaska, Prochaska, and Levesque (2001) and advanced by Weatherbee, Dye, Bissonnette, and Mills (2009) is a particularly useful organizational change approach that facilitates individuals' confrontation of personal values. (See the Theoretical Framework section of this chapter.)

Center for Teaching and Learning (CTL) programming that facilitates faculty members' confrontation of personal values has the potential to impact positively the effectiveness of the centers' abilities to enact change. Essentially, an effective Center for Teaching and Learning "takes a systems approach to being a change agent and provides

synergy to campus support activities" (Professional and Organizational Development Network in Higher Education, 2006). Effective centers offer comprehensive professional development opportunities focused on supporting and promoting effective teaching. Comprehensive CTL programming that consistently encourages faculty to confront biases against learner-centered instruction has the potential to move the institution systematically toward the active engagement of learners. This thinking is supported by the Professional and Organizational Development Network in Higher Education's assertion that the effectiveness of professional development is increased when it is provided by a teaching center with a comprehensive program of services, rather than as isolated in-service events organized by a variety of college departments.

Is this assertion true? Are Centers for Teaching and Learning truly effective? This question is more important than ever, as community colleges follow the lead of universities and increasingly establish centers to support faculty. Assuming that Centers for Teaching and Learning are effective, as an increasing number of new entrants into higher education enroll in community colleges, faculty at these institutions are in need of professional development provided by these centers because they must respond to their shifting role by changing from direct, lecture style teaching to methods that more fully facilitate student learning (Dickinson, 2006). As community colleges move away from the Teaching Paradigm and toward the Learning Paradigm (O'Banion, 1997), community college faculty members will be required to change their approach to teaching:

> To act as synthesizers, knowledge navigators, designers of learning environments, facilitators, mentors to students and part-timers, classroom researchers, members of development

> teams, brokers of individualized educational experiences, and certifiers of content mastery, faculty members will have to develop new forms of expertise and give up other roles that currently consume their time. (Dickinson, p. 31).

For a productive transition to occur, faculty must be provided with professional development opportunities to assist them as they meet new expectations. Based on data from the Council for the Study of Community Colleges, an affiliate of the American Association of Community Colleges, community college faculty prefer taking in-service courses at their college over other professional development opportunities, such as enrolling in courses at a university (Weisman & Marr, 2002, p. 103). Considering this preference, establishing Centers for Teaching and Learning at community colleges that can effectively guide the change process makes sense and takes on increasing importance.

In addition to providing professional development activities, the centers address the desire for collegiality among faculty (Fogg, 2006). In referring to The Center for Excellence in Teaching and Learning at Parkland College in Champaign, Illinois, a faculty member commented, "How refreshing it is to have a place to go to talk about the art/science/magic/mystery of teaching" (Harris, Rouseff-Baker & Treat, 2002, p.31). The physical space allotted to centers and the activities provided by the centers address "the need for community among faculty [which] is critical to institutional growth" (Harris, Rouseff-Baker & Treat, 2002, p.31). The general wisdom is that Centers for Teaching and Learning can facilitate a sense of community because they provide "the opportunity

to increase knowledge and develop skills while employed [which] leads to an improved sense of belonging" (Weisman & Marr, 2002, p.103).

## Purpose of the Study

Much of the information concerning the successes of Centers for Teaching and Learning (CTLs) at community colleges is anecdotal. Those best equipped to determine whether centers are, in fact, accomplishing their stated purposes are teaching faculty. The purpose of this study was to explore faculty members' perceptions of community college CTLs to determine what makes a Center successful and useful in the eyes of the user. It also examined the impact of CTL participation on faculty teaching behavior, and the implications of faculty perceptions and impact for CTL directors' programming decisions. The guiding research questions were as follows:

1. In what ways are faculty involved in the CTLs' offerings such as face-to-face stand alone events, cohort groups, individual consultations, etc.?
2. How has faculty involvement with CTLs impacted teaching strategies?
3. Are there changes in teaching strategies and behavior resulting from participation in CTL programs and services that indicate faculty are making changes that are consistent with modern organizational change theory?
4. To what extent and in what ways such as suggesting topics, delivery formats, and presenters do faculty and administrators influence the activities of the centers?
5. Why do some faculty members have no interaction with the CTL?

## Working Hypotheses

The working hypotheses of this researcher were:

1. CTLs that involve faculty at all levels of CTL programming decisions foster changes in approaches to teaching and learning that faculty perceive as positively impacting student learning.
2. CTLs that provide programming options that are aligned to progressive stages of attitudinal change and related change processes foster changes in approaches to teaching and learning that faculty perceive as positively impacting instructional strategies and student learning.

## Scope of the Study

This study was delimited to an exploration of faculty members' perceptions of Centers for Teaching and Learning at three Midwestern community colleges. It was not the intent of this study to evaluate how changes in teaching, prompted by experiences with the CTL, affect student learning, but to determine how involvement with the centers influences teaching behavior. A large volume of other research examines the impact on student learning as teachers develop more engaging and participative approaches. The focus of this study was whether or not CTLs positively influence change in teaching strategies and if so, how CTLs can best involve faculty to impact their teaching positively.

## Theoretical Framework

Stages of Change Theory (Prochaska et al., 2001) served as the primary theoretical framework for this study. Also known as the Transtheoretical Model of Change (TTM), Stages of Change Theory is an approach to organizational change in which processes of change are utilized to facilitate individuals' confrontation of personal values and movement through stages of change. Weatherbee et al. (2009) argue that

providing individuals with experiences that expose them to new ideas gives them an opportunity to bring personal valuations to a conscious level and to consider actively new institutional values. The individual may choose to modify, substitute, eliminate, or supplement current personal valuations while working through the change process in stages: Precontemplation, Contemplation, Preparation, Action and Maintenance (Prochaska & DiClemente, 1983; Prochaska et al.; Weatherbee et al.). Organizations can facilitate individuals' progression through these stages through five change processes: consciousness raising, environmental reevaluation, self-reevaluation, self-liberation, and helping relationships (Weatherbee et al.). Weatherbee et al. describe consciousness raising as "awareness of issue and potential solutions;" environmental reevaluation as "understanding the positive impact of change on work and social environments;" self-reevaluation as "self-change (understanding necessity for reevaluation to complement change);" self-liberation as "commitment to success through change;" and helping relationships as "facilitating change through social support" (p. 203).

Helgesen's (1995) Web of Inclusion served as a secondary theoretical framework for this study. This theory places the leader at the center of the organization rather than at the top and supports participatory involvement in organizational decision making at all levels. This study evaluated whether centers that employ change strategies consistent with the Stages of Change Theory (Prochaska et al., 2001) were effective in facilitating changes in teaching strategy, and if these centers utilized an organizational approach that placed the center's director at the communication center of activity, or in a more hierarchical position.

## Significance of the Study

In reviewing the literature, this researcher found that the research on the impact of faculty participation in professional development activities primarily focuses on long-term professional development programs at four-year institutions in Europe. This has been the focus for the past two decades. Weimer and Lenze (1994) also note that the literature on the impact of faculty development programs largely addresses programs of considerable duration at four-year institutions. Are the positive findings of these studies applicable to the one-time events or series of trainings of shorter duration provided by Centers for Teaching and Learning at community colleges? This study provides findings about the impact of shorter duration faculty development activities at community colleges in the United States, addressing this gap in the literature.

Considering the recent closing of some centers at four year institutions (McIntosh, 2010) and decreases in funding for institutions of higher education across the United States, research on the impact of Centers for Teaching and Learning is needed now more than ever. Without research that evaluates the impact of centers on teaching and student learning, the continuation and growth of centers at community colleges is at risk. The results of this study provide insight to institutional administrators who make funding decisions related to CTLs. Administrators may cite the centers' positive impact on teaching behavior demonstrated in this study as support for providing funding for centers.

The findings of this study also provide insight for CTL directors, as they work to facilitate effective teaching. Specifically, the findings suggest the most effective leadership style to embrace, and suggest essential aspects of professionalism needed to direct a CTL that effectively impacts teaching and learning. Furthermore, the results of

this study inform CTL directors as they make programming decisions. For example, comments made by faculty in the study indicate that they participated in programming aligned to their stage of change at the time, and that they found that programming particularly useful to bringing about changes in their teaching strategies. Directors who believe the faculty on their campuses are similar to the study participants may act on that information and structure professional development opportunities that allow for faculty members' systematic progression through the stages of change. For instance, directors could plan a series of workshops for faculty committed to adoption of a specific teaching strategy such as student response systems (clickers), which would be a good fit for faculty members in the Action stage. For faculty members in the Contemplation stage, directors could plan a one-time informal group lunch meeting with discussion on a specific topic such as Adult Learning Theory. This research guides directors in their efforts to provide programming of value to faculty and institutions as they work toward the ultimate goal of facilitating substantial change in enough faculty members to transform the culture of the institution to one that reflects learner-centered teaching practices.

## Methodological Approach

This study employed a qualitative methodology utilizing purposeful sampling, focus group interviews, individual interviews, and review of archival data for data collection. Grounded theory techniques were used for data analysis with microanalysis beginning at the start of data collection and continuing throughout the study. Open Coding, Axial Coding, and Selective Coding were utilized to identify themes as they emerged, to determine if the role of the center director was consistent with Helgeson's

model of effective organizations, and to evaluate if programming options aligned to varying stages of change and related change processes were provided.

## Organization of the Study

Chapter One of this dissertation described the role Centers for Teaching and Learning play in addressing demands for change in U.S. higher education. The purpose of the study and its significance, along with the hypotheses, methodology, theoretical framework, and scope of the research, were also outlined in Chapter One. Chapter Two examines literature related to Centers for Teaching and Learning and gaps in the literature that are addressed by this study are identified. Chapter Three presents the methodology, including data collection and analysis procedures. Justification of the selected design of the study is also provided. Chapter Four presents the findings of the study and provides an analysis of the data. In Chapter Five, the findings and their implications, including how they inform programming decisions of CTL directors, are discussed.

# Chapter Two: Review of the Literature

## Introduction

There are a number of assumptions implicit in an institutional decision to create a center for teaching and learning at a community college. Among these are the belief that teaching is central to the community college mission, that teaching and learning can be positively impacted through professional development experiences, that evidence exists that some instructional strategies work better than others, and that there are organizational models that lend themselves to effective center function and design. This chapter examines each of these assumptions through the lens of the body of literature that has developed around the assumption, and demonstrates that although a sizable body of related scholarship exists, there is still fertile research ground to be tilled, and many questions remain unanswered. More specifically, the chapter illustrates the need for this piece of research, and explains how it will further scholarship related to professional development.

The chapter is organized as the assumptions have been presented above; first examining the community college as teaching institution, then reviewing evidence that professional development positively impacts teaching effectiveness. A study of the literature supporting the effectiveness of some pedagogical approaches over others follows, and the chapter concludes with a review of organizational models that lend themselves to centers such as those examined in this research.

## Community Colleges as Teaching Institutions

Since their creation at the turn of the last century community colleges have identified teaching and learning as central to their mission (Cohen & Brawer, 2003).

Faculty were hired for their teaching skills and from the inception, community college faculty have had a reputation as excellent teachers (Cohen & Brawer; Witt, Wattenbarger, Gollattscheck, & Suppiger, 1994; Smith, 1994). In part, this reputation comes from the fact these faculty typically spend little time on research, allowing them to devote the vast majority of their time to the practice of teaching (Cohen & Brawer). This focus on excellent teaching has been more critical as community colleges have attracted greater numbers of adult students, students from disadvantaged backgrounds, and those coming out of secondary school underprepared (Cohen & Brawer; Witt et al.). Superior teaching at community colleges is also rooted in the early common practice of hiring faculty from local high schools who had formal pedagogical training in preparation for their role as secondary teachers (Cohen & Brawer; Witt et al.).

As these colleges matured as a segment of higher education, they continued to focus on providing quality teaching and in the 1970's community college leaders such as George Boggs and Robert Barr of Palomar College in California were among the first to embrace the idea of changing from a focus on teaching to a focus on student learning (O'Banion, 1997). In the seminal article, *From Teaching to Learning – A New Paradigm for Undergraduate Education*, Robert Barr and John Tagg (1995) detail the steps an institution must undertake to make the shift from the Instruction Paradigm to the Learning Paradigm. In his book, *A Learning College for the 21st Century*, Terry O'Banion (1997) identifies the key principles of the learning college and documents the transformation of several community colleges to learner-centered institutions. According to O'Banion, the learning college is guided by six key principles:

- The learning college creates substantive change in individual learners.
- The learning college engages learners as full partners in the learning process, with learners assuming primary responsibility for their own choices.
- The learning college creates and offers as many options for learning as possible.
- The learning college assists learners to form and participate in collaborative learning activities.
- The learning college defines the roles of learning facilitators by the needs of the learners.
- The learning college and its learning facilitators succeed only when improved and expanded learning can be documented for its learners.

(O'Banion, 1997, p. 47)

Each of these characteristics presents unique challenges to faculty; bringing about substantive change, offering learning options, engaging learners as full partners, offering collaborative learning opportunities, and viewing the teaching role as that of facilitator. O'Banion notes that resistance to making the change to a learning-centered college will come from many stakeholders, including faculty. With this expressed concern, one might expect the advent of teaching and learning centers to occur in the community college sector but as the following section on learning centers indicates, community colleges were relative late-comers to teaching centers, and have been weak in their support, once

centers appeared. There has been a dearth of research about the value of Centers for Teaching and Learning at community colleges and their potential to reduce faculty resistance to the adoption of learning-centered teaching approaches. This study begins to address that shortcoming by examining three existing Community College CTLs to determine what faculty view as critical elements of a successful and useful center.

## Impact of Faculty Development

Before reviewing the literature related to the creation of Centers for Teaching and Learning, it is first useful to examine what has been learned about the general benefit of professional development for postsecondary faculty. As American universities evolved toward the German model as centers of scholarship rather than as centers of instruction (Rudolph, 1990), it is not surprising that institutional commitment to the professional growth of faculty members in the United States in the early part of the nineteenth century first appeared as the sabbatical leave which gave faculty release time from teaching in an effort to advance research and publications (Ouellett, 2010; Rudolph, 1990). This focus on disciplinary expertise continued until the 1950's when social and economic factors precipitated the emergence of contemporary faculty development with a greater emphasis on improving instruction (Ouellett). Since the middle of the twentieth century faculty development has evolved to address the many roles faculty now must assume, including the teaching role.

Sorcinelli, Austin, Eddy, and Beach (2006) identify five stages in the history of faculty development in the United States. In the Age of the Scholar (mid 1950's through the early 1960s), faculty development focused almost exclusively on the support of faculty research and publication efforts. The Age of the Teacher (mid 1960's through the

1970's) is characterized by programs to improve faculty teaching. During the 1980's, the Age of the Developer, the number of formal centers devoted to experimentation with innovative teaching approaches increased and in the Age of the Learner (1990's) faculty at all career stages were encouraged to shift from instructor-centered methods of pedagogy to student-centered methods. Currently, Sorcinelli et al. suggest faculty development is in the Age of the Networker, in which faculty developers work with faculty and other institutional leaders to propose solutions to a variety of institutional problems. It is worth note that it was not until the mid-1960's that teaching became a primary focus of professional development for college and university faculty, giving some indication of why community colleges were not early adopters.

The term Instructor-Centered Teaching refers to teaching methods utilized by an instructor that put the instructor in an active role such as lecturing, in an effort to transfer knowledge from instructor to student (Barr & Tagg, 1995). The terms instructor-centered and teacher-centered are used interchangeably in this study. Learner-Centered Teaching is defined as teaching methods utilized by an instructor that put students in an active role such as collaborative learning, in effort to facilitate students' discovery and construction of knowledge (Barr & Tagg). In this study, the terms learner-centered, learning-centered and student-centered are used interchangeably.

Faculty development in community colleges began in the 1970's as the nation experienced a rapid increase in the number of associate degree-granting institutions (Watts & Hammons, 2002). Watts and Hammons state that the increasing numbers of high-risk students attending community colleges and the need for personnel who were able to adapt to change contributed to the growth of professional development for faculty

at community colleges. In the 1970's and early 1980's an attempt to legitimize professional development in the community colleges had some success. However, with the economic downturn of the mid-1980's this success essentially ended, demonstrating the vulnerability of teaching and learning centers to periods of budget crisis. Watts and Hammons report that currently the state of faculty development varies considerably amongst U.S. community colleges, with some having programs in the start-up stage and others having comprehensive programs.

The body of literature on the effectiveness of faculty development is sizable and varied, but largely comes from abroad. Researchers worldwide utilizing quantitative, qualitative and mixed methods research designs have examined the efficacy of faculty development, with the majority of the literature addressing the impact of professional development on participants' teaching philosophy and practice. Literature addressing the impact of faculty development on student learning exists to a lesser extent and the remainder of this section of the literature review is divided into two portions: 1) studies that are limited to the impact of professional development on participants' teaching philosophies and practice and 2) studies that also address the impact of professional development on student learning.

### *Impact of Faculty Development on Teaching*

Much of the recent scholarship on professional development is coming out of Europe. In a mixed methods study of 200 teachers at the University of Helsinki, Postareff, Lindblom-Ylanne, and Nevgi (2007) investigated the impact of pedagogical training on faculty approaches to instruction. Specifically, they looked at the impact of voluntary faculty participation in both short and long term courses in teacher training

provided by the University of Helsinki Centre for Research and Development of Higher Education on the faculty members' movement away from an information transmission/teacher-focused (ITTF) approach to instruction and towards a conceptual change/student-focused (CCSF) approach. Based on participants' responses to a questionnaire about approaches to teaching, faculty were divided into four groups according to the amount of teacher training received. Questionnaire responses were used to identify faculty to participate in semi-structured interviews focused on their perceptions of the impact of the teacher training on their teaching.

ANOVA results utilized in the study found that teachers with the most training scored highest on the measure indicating use of a student-focused teaching approach (Postareff et al. 2007). Analysis of the interviews revealed that faculty believed participation in the training made them more aware of their approach to teaching and positively impacted their move from a teacher-focused instructional approach to a student-focused approach. However, the researchers found that this shift in approach is a slow process, with training over the course of at least a year most beneficial. Furthermore the researchers note that short courses in pedagogical training may actually undermine teachers' confidence in their ability to teach. These findings are especially relevant to an examination of Centers for Teaching and Learning because the on-campus nature of CTLs facilitates both short-term and ongoing training.

The Postareff et al. (2007) study is particularly useful in that the researchers explicitly connect their results to the design of faculty development programs, recommending that faculty should be encouraged to continue their study of student-

focused pedagogy over an extended period of time. The study does not address whether student learning increases as faculty move to a student-focused approach to teaching.

The results of a qualitative study of the impact of a faculty development program, conducted by Stes, Clemment, and Petegem (2007), also indicate that faculty members perceive participation in faculty training as having a strong effect on their teaching. In this University of Antwerp study, however, the researchers explore whether the positive results reported shortly after a voluntary year-long training program in 2001 in the use of a student-centered approaches to teaching were maintained two years later. In a written survey conducted shortly after the training program, the faculty participants, assistant professors with less than five years' teaching experience at the time of training, acknowledged practical changes in day-to-day teaching practice and indicated that they also tried to impact teaching culture on campus positively.

In the study, thirty faculty members who participated in the 2001 faculty training program were sent an open ended questionnaire in 2003. Fourteen responded to the questionnaire. The researchers found that two years after completion of the training all respondents indicated long term behavioral changes in their teaching and most had contributed to teaching innovation within their departments. The respondents also indicated that positive reactions from colleagues and students to innovative teaching and collaboration with colleagues motivated them further to put into practice the innovative strategies.

Stes et al. (2007) give sufficient details of the training program and provide examples of faculty comments with the corresponding codes assigned, helping the reader see how conclusions were drawn and providing some indication of how participant

comments might be coded and organized in this study. They also acknowledge limitations of the study, including the possibility that non-respondents might be less positive about the impact of the training on their teaching. Suggestions for future research support this study by including a recommendation for the use of faculty interviews and observations in addition to a written survey to determine the impact of faculty training.

Rust (2000) also utilizes qualitative methodology in his studies of the impact of an initial training course at Oxford Brookes University in the United Kingdom. New teaching staff with less than five years of teaching experience at the post-secondary level were required to participate in the year-long course. For the first half of the year, participants met for three hours a week while during the second half of the year, the meeting time was gradually reduced. In addition to the regular meetings, observations of participants' teaching, peer- and self-assessments, and instructor-created portfolios demonstrating the outcomes of the course were components of the course.

Two separate studies were conducted to evaluate the effectiveness of the course. In the first study, participants from three cohorts were sent a questionnaire about the impact and processes of the course. The researchers also conducted telephone interviews and focus group interviews. In the second study, participants from a single cohort completed a questionnaire and participated in guided conversations one year following the course.

Analysis of the responses to the questionnaire in the first study revealed that 27 of 34 respondents believed that as a result of the course they were better teachers and 26 indicated an increase in enjoyment of their work. Specific areas of participant growth included assessment, reflective approach and course planning and design. Results of the

second study include verbatim statements from participants which support the finding that behavioral and conceptual changes resulted from participation in the course.

Rust (2000) provides a fairly detailed description of the components of the professional development course experienced by the participants; however the specific topics addressed within the course are not described. He does share details regarding the research methods utilized, including the 32 attitude statements presented to the participants, facilitating future researchers' ability to replicate the studies. Especially valuable to this study were the direct quotes from participants, which provide insight into the varied ways individual participants were positively impacted by the course. However, participants' negative comments, if any, were not addressed.

In a study of the Foundations of University Teaching and Learning (Foundations) program at the University of Western Australia, Spafford-Jacob and Goody (2002) look at the impact of a professional development course that serves as an initial training experience for new faculty, yet is also open to all teaching staff. Over the course of eight meetings, faculty members in the Foundations course participate in at least 31 contact hours of activities designed to develop their teaching and reflective practice. The activities, such as panel discussions and individual and group activities, model effective teaching. Peer observation of teaching activity is also part of the course.

An electronic survey was sent to faculty members who had participated in the Foundations program during the previous two-and-a- half years. Forty-eight percent of the respondents reported the course helped very much and another 41% said it was somewhat helpful. Specifically, respondents cited learning new lecturing techniques, group discussion methods, tools for gathering student feedback and questioning

techniques as benefits of participating in the program. The data indicated that faculty who have limited or no teaching experience found the program most helpful. The data also indicate that most participants continued to communicate with each other about teaching after the course ended and to participate in teaching and learning development in some form. Spafford-Jacob and Goody's (2002) conclusion that the Foundations course is worthwhile is supported by the data presented. Additionally, they cite a shortcoming of the program, noting that the needs of more experienced faculty are not being met.

The studies referenced above provide strong support for the efficacy of professional development but are typical of the vast majority of faculty development studies in that they were conducted at universities, demonstrating the need for similar work to be done in the community college sector where teaching is of primary concern. It is also worthy of note that all of the studies cited above were conducted outside of the United States, suggesting that other developed countries, particularly in Europe, may lead the U.S. in assessment of teaching and learning, and in providing professional development opportunities for faculty.

One study was found that addressed the impact of faculty development on teaching at a community college in the United States. Nellis, Hosman, King, and Armstead (2002) conducted a study of web-based faculty development as a means to tackle the problem of faculty having limited time to attend professional development workshops. Using a case study approach, the researchers examined the use of Time-Revealed Scenarios (TRS) by faculty developers at Valencia Community College.

The "Teaching in College" Time-Revealed Scenario centers around a simulation involving a professor whose experiences are presented, along with online resources and

activities that address the teaching issue in the experiences. Faculty members participating in the TRS post comments to a discussion board that will assist the professor in providing effective teaching. Faculty members are then asked to implement suggested strategies in actual courses they are teaching, and post their own experiences to the discussion board.

The researchers found that TRS is effective in providing faculty members with information on active learning and classroom assessment techniques. The findings are supported by the researchers through triangulation; a similar use of TRS at another community college is cited. The detailed description of the active learning aspects of the asynchronous web-based professional development tool facilitates the reader's development of a similar web-based faculty training workshop.

Through both qualitative and quantitative studies conducted largely at international universities, faculty development has been shown to facilitate changes in teaching approaches and behaviors that move faculty toward a more student-centered approach to teaching. The changes resulting from professional development endure over time (Stes et al., 2007), however, impacting teaching through professional development is a slow process that calls for faculty participation in professional development over an extended period of time (Postareff et al., 2007). In addition to impacting approaches to teaching, professional development increases enjoyment of work (Rust, 2000) and while teaching approaches of faculty at all career stages are impacted by professional development, faculty with limited teaching experience most appreciate participation in professional development (Spafford-Jacobs & Goody, 2002). The research referenced above establishes the ability of professional development to impact teaching in higher

education, particularly at the university level where many faculty will lack backgrounds in teaching strategies and techniques. The literature tells us very little, however, about the value of professional development at associate degree-granting institutions at which some faculty come to the institutions without backgrounds in teaching strategies and techniques while others have backgrounds in teacher education.

### *Impact of Faculty Development on Teaching and Student Learning*

The studies presented in the preceding section demonstrate that faculty participation in professional development at the university level yields changes in faculty teaching practice and philosophy towards a more student-centered conception of teaching. Based on the considerable research showing that a student- centered as opposed to an instructor-centered approach to learning increases student learning we might deduce that faculty development increases student learning. A number of studies directly relating faculty development to student learning test this hypothesis, providing some support of the assertion that faculty participation in professional development not only positively impacts teaching, but student learning as well.

In a quantitative study published in 2004, Gibbs and Coffey (2004) look at the impact of training on the "improvement of teachers' skills; the development of teachers' conceptions of teaching and learning; [and] consequent changes in students' learning" (p. 88). This study was again conducted in England where the researchers studied the effects of substantial training programs; programs with a "coherent series of meetings and learning activities spread over a period of 4-18 months" (p. 90). The study involved 20 universities in eight countries in which trainee teachers completed the Approaches to Teaching Inventory before participating in training and again, a year later, after

completing training. The students in the trainee teachers' courses, prior to the teacher participating in training, completed two questionnaires. On the first, the Students' Evaluation of Educational Quality (SEEQ), students commented on their learning and the teacher's enthusiasm, organization, ability to facilitate group interaction, rapport and breadth of knowledge. On the second questionnaire, the Module Experience Questionnaire (MEQ), students' responses addressed three concepts; a surface approach to learning, a deep approach to learning, and good teaching. The two surveys were also administered to a different set of students in the trainee teachers' courses taught after the teacher had completed the training. The study also included a control group of new teachers who had no training and their students. These teachers and students completed the same questionnaires in the same way as the trainee teachers and their students.

Gibbs and Coffey (2004) found that teachers who participated in training became more Student Focused and less Teacher Focused, while the teachers who had no training became more Teacher Focused and less Student Focused. Based on the data from the student questionnaires, the researchers concluded that the improved teaching improved students' learning, although the improvements in learning were self-reported by students and were not assessed through some value-added measure of actual knowledge. The positive change in student learning is evidenced by a reduction in the self-reported Surface Approach to learning on the part of students and students' improved scores on the Learning scale of the SEEQ.

Gibbs and Coffey (2004) make a point to clarify that other factors at the institutions with training, such as mentors and rewards for excellent teaching, may be the

reason for the positive changes, rather than the training itself. Yet they do conclusively state that institutions that provided training had teachers who improved.

In contrast to the quantitative methodology utilized by Gibbs and Coffey (2004), Keehn and Martinez (2006) utilize qualitative methodology to study the impact of faculty development on teaching and student learning. Through a multiple-case study, they examine the impact of professional development upon adjunct faculty who teach courses that prepare students to become teachers. Data collection included multiple interviews with each adjunct instructor, review of the instructors' syllabi pre- and post-training, and student questionnaires.

The adjunct instructors in this study participated to varying degrees in a diversity initiative to prepare them to more effectively teach their college students how to address the needs of K-12 students from varying backgrounds. The initiative included sessions with experts on diversity, clarification of diversity competencies, a summer institute highlighting research on diversity, and diversity awareness as it relates to curriculum and assessment.

Keehn and Martinez (2006) found that participation in the diversity initiative increased adjunct faculty members' attention to diversity in their teaching to the extent which they participated in the training. Faculty with high participation made extensive changes to their courses to address diversity more effectively. Faculty with moderate participation made some changes and even faculty members with very limited participation made some limited changes to their teaching.

In this study, improved learning was measured using a student questionnaire that assessed understanding of diversity. Keehn and Martinez (2006) note that the students of

an instructor who had attended just one diversity training session were not able to state what they specifically learned about diversity. Keehn and Martinez also mention that an instructor with high participation in the diversity initiative found her students' responses to the questionnaire disappointing. No other information related to the training's impact on student learning is given, making the researchers' discussion of impact on student learning quite limited and disappointing. Although students were asked what they learned about teaching diverse learners and which course assignments and activities led to the insights, Keehn and Martinez (2006) do not share enough of the findings for the reader to determine the impact of the training on student learning. Additionally, the researchers do not themselves state a conclusion about the impact of the training on student learning in their discussion of the findings.

In a longitudinal study, Ho et al. (2001) utilize mixed methods to determine the impact on teaching and student learning of the Hong Kong Polytechnic University 1995 Conceptual Change Faculty Development program. Twelve instructors elected to participate in the program that was open to all academic staff. The twelve instructors, referred to as the experimental group, participated in four training sessions intended to yield positive changes in the instructors' approaches to teaching through a self-awareness process. Four teachers who signed up for the program, but did not attend, served as a control group, completing the same interviews and student questionnaires utilized with the experimental group.

Each participant was interviewed three times using the same set of questions designed to provide insight into changes to each instructor's conceptions of teaching and teaching practices. Analysis of the pre-program, immediate post-program, and delayed

post-program interviews was used to place each participant into one of three groups for the quantitative study; Yes, Unsure, or No change. This assessment was based on the likelihood that their students' perception of instructor's teaching would change in a positive direction and their students' approaches to studying would positively change. Students' perceptions of teaching were measured using Ramsden's 1991 Course Experience Questionnaire (CEQ). Students' approach to studying was measured using the Approaches to Studying Inventory (ASI). A positive change in conception of teaching is considered as movement away from a view of teaching as imparting information and toward a view of teaching as supporting student learning. Ho et al. (2001) found that 50% of these instructors made changes significant enough to impact students' approaches to studying in positive ways. The researchers conclude that faculty development using a conceptual change approach, even when delivered through training sessions of short duration, leads to improved teaching and eventually leads to improved student learning.

Although faculty development has been shown to improve teaching and student learning using self-reported perceptions (Gibbs & Coffey, 2004), there is little data that actually measures whether student performance improves. Evidence is strong, however, that the extent to which faculty participate in faculty development impacts the degree of change in teaching; faculty with high participation make substantial changes, faculty with moderate participation make some changes and faculty with limited participation make limited changes (Keehn & Martinez, 2006). As teachers move from a conception of teaching as imparting knowledge toward a conception of supporting student learning, students' approaches to studying are positively impacted (Ho, Watkins & Kelley, 2001). It is again important to note that the above studies examine the impact of professional

development on student learning at universities only, demonstrating the need for additional research on the impact of professional development at community colleges where teaching is the primary focus.

The considerable body of literature on the efficacy of faculty development indicates that participation in faculty development does elicit a change in faculty members' teaching practice and teaching philosophy. The studies cited have in most cases focused on long term training programs in Europe, with some referencing formal centers for professional development, raising the question of whether professional development can effectively be delivered through programs of shorter duration delivered by on-campus Centers for Teaching and Learning in the United States.

## Centers for Teaching and Learning

While many of the studies looking specifically at the impact of professional development come from abroad, studies related to Centers for Teaching and Learning in the United States have also been conducted. This is undoubtedly a reflection of a popular movement to create CTLs at American universities that began in the 1960's with the creation of "expert centers" where teaching improvement services were offered to faculty on a continuous basis (Ouellett, 2010). The services were typically provided by faculty colleagues who were awarded release time from other duties. Ouellett cites the 1962 establishment of the Center for Research on Learning and Teaching at the University of Michigan, Ann Arbor and the creation of the Clinic to Improve Teaching established in 1972 at the University of Massachusetts Amherst as examples.

The number of expert centers providing faculty development dramatically increased during the 1980's (Ouellett, 2010). According to Ouellett, donations from

private foundations such as the Bush, Ford and Lilly foundations helped to make this possible. Further, the Professional and Organizational Development Network (POD), founded in 1974, provided an avenue for faculty developers across the country to collaborate. The number of centers continued to increase in the 1990's as colleges and universities embraced a shift away from instructor-centered pedagogy and towards student-centered pedagogy (Ouellett).

In community colleges, the emergence of CTLs is largely rooted in the establishment of the National Institute for Staff and Organizational Development (NISOD) and the National Council for Staff, Program, and Organizational Development (NICSPOD) during the 1970's and early 1980's (Watts & Hammons, 2002). In the mid-1980's, in part due to the loss of Title III funding that had supported many of these centers, most faculty development programs at community colleges were discontinued (Watts & Hammons). According to Watts and Hammons, most faculty development efforts at community colleges today do not rise to the level of a comprehensive center, begging the question as to whether these centers serve a valuable function in improving teaching and learning.

It is important to note that many of the studies referenced in the previous section (Gibbs and Coffey, 2004; Keehn & Marinez, 2006; Nellis et al., 2002; Rust, 2000; Spafford-Jacob & Goody, 2002; Stes et al. 2007) largely look at training programs of considerable duration, yet faculty development programming at Centers for Teaching and Learning also include one-time events and series of trainings of shorter duration. This raises questions about whether the positive impact of faculty training on college teaching found in the previously mentioned studies is applicable to the shorter term faculty

development provided by Centers for Teaching and Learning in the United States. Yet in contrast to the considerable literature on the efficacy of long term professional development, the literature specifically addressing the effectiveness of American Centers for Teaching and Learning as a delivery platform for professional development is quite limited. Much of the literature on CTLs is descriptive and anecdotal rather than rigorous research, a reflection, perhaps, of the fact that community college faculty and staff, who have conducted much of the research, do not have a research responsibility. There are, however, several useful action research studies that cast light on the role and effectiveness of CTLs.

As an example of what is available, a case study of the Center for Excellence in Teaching and Learning at Parkland College in Champaign, Illinois, examines the professional development opportunities available to faculty members through the center (Rouseff-Baker, 2002). The faculty training offered includes workshops, seminars and informal discussions, as well as a mentoring program and assessment and research courses. In this qualitative study, Rouseff-Baker finds that institutional change has been energized by the faculty-driven Center for Excellence in Teaching and Learning (Rouseff-Baker, 2002). She also attributes shifts in faculty perspectives and behaviors to faculty and staff participation in the center's programs. Rouseff-Baker states that, "Faculty realize that many instructional methods must be used throughout the semester to successfully reach all of their students" (p.41). The ongoing nature of professional development is emphasized, as well as the responsiveness to the needs of faculty members. Rouseff-Baker cites high levels of participation in the center's programming as an indicator of the center's success.

A strength of Rouseff-Baker's (2002) study is the depth of understanding which is facilitated by the role of the researcher as an employee at the college under study. This facilitates the researcher's ability to be immersed in the environment, which is appropriate for qualitative research. The author establishes triangulation by citing similar success at another college. However, the researcher's role as the director of the center and the absence of a description of methods used for gathering and analyzing data compromise the sense of objectivity. The study was useful in preparing for this study by emphasizing the importance of recognizing the potential for researcher bias, since this researcher also directed a CTL on a community college campus, though not one included in the research design.

The College of DuPage, a community college in the Chicago suburbs of Illinois, is cited as having an award winning Center for Teaching and Learning (Troller, 2002). In 2001 the college "received the Institutional Merit Award from the National Council for Staff, Program and Organizational Development in recognition of its excellence in the delivery of professional development programming" (p. 67). The Teaching and Learning Center's unique feature is that it serves all employees: faculty, administrators, and staff. Troller (2002) provides detailed information about the center and believes this inclusive environment facilitates collaboration and rapport among the employees of the college.

Troller gives specific advice for others in higher education wishing to duplicate the center or improve existing professional development programs. For example, she provides information about the center's mission, location on campus, staffing, types of programs and assessment measures. The center facilitates in-service days, short courses and workshops. The impact of the center is measured by evaluation forms provided to

participants at the end of each event. The assessment asks four questions: "I came expecting…, I got …, I really liked… [and] I can use this …" (p. 70). Troller directly attributes the "spirit of cooperation" (p. 71) and "institutional growth" (p.73) at the College of DuPage to the Teaching and Learning Center (TLC). As with Rouseff-Baker's (2002) study, Troller's (2002) study does not include a description of methods used for gathering and analyzing data and again leaves the reader wondering if conclusions were drawn based on personal observations rather than scholarly study.

In a more formally structured study from Australia, Ferman (2002) conducted a qualitative case study at the University of Queensland to gain insight into which types of professional development activities, including services offered by the Teaching and Educational Development Institute, faculty members find valuable. Sixteen faculty members from a variety of disciplines and with varying years of experience responded to an open-ended questionnaire. The faculty members then participated in a two-part interview. Responses to the questionnaire were first explored and then a variety of issues, including whether faculty considered professional development a necessity, were evaluated.

The major finding of the study is that all of the faculty members in the study, representing varying levels of experience, valued professional development that provides for collaboration. The types of collaborative activities most valued included consultation with an educational designer, workshops, conferences, discussions with peers, and mentoring. Another finding is that half of the participants viewed professional development as a necessity and the other half considered it a choice. However, none of the faculty members considered participation in faculty development to be a burden.

While the study does not demonstrate that the faculty development offered by the center leads to improvement in teaching, it does demonstrate that faculty members find professional development offered through a center to be valuable. Ferman's (2002) sufficient description of methodology and acknowledgement of possible bias, due to her role as a provider of the professional development being studied, generate confidence in the findings. However, the questionnaire items and interview questions are not provided, making it difficult to replicate the study.

Despite an apparent lack of rigorous study of the impact of Centers for Teaching and Learning, centers continue to be created. The new center at Hampshire College in Amherst, Massachusetts is an example. D'Avanzo (2009), director of the center, describes the center and its creation in detail similar to that provided by Troller at the College of DuPage. Again, as with Rouseff-Baker's (2002) and Troller's (2002) studies, specific research methods for gathering and analyzing data are not given. However, D'Avanzo does explicitly admit that while the positive evaluations of sessions by participants is an indicator of the center's positive impact, it will take more time to judge the extent to which the center has an effect on teaching and learning. It is interesting to note that the mission of the center includes an objective aimed at increasing student focused instruction: "Stimulate discussion about student-active pedagogy faculty consider especially effective at Hampshire" (Hampshire College, 2009). This is a specific example of the move away from a teacher-centered approach to instruction and towards a student-centered approach in higher education.

Before moving to an examination of learner-centered teaching, it is again important to note that a review of the literature on professional development indicates

that there are relatively few American studies, and even fewer focusing on community college faculty. The literature pertaining to formal centers at community colleges is equally limited, and is primarily descriptive, rather than evaluative. With the evidence presented by university studies that professional development can play an important part in improving teaching, and with the claims by Watts and Hammons (2002) that CTLs at community colleges are particularly vulnerable to budgetary constraints, there is a critical need for research that examines the impact of Centers for Teaching and Learning within the community college sector, and how that impact might affect student learning.

## Learning-Centered Teaching

This examination of the effectiveness of CTLs is particularly important at a time when higher education is seeing a major transition from teacher-centered approaches to pedagogy to learner centered methods. Learning-centered teaching is a process that facilitates learning through engaging the learner more actively in the learning process (O'Banion, 1997). In contrast to the teacher-centered paradigm in which knowledge is dispensed by the professor to students with little attention given to what is assimilated or retained, the learner-centered paradigm asserts that students actively construct knowledge through synthesis and integration (Huba & Freed, 2000). McCombs and Whisler (1997) define the term learner-centered as a perspective with a dual focus; one on individual learners and one on learning. According to McCombs and Whisler, a focus on individual learners includes attending to students' backgrounds, interests, needs, capacities and experiences. This focus on learning involves the use of learning theory to inform teaching practices that promote motivation, learning, and achievement for all students.

In learner-centered teaching, the focus is on what students do as opposed to what instructors do (Weimer, 2002). Weimer identifies five key changes instructors must embrace to achieve learner-centered teaching. First, power must be reallocated. In a learning-centered class, the instructor relinquishes some control to students in making decisions about classroom policies, course content, types of evaluation, assignments due dates, etc. Second, the function of content changes. Content is more than simply information students are intended to acquire. Content is used to facilitate students' mastery of course outcomes and, just as important, to develop students' learning skills. This may necessitate the instructor covering less content, allowing more time for analysis, synthesis and exploration. Third, the role of the teacher changes from deliverer of content to facilitator of student learning. It calls on the instructor to facilitate active learning on the part of students. The instructor plans and manages students' active engagement with content and with each other, through the use of active-learning strategies such as collaborative and cooperative learning. Fourth, responsibility for learning shifts from the instructor to the student. The instructor creates conditions that encourage students to become more autonomous. Lastly, the purposes and processes of evaluation expand to allow for not only generation of grades, but also the promotion of learning.

The active involvement of students in the learner-centered paradigm includes engaging students through a variety of strategies including, but not limited to, cooperative learning, collaborative learning, case studies, service learning, problem-based learning, authentic assessment, performance-based assessment, simulations, debate, and role-play. This learner-centered view of teaching is in contrast to the instructor-centered view which

sees teaching as an activity in which instructors' engagement with students is exemplified by the hallmark of instructor-centered teaching method, the lecture. Historically, instructor-centered teaching has been dominant in institutions of higher education, including community colleges (Cohen & Brawer, 2003). But a sizable body of research supports the current shift to learning-centered teaching.

In a meta-analysis, Johnson, Johnson and Smith (1998) look at 305 studies that examine the relative efficacy of cooperative learning compared to the efficacy of competitive and individualistic learning. The studies were placed in categories to determine the impact of cooperative, competitive and individualistic learning on several aspects of college life: academic success, quality of relationships, adjustment to college, and attitudes toward college life. In their analysis of the studies relating learning style to academic achievement, Johnson et al. found that cooperative learning resulted in substantial increases in individual student achievement when compared to competitive and individualistic learning. Specifically, in the comparison of cooperative learning with competitive learning, an effect size of .49 was obtained. In the comparison of cooperative learning with individualistic learning, an effect size of .53 was obtained. The increased student learning resulting from cooperative learning was demonstrated through increases in knowledge acquisition, retention, problem-solving and transfer of learning. The superiority of cooperative learning over competitive and individualistic learning was also demonstrated in terms of its positive impact on students' attitudes toward diverse students, psychological health, and social skills.

Johnson et al. (1998) richly describe many types of cooperative learning, differentiate between formal and informal cooperative learning, comment on why it is not

used more frequently, and offer practical suggestions for effectively using cooperative learning in the college classroom. However, a more detailed description of the methodology would add to the credibility of the study.

In another meta-analysis, Springer, Stanne, and Donovan (1999) examined the impact of small-group learning on the academic achievement, attitudes, and persistence of students majoring in science, mathematics, engineering and technology. A literature review by the researchers yielded 383 studies, with 39 meeting the criteria for inclusion in the meta-analysis. The positive impact of small-group learning is demonstrated by the large effect sizes obtained; .51 effect of small-group learning on achievement, .46 effect on students' persistence and .55 effect on students' attitudes.

Like Johnson et al. (1998), Springer et al. (1999) provide helpful information about the types of cooperative learning, but unlike the Johnson study they provide a detailed description of the methodology used for the meta-analysis, solidifying the integrity of the study. For example, Springer et al. state that because they reviewed both published and unpublished studies, they were able to determine that publication bias was not evident in the studies of the impact of small-group learning on achievement.

Dori and Belcher (2005) also examine the efficacy of learning-centered approaches to teaching and learning as they evaluated the transformation of two introductory physics courses at the Massachusetts Institute of Technology from a lecture format to a cooperative learning format. Specifically, they studied the impact of TEAL (Technology Enabled Active Learning) on students' understanding of electromagnetism. In contrast to the traditional lecture format used to teach physics courses, TEAL reduces the time allocated to lectures, while incorporating the use of personal response systems

(clickers) during lectures, and includes time for small group problem solving sessions and hands-on laboratory experiences.

Dori and Belcher (2005) compared the scores of students enrolled in an introductory physics course delivered in the lecture format with the scores of students enrolled in the same course delivered in the TEAL format. A modified version of the Conceptual Survey in Electricity and Magnetism was administered to students in both classes prior to and following instruction. Based on performance on the pre-test, for each delivery format, students were placed into one of three groups: high, intermediate, and low scorers. A comparison of the post-test scores for each of the three groups showed that students in the TEAL version of the course had higher scores than students in the lecture-only version of the course.

In another recent study comparing learning-centered teaching strategies with instructor-centered strategies, researchers examined the impact of the strategies not only on student mastery of learning outcomes, but also on mastery of process-oriented outcomes such as engagement with content and with other students (Haidet, Morgan, O'Malley, Moran & Richards, 2004). In this experimental study, medical residents participated in either a 60 minute session in which they listened to a didactic lecture on the effective use of diagnostic tests which included mathematical definitions and concepts related to the ordering and interpreting of tests, or in a 60 minute session in which 30 minutes were devoted to the same instructor directly delivering the same content and 30 minutes were devoted to small-group task-solving activities related to the content. Changes in knowledge and attitudes related to the use of diagnostic tests were

measured with true-false and multiple choice questions and a modified Stallings Observation Instrument before, immediately after, and one month after the sessions.

An analysis of variance demonstrated significant gains in knowledge and improved attitude for both the active and didactic groups, with no significant difference between groups (Haidet et al., 2004). The results of the self-ratings demonstrated, however, that students in the active group were more engaged with each other and with the content than students in the didactic group. Interestingly, even though there was no difference in knowledge gains between the groups, students in the active group rated the session lower in terms of session value and meeting learning objectives than students in the didactic group. The researchers offer several hypotheses to explain the lower value given by students to the active session including that it may be a reflection of the high value traditionally placed on the lecture method. Haidet et al. conclude that the use of learning-centered teaching strategies results in more actively engaged learners without a negative impact on student learning. This result is of particular relevance to faculty who believe that having too much content to cover prevents the use of active learning strategies in their teaching. While Haidet et al. found no difference between the knowledge acquisition and retention of students who participated in the two sessions, the lack of difference in knowledge acquisition may primarily be the result of highly motivated participants, medical residents, who will learn regardless of the teaching strategy used (Haidet et al.).

The work of Dori and Belcher (2005), Johnson et al. (1998), and Springer et al. (1999) demonstrate that learning-centered approaches to teaching, as opposed to instructor-centered approaches, generally result in increased student learning. While

Haidet et al. (2004) found student learning was similar with both approaches, they demonstrated that the use of learning-centered approaches to teaching increases students' mastery of process-oriented outcomes. With the current emphasis on increasing student learning in U.S. institutions of higher education, it is imperative that faculty adopt learning-centered teaching methods, and the literature reviewed in earlier sections demonstrated that professional development can be a valuable tool in helping faculty transition from the old teacher-centered model to a learner-centered approach. Yet little evidence exists for use by institutional decision-makers that Centers for Teaching and Learning, particularly at the community college level, are effective organizational units for accomplishing this goal. This study demonstrates how Centers for Teaching and Learning can facilitate change on the part of instructors so that the use of instructor-centered teaching techniques decreases, the use of learning-centered techniques increases, and institutions benefit from the resulting improvement in faculty competency.

## Organizational Theory

The question still remains as to whether there are organizational models that best lend themselves to creation of an effective Center for Teaching and Learning. This research looks at two organizational theories, one related to organizational structure, and one explaining the change process, to determine if they have useful application, both in explaining and in creating an effective CTL. Each comes from a different branch of organizational theory.

### *Development of Organizational Theory*

Organizational Theory has evolved from simple structural models in the early decades of the twentieth century to more people-centered models as we entered the

twenty-first. The work of its many contributors has conveniently been organized into categories by a number of analysts (Morgan, 2006, Perrow, 1986; Rogers, 1975; Scott, 1998). One of the most useful approaches is found in the four categories presented by Bolman and Deal (2003) who divide organizational theory into structural, human resource, political, and symbolic frameworks. According to Bolman and Deal, theories in the structural frame address the formal structure of the organization; the division and coordination of work within the organization, including its official policies and procedures. In the human resource frame, theories address the needs, feelings, attitudes and abilities of the individuals within the organization, relationships between people and the organization, and the use of that information to accomplish the goals of both. Theories that address the sources of power and conflict within an institution and methods for understanding and handling those sources constitute the political frame. Finally, the symbolic frame is composed of theories that address the culture of an organization including its ceremonies, symbols, heroes, and myths and the importance of taking the institutional culture into account during decision making processes. Work of theorists in the human resources and structural frames lend themselves directly to this study by providing an organizational structure that would be effective for a CTL, and by describing the change process desired of faculty who are moving from one pedagogical model to another. Helgesen's Web of Inclusion serves as the organizational model, and Prochaska's Stages of Change provides a useful framework for examining the change process.

Though theories within only two of Bolman and Deal's four frameworks are to be utilized, a brief description of the development of the body of research within each frame

will be useful in demonstrating why these two were selected. The origins of organizational theory date to pre-Christian writings dealing with "centralization and decentralization and the problems of coordination" (Cyert & March, 1963, p.17), but more typically modern organizational theories find their origins in the work of early structuralists such as Frederick Taylor, Max Weber, and Henri Fayol. At the beginning of the twentieth century Frederick W. Taylor (1911) suggested a set of principles for improving the productivity of industrial organizations, based on a series of time and motion studies. Specifically, Taylor's principles aimed to increase the efficiency of workers. Known as Scientific Management, his ideas separated work into work performed by workmen and work performed by managers. Though Taylor's Scientific Management theory is the cornerstone of the structural perspective of organizational theory (Bolman and Deal, 2003), Henri Fayol, working independently, also professed that division of work results in better productivity (Fayol, 1949). He is best known for his 14 general principles of management.

A contemporary of Taylor and Fayol, Max Weber, described what he called the "monocratic bureaucracy" and presented it as a better organizational structure for companies than the patriarchal systems that dominated his time (Weber, 1947). Rather than a father figure holding immense power over all employees, Weber called for hierarchies within companies based upon responsibilities and a rational approach to making decisions. In the later part of the twentieth century theorists such as Henry Mintzberg and Sally Helgesen shed additional light on managing complex organizations by focusing on structure, formal responsibilities, and established communication mechanisms (Bolman & Deal, 2003).

By the 1970's Mintzberg (1973) envisioned organizational structure as being much more complex than were represented by traditional organizational charts with lines and boxes. His more sophisticated representation of organizational structure included an operating core, administrative component, strategic apex, technostructure, and support staff (Mintzberg, 1979). Using these components he proposed five structural models that represent the ways organizations manifest themselves: simple structure, machine bureaucracy, professional bureaucracy, divisionalized form, and adhocracy.

As organizations demonstrated the need to be more nibble and responsive in the 1990's, Sally Helgesen (1995) proposed a more open structure for organizations, a "web of inclusion," that put the leader at the center rather than at the top. This circular structure allows for more flexibility and an emphasis on the work to be done rather than on the positions people hold (Helgesen, 1995). Connectedness and continual integration of learning into daily work are essential to the "web of inclusion," making it an ideal model for a center that is designed to facilitate change, encourage collegial engagement, and foster collaboration. Helgesen's work is further discussed in the *Application of Helgesen's Web of Inclusion Theory to CTLs* section of this literature review.

The human resources framework presented by Bolman and Deal includes a family of theories that place greatest emphasis on the relationship between people and the organization and how each can serve the other's interests and needs. Work by Mary Parker Follett at the beginning of the twentieth century was among the first examples of theory that placed the needs and interests of the human element within organizations as equal with institutional interests. Follet's work, first published in 1909 (Metcalf & Urwick, 1940), presented conflict as neither inherently good nor bad, but rather as an

opportunity to identify differences in values and suggested that conflict be used for the good of the organization and its workers. Rather than dominance or compromise, she saw integration as the best solution to conflict. Follet suggested that power-with is more effective than power-over and defined power-with as "a jointly developed power, a co-active, not a coercive power" (p.101). She promoted frank, open discussions and believed the more people involved in the process of consensus building, the more likely the best solution will be found (Follett, 1940).

A number of well-known organizational theorists expanded on the "human element" work of Follett by focusing specifically on what employees needed and wanted from the organizations they worked for. Maslow's popular hierarchy of needs added to the human resources perspective of organizational theory when in the 1950's he hypothesized that people are motivated by needs in an ascending order of importance: physiological, safety, belongingness and love, esteem, and self-actualization (Maslow, 1954). Maslow's concept that once lower needs are met, individuals are motivated by higher needs is fundamental to the human resources frame.

Working in the 1950's and 60's, Douglas McGregor added to Maslow's ideas by asserting that the assumptions of managers about people who work for them are self-fulfilling. McGregor (1960) identified management strategies based on negative assumptions about human nature and behavior as Theory X. These assumptions include the beliefs that people inherently dislike work, want to avoid work, must be forced to put forth effort, and lack ambition. McGregor postulated that most managers held Theory X assumptions and proposed that managers should instead adopt more positive Theory Y assumptions: people naturally want to work; people will put forth effort towards goals

they believe in; people's commitment to goals is rewarded by self-actualization; people seek responsibility; and most workers are able to apply ingenuity to work problems.

Based on Theory Y beliefs, managers would match work requirements with employee interests to facilitate employee satisfaction and advancement of the organization's goals. McGregor (1960) writes specifically about management development programs and notes that it is up to individuals to commit personally to doing the work of developing. According to McGregor, an individual will only do that work which is perceived as personally valuable and meaningful. McGregor states that if the individual is included in decisions about development opportunities, participation by the individual in development activities is more likely.

In the 1970's and 1980's with publications such as Greenleaf's *The Servant as Leader* (1973), theories concerning the synergy between people and organizations developed a more leader-centered focus. Greenleaf called for leaders to "be engaged in living out a great dream for the organization, for its members, and for those it serves" (Farnsworth, 2007, p.18). In the 1980's, theorist Edward Deming focused on improving quality in organizations and promoted the idea that people have a desire to do their best at work (Deming, 1982). Deming maintained that the "aim of leadership should be to improve the performance of man and machine, to improve quality, to increase output, and simultaneously to bring pride of workmanship to people" (p.248).

At the turn of the century, theorists continued to place value on people and on improving their performance. The work of Mirvis and Hall shed light on the changing role of workers, with Hall theorizing that the "3F organization" prospers best in rapidly changing and complex environments (Mirvis & Hall, 1996). He describes the 3F

organization as free, fast and facile. In 3F organizations individuals and departments have autonomy, situations are responded to quickly and routine practices are changed as a result of new information. Mirvis and Hall note the importance of individuals within the institution being multi-skilled and able to function in new settings. Rather than periodic retraining, Mirvis and Hall promote continuous learning on the part of all individuals within the institution. This suggests that an organizational model that encourages individuals to be in a constant state of collaboration, integration, and communication will best facilitate a learning environment – the reason Helgesen's Web of Inclusion model is applied by this study to Centers for Teaching and Learning.

Theories in the political and symbolic frames relate less directly to the frameworks for this study; however, it is important to note the basic premise of each to allow the reader to evaluate that conclusion. From the political perspective, organizations are made up of coalitions who bargain with each other to obtain resources and to impact decisions (Bolman & Deal, 2003). Power is central to theories in the political frame, and much of the emphasis in studies is placed on the distribution and use of power. The symbolic frame addresses the importance of institutional culture and asserts that individuals within an organization all play a part or role and that what happens within the organization is less important than what it means to individuals (Bolman & Deal, 2003). Each of these theoretical families has something to add to the examination of any organization, but several theories related to the structure of organizations (Helgesen, 1995; Mintzberg, 1979) and to human resources (Deming, 1982; Follet, 1940; Greenleaf, 1973; Maslow, 1954; McGregor, 1960; Mirvis & Hall, 1996; Helgesen, 1995) appear to provide the most useful insights relevant to the organization of Centers for Teaching and

Learning. In addition to being useful evaluative tools for this research, these models can be helpful for directors of Centers for Teaching and Learning as they work to facilitate a movement toward more student-centered approaches to teaching and learning.

### *Application of Helgesen'sWeb of Inclusion Theory to CTLs*

As noted above, this study utilizes Helgesen's (1995) Web of Inclusion as a theoretical framework for examining the effectiveness of a CTL's formal organization and structure. Specifically, the research seeks to relate Helgesen's structural model to the role of directors of Centers for Teaching and Learning.

Although she didn't realize it at the time, the seeds for Helgesen's Web of Inclusion theory were planted during her work as an assistant at a weekly newspaper, the *Village Voice*, as she observed the workings of a flat, leader-centered organization (Helgesen, 1995). It was later through her diary studies of women business leaders that she made the connection between the system of open communication at the newspaper, in which all employees interacted with each other, and the management styles of the women business leaders she studied. Helgesen noticed that the women leading the organizations addressed varying challenges by running their businesses in a similar way. They put themselves at the center rather than at the top, focused on nurturing relationships, and included people at all levels in making decisions. Hierarchical rank did not dictate lines of communication. For lack of an existing term, Helgesen described these organizations as "webs of inclusion." After publication of her book, *The Female Advantage: Women's Ways of Leadership*, Helgesen heard from both women and men who recognized their styles of leading as "webs of inclusion."

Helgesen (1995) describes the Web of Inclusion as both a pattern and a process. She cautions that it is not a static model, but rather a flexible model that configures in different ways for different organizations, based on the strengths of people at all levels. Through her study of five organizations utilizing web of inclusion structures (Intel Corporation, the Miami Herald, Beth Israel Hospital, Annixter Inc. and Nickelodeon), Helgesen identified six principles that characterize the way webs operate in the daily work of an organization. She describes the six as open communication, blurred distinctions between conception and execution, lasting networks that redistribute power, constant reorganization, embracement of the world outside the organization, and evolution through trial and error. Through the application of these principles, barriers between divisions and departments are broken down so that tasks and functions of employees are integrated.

Based on Helgesen's (1995) model, CTL directors would be most effective by placing themselves at the center of their institutional unit and welcoming ideas from all stakeholders, regardless of position within the institution. Continually connecting with all stakeholders would be critical to the success of directors of CTLs, and those connections should deal with the stakeholders' daily work. The director can then plan a variety of programs in an effort to address the needs of all stakeholders. One interest in this study was to determine if effective CTL leaders operated according to the six principles characteristic of Web of Inclusion leadership.

### *Stages of Change Theory*

Helgesen's model does not specifically address the change process, however, and primary to the work of CTLs is the promotion and facilitation of changes in teaching that

embrace the learning-centered paradigm. This involves facilitating a paradigm shift on the part of many faculty members away from an instructor-centered approach toward a learner-centered approach. In evaluating this change process, a theory drawn from the human resources family becomes particularly useful. Prochaska's Stages of Change Theory, stemming from Hubert Hermans' Valuation Theory, serves as a useful theoretical model for determining how CTL directors can assist faculty members in making the change, and whether this is occurring within successful CTLs.

Hermans' research initially focused on the measurement of psychological traits such as an individual's motives to achieve, but in 1972 he consciously began preliminary research in the area of individuals' experiences with new situations, ultimately leading to what he called the Self Confrontation Method and Valuation Theory (Hermans, 2006). Valuation Theory maintains that individuals continually adopt and reject perspectives based on their experiences (Hermans, 1987b). The theory asserts that individuals live in the present through a process of thinking that is connected to the past and to the future. Through self-reflection, past, present and future experiences are harmonized into a unified experience, with this unified experience emerging as most dominant.

Hermans presents the Self-confrontation Method (SCM) as a technique individuals utilize to facilitate self-reflection and change in beliefs which lead to changes in actions (Hermans, 1987b). The technique utilizes dialogue to encourage a person to recognize and reconsider beliefs. Through dialogue with others, an individual reflects on past, present and anticipated future experiences and then modifies, substitutes, eliminates, or supplements current valuations (Weatherbee et al., 2009). The reflection, which is a

self-dialogue, impacts the individual's valuation system. Hermans theorizes that a person's sense of self changes over time as new perspectives are adopted.

Adoption of new valuations occurs as the individual considers present experiences in light of past and anticipated future experiences. The individual continually places more importance on one valuation than another, organizing valuations into a system with each valuation having an affective connotation. As the person makes valuations, a struggle occurs between the desire for individuality and the desire to fit into the larger environment.

Stages of Change Theory (Prochaska & DiClemente, 1983; Prochaska et al., 2001; Weatherbee et al., 2009) grew out of Hermans' Valuation Theory and serves as a particularly useful tool in evaluating how change might be occurring as faculty members work with a CTL. As such, it was helpful to the researcher in evaluating statements made by faculty about how experiences with the CTL were affecting behavior. The theory also has the potential to be beneficial to directors of CTLs as they make programming decisions. According to Stages of Change Theory, individuals progress through five stages as they modify behavior. The change process includes: Precontemplation, Contemplation, Preparation, Action and Maintenance. This progression through stages occurs whether the individual is participating in formal interventions or working independently.

Prochaska et al. (2001) identify ten processes that produce change and associate each change process with one of the five stages of change. According to Prochaska et al., three processes of change are emphasized for individuals in the Precontemplation stage: Consciousness Raising, Dramatic Relief and Environmental Reevaluation. For

individuals in the Contemplation stage, Self-Reevaluation is the process emphasized and for those in the Preparation stage, Self-Liberation is the process emphasized (Prochaska et al.). For those individuals in the Action and Maintenance stages, the following four processes of change are emphasized: Contingency Management, Helping Relationship, Counter-Conditioning and Stimulus Control (Prochaska et al.). Weatherbee et al. (2009) identify five of the ten processes of change as most conducive to facilitating organizational changes through individual self-confrontation: Consciousness Raising, Self-Reevaluation, Self-Liberation, Environmental Reevaluation, and Helping Relationships. Prochaska et al. suggest leaders can actively encourage institutional change by purposefully designing and offering activities that elicit desired changes in beliefs and behaviors.

Based on Stages of Change theory, successful CTL directors would provide faculty with exposure to new ideas to facilitate self-dialogue that may result in changes in their valuation systems. Since faculty members are at a variety of stages in the change process, Precontemplation, Contemplation, Preparation, Action or Maintenance (Prochaska & DiClemente, 1983; Prochaska et al., 2001; Weatherbee et al., 2009), to ensure the self-dialogue is relevant to an individual's current stage in the change process, CTL directors would need to offer a variety of programs from which faculty members can choose. For example, a faculty member in the Action stage would benefit from participation in a series of workshops on a specific topic facilitating a Helping Relationship, while a Brown Bag Lunch, a one-time informal discussion on a specific topic with a group of faculty facilitating Consciousness Raising, may be more appropriate for a faculty member in the Precontemplation stage. The ultimate goal is to facilitate

change in enough faculty members so that the culture of the institution is changed to one that reflects learner-centered teaching practices. Stages of Change Theory fits nicely with Helgesen's Web of Inclusion organizational theory in that appropriate valuation benefits from broad, acknowledged input from the full circle of invested stakeholders in the instructional process. In combination, they provide a very useful framework for structuring and evaluating this research.

Utilizing Helgesen's Web of Inclusion and Prochaska's Stages of Change Theory as evaluative tools, one might expect the successful CTL to be leader-centered rather than leader-driven, and to see a variety of professional development opportunities presented to faculty that assist them in moving through the critical stages of change needed to adopt new teaching approaches and strategies. This researcher studied three CTLs to determine if those that are viewed by faculty as most successful do, in fact, demonstrate these characteristics.

## Summary

Reviewing past research on a topic of interest serves a number of purposes. It illustrates what questions inspired researchers to undertake a study, what methods were employed to address those questions, how adequately the methods worked, and what we have learned as scholars and practitioners from their efforts. Of equal importance, the literature indicates what questions have not been addressed and what remains to be discovered. In this chapter, the literature related to community college Centers for Teaching and Learning revealed that although these colleges were created to be and remain teaching institutions, they have been late-comers to the application of professional development. When Centers for Teaching and Learning have been created, they have

been vulnerable to economic changes within the colleges, indicating that the colleges have never been convinced of their absolute worth.

Yet a body of literature – largely from Europe – presents a very compelling case that professional development is effective. Specifically, the impact of faculty development and the merits of learner-centered instruction are strongly supported by the data, indicating that a serious look needs to be taken at the effectiveness of CTLs on all campuses, but particularly at community colleges where teaching is the primary focus.

The literature also suggests that several organizational theories have useful application to both evaluating and managing Centers for Teaching and Learning. Prochaska's Stages of Change Theory identifies ways to assess and facilitate change as it occurs, and Helgesen's Web of Inclusion is useful to both the researcher and to CTL directors as a way of evaluating the nature and effectiveness of relationship within the Center.

Research shows that professional development for faculty in higher education does have a lasting impact on their teaching; typically facilitating teaching that is more learner-centered. However, impacting teaching and student learning through professional development is a slow process and the degree to which teaching and learning are improved is connected to the extent to which faculty participate in professional development. The overwhelming body of research demonstrating that learner-centered teaching, as opposed to instructor-centered teaching, increases student learning leads to the conclusion that faculty participation in professional development leads to increased student learning. Some studies explicitly demonstrate this connection between faculty development and increased student learning.

In the wake of this research, Centers for Teaching and Learning have become commonplace at four year colleges and universities, and are now making their appearance on more and more community college campuses. Yet, much of the research demonstrating the positive impact of faculty training was conducted at universities, comes from outside of the United States, and is based on more in-depth training than is typically provided by centers at community colleges. Rigorous scholarly research expressly addressing the effectiveness of Centers for Teaching and Learning is limited and as a result the impact of community college CTLs on teaching and student learning is unknown. This study has been conducted to begin to remedy that shortcoming. It demonstrates the impact of CTLs on the teaching of college faculty, and illuminates how Centers for Teaching and Learning at community colleges impact teaching in a way that college instructors perceive as positively impacting student learning. This study did not attempt to demonstrate the impact of CTLs on student learning which also needs to be discovered. The methodology this researcher utilized to discover the impact of faculty participation in CTL provided professional development activities on teaching at community colleges is detailed in Chapter Three.

# Chapter Three: Methodology

## Design

The purpose of this study was to explore faculty members' perceptions of community college Centers for Teaching and Learning (CTLs) to determine what makes a Center successful and useful in the eyes of the user, and the implications of these observations for CTL directors' programming decisions. This researcher investigated how and why faculty members create their perceptions of CTLs, whether these perceptions reflect a sense that effective centers utilize a director-centered web of inclusion and the principles of Prochaska's stages of change, and if faculty teaching behavior has been modified by experiences with the CTL. A qualitative as opposed to a quantitative research approach was used because it was considered best for developing an "understanding of complex psychosocial issues" (Marshall, 1996, p.522), such as those addressed by this study. The researcher rejected a quantitative approach in this case because it is often best for answering "what" questions (Merriam, 1998), while a qualitative approach is best used to discover how people "make sense of their world and the experiences they have in the world" (Merriam, 1998, p.6). Through the use of qualitative methods, researchers can uncover the "meanings and the processes by which they have been created" (Berg, 2007, p. 13) which allows researchers to "develop a sufficient appreciation for the process [of meaning making] so that understandings can become clear" (p. 13). Qualitative research was the best fit for this study because of the interest here in eliciting "understanding and meaning" (Merriam, 1998, p.11) in an effort to understand how and why faculty create their perceptions of CTLs.

To accomplish these goals, a generic/basic qualitative study (Caelli, Ray & Mill, 2003; Chenail et al., 2009; Merriam, 1998) was conducted, utilizing some of the practices employed in grounded theory research, though not strictly adhering to all of the classic procedures associated with grounded theory (Chenail et al.). For example, this study utilized data analysis methods of grounded theory, but did not use a theoretical sample as called for in grounded theory research. However, since this generic qualitative study made considerable use of the tools of grounded theory, a detailed discussion of the approach is warranted.

In grounded theory, theory emerges from data analysis, and the collection and analysis of data are interrelated processes (Corbin & Strauss, 1990). As data are collected they are analyzed and relevant information is used to inform subsequent data collection. According to Corbin and Strauss, ongoing examination of the data mitigates researcher bias and ensures that only concepts that are repeatedly found in the data are included in the resulting theory.

As data are analyzed, the researcher assigns conceptual labels to incidents, giving incidents reflecting the same phenomena the same conceptual label. This labeling typically involves a line by line look at transcripts to identify concepts and is part of a procedure termed open coding. Concepts are the basic units of analysis in grounded theory, and as data collection and analysis continue, the level of abstraction and number of concepts increases (Corbin & Strauss, 1990). Open coding continues as the researcher goes on to compare concepts, grouping them into categories of concepts that relate to the same phenomenon, and defining each category in terms of properties and dimensions (Corbin & Strauss). According to Corbin and Strauss, as new data are collected and

analyzed, constant comparisons must be made to facilitate greater precision and consistency.

As research progresses, axial coding takes place; categories are related to each other, subcategories emerge, relationships are tested against data, and patterns and variations are accounted for (Corbin & Strauss, 1990). Towards the end of a study, a dominant category often emerges and other categories' relationships to the dominant category are revealed. This process is termed selective coding and is used to generate a theory (Corbin & Strauss). Corbin and Strauss note that coding is not a linear process, but rather a fluid process where the researcher utilizes the coding type called for by the task at hand.

Researchers utilizing grounded theory look for identified concepts throughout the data collection process and select samples that are likely to allow further study of the emerging concepts and associated properties and dimensions of categories. Thus, in grounded theory, sampling continues based on theoretical grounds as opposed to groups of people or other units (Corbin & Strauss, 1990).

Writing theoretical memos is essential in grounded theory studies because it serves as a system for keeping track of decisions made during data analysis such as the identification of properties and dimensions of categories and emerging relationships between categories (Corbin & Strauss, 1990). According to Corbin and Strauss, conscientious memo writing throughout the research process, that includes detailed coding session notes, facilitates an in depth, integrated analysis of the phenomenon under study. Consistent writing of theoretical memos helps to ensure that hypotheses about relationships among categories are continually established, reevaluated and confirmed

throughout the research process, which is fundamental to grounded theory (Corbin & Strauss). Corbin and Strauss also suggest that in depth, integrated analysis can be facilitated through consultation with colleagues.

Another fundamental part of grounded theory is that process analysis must be a part of generating a theory. The phenomenon under study may be examined in terms of stages or steps or in terms of actions that change in response to current circumstances (Corbin & Strauss, 1990). Additionally, relevant conditions surrounding the phenomenon under study such as economic climate, prevailing cultural norms and political influences must always be analyzed (Corbin & Strauss).

In grounded theory the end result is a "substantive" theory, a theory that has "a specificity and hence usefulness to practice" (Merriam, 1998, p.17). An important difference between a grounded theory study and a generic qualitative study is that in the latter, the "analysis usually results in the identification of recurring patterns (in the form of categories, factors, variables, themes) that cut through the data or in the delineation of a process" (Merriam, 1998, p.11) that may or may not reach the level of a substantive theory as is the case with analysis in grounded theory studies. This researcher strove to uncover faculty members' perceptions of CTLs and provide practical recommendations for CTL directors' programming decisions based on the identification of recurring patterns in faculty members' perceptions. This researcher related recurring patterns in faculty members' perceptions to Hermans' Valuation Theory (Hermans (1987a) and Stages of Change Theory (Prochaska et al., 2001). The interest here, as Merriam states it, was to "simply seek to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved" (Merriam, 1998, p.11). This study

sought to discover faculty members' experiences with and perceptions of community college CTLs.

## Research Questions

The following research questions guided the method used to collect data, the sampling process, and the approach to analysis:

1. In what ways are faculty involved in the CTLs' offerings such as face-to-face stand alone events, cohort groups, individual consultations, etc.?
2. How has faculty involvement with the CTLs impacted teaching strategies?
3. Are there changes in teaching strategies and behavior resulting from participation in CTL programs and services that indicate faculty are making changes that are consistent with modern organizational change theory?
4. To what extent and in what ways such as suggesting topics, delivery formats, and presenters do faculty and administrators influence the activities of the centers?
5. Why do some faculty members have no interaction with the CTL?

## Working Hypotheses

The working hypotheses of this researcher were:

1. CTLs that involve faculty at all levels of CTL programming decisions foster changes in approaches to teaching and learning that faculty perceive as positively impacting student learning.
2. CTLs that provide programming options that are aligned to progressive stages of attitudinal change and related change processes foster changes in approaches to teaching and learning that faculty perceive as positively impacting instructional strategies and student learning.

## Sampling

The population this study addressed was faculty teaching at three Midwestern community colleges with Centers for Teaching and Learning. Community colleges with established Centers for Teaching and Learning, located in three different Midwestern states served as the setting for this study. CTLs were considered established if they were written about in the literature, referenced on the POD website, or recommended to the researcher as such by a POD member. Student enrollment at the three colleges ranges from approximately 10,000 to 20,000 students. Selection of the colleges is described in the Procedures section of this chapter.

At all three colleges, the directors participated in individual interviews and faculty participated in focus group interviews which took place during the months of April, May, and October of 2011. Gathering data from several community colleges ensured that subsequent recommendations for CTL programming decisions are the result of analysis of patterns of general faculty perceptions, rather than from analysis of faculty perceptions unique to a single institution. Gathering data from colleges with established CTLs increased the likelihood that sufficient numbers of faculty at each institution met the criterion of the study's purposeful sample of faculty with varying levels of interactions with the CTL, and that patterns of change strategies, should they emerge, can be attributed to more than one institution's culture.

This researcher recognizes the complexity in selecting samples for qualitative research and that sample selection greatly impacts the eventual quality of the study and its findings (Coyne, 1997). Sampling techniques typically used for quantitative studies, such as random sampling are not a good choice for qualitative research (Marshall, 1996).

According to Marshall, there are many reasons why random sampling is not appropriate for such studies. Of greatest significance to this researcher is Marshall's point that a random sample requires that the researcher knows the characteristics of the whole population being studied when in this case, that is not possible. Another reason random sampling was inappropriate for this qualitative study is that it is unlikely that the perceptions of faculty are normally distributed (Marshall).

According to Coyne (1997), qualitative research calls for purposeful sampling so that the study includes participants who are information-rich and who possess particular qualities identified by the researcher (Berg, 2007). Purposeful sampling was utilized for this study to ensure individuals were selected who have detailed knowledge relevant to Centers for Teaching and Learning and whose comments would likely inform the research questions posed here (Merriam, 1998).

Coyne (1997) differentiates between purposeful and theoretical samples, with the later being a type of purposeful sampling determined by emerging theory. This researcher did not utilize theoretical sampling, but rather utilized phenomenal variation sampling, selection of participants prior to the study based on variation of the phenomena being studied (Coyne). This researcher believes faculty members' varying levels of interaction with the CTL is key to their perceptions of CTLs. Therefore, the sample for this study purposefully ensured representation of faculty with varying levels of interaction with the CTL.

## Participants

Participants were selected for this study based on the following considerations: 1.) faculty or director status at a community college with an established CTL and 2.) level of

interaction (Frequent, Less Frequent, and Infrequent or No Interaction) with the respective institution's CTL. A discussion of how faculty members' levels of interaction were assessed is included in the Procedures section of this chapter. Fifty-four participants were involved in this study; 51 faculty members and three CTL directors. Of the faculty, 18 were part-time and 33 full-time, 17 from College 1, 19 from College 2, and 15 from College 3. Of the three directors of Centers for Teaching and Learning, one represented each of the three institutions. The researcher spoke with a total of six faculty, four part-time and two full-time, who had infrequent or no interaction with the CTL. Faculty with frequent interaction with the CTL and less frequent interaction with the CTL were similar in number, with more full-time faculty than adjunct instructors participating in the group discussions. See Table 1 for additional details.

Table 1: Faculty Participants by Level of Interaction and Self-Reported Faculty Status

| | Part-time Faculty | Full-time Faculty | Total |
|---|---|---|---|
| Frequent Interaction | 5 | 18 | 23 |
| Less Frequent Interaction | 9 | 13 | 22 |
| Infrequent or No Interaction | 4 | 2 | 6 |
| Total | 18 | 33 | 51 |

Recruiting faculty with no interaction with the CTL to participate in focus group discussions was difficult. In part, this may have been due to the original labels used to describe faculty members' degree of involvement with the CTL: Significant, Limited, and No Interaction. These value-laden labels may have alienated faculty, especially faculty who had little or no involvement with the CTL. At Institution 2, very few of the faculty invited to participate in the No Interaction group responded to the invitation e-

mail sent by the researcher, and the vast majority of those who did respond declined to participate. Further, a few of the faculty invited to participate in the No Interaction group at College 2 responded with concerns about how they were identified as having no interaction with the CTL. One faculty member, who assumed a list was being kept by the CTL of faculty who have not used the Center, was outraged that the list was in the public domain. Despite a subsequent e-mail clarification that the faculty member was invited to the discussion through the researcher's comparison of a list of all faculty with CTL attendance lists, the faculty member still declined to participate.

The difficulty in recruiting faculty with no interaction with the CTL to participate in focus group discussions at College 1 was likely due to miscommunication between the researcher and the director at College 1. The four faculty members who responded positively to the director's invitation to participate in the No Interaction group actually had some interaction with the CTL in past years; this was discovered by the researcher during the focus group discussion with the faculty. At College 3, the director indicated that all faculty participate in CTL programming, so there was no one to invite to the No Interaction group. Once the researcher was on campus, it was determined that some adjunct instructors do not interact with the CTL. The director and the researcher went to the adjunct offices and the researcher approached several adjunct faculty and asked them to participate. All declined saying they were too busy. To more accurately represent the composition of the faculty groups and to provide the reader with value-neutral identification of the faculty groups, the following labels were devised during the writing of chapter four: Frequent Interaction, Less Frequent interaction, and Infrequent or No Interaction with the CTL.

It is important to include details about participants' faculty status, length of employment at their institutions, and discipline of expertise so that the reader can determine whether the findings are applicable to other situations, and because part of the mission of the CTLs in this study is to serve all faculty. Faculty participants in this study had varying years of employment with their institutions, ranging from one to more than 21 years. The duration of employment for full-time faculty in this study was fairly evenly distributed across categories. In contrast, most of the adjunct instructors had been employed at their institutions for less than ten years, and of those the vast majority had taught at their institutions for five or fewer years. While no adjunct instructors in this study had between 11 and 20 years of employment at their institution, a substantial number had more than 21 years. See Table 2 for details.

Table 2: Faculty Participants by Self Reported Status and Years at Institution

| | Part-time Faculty | Full-time Faculty | Total |
|---|---|---|---|
| 1-5 years | 9 | 9 | 18 |
| 6-10 years | 2 | 5 | 7 |
| 11-15 years | 0 | 9 | 9 |
| 16-20 years | 0 | 6 | 6 |
| 21 or more years | 7 | 3 | 10 |
| Unknown Number of Years | | 1 | 1 |
| Total | 18 | 33 | 51 |

Faculty participants represented a wide variety of disciplines ranging from math, biology, and chemistry to art and interior design. The modal disciplines were English and Computer related fields. See Table 3 for details.

Table 3: Faculty Participants by Self Reported Discipline

| Discipline | Number of Faculty Participants |
|---|---|
| Anatomy & Physiology | 1 |
| Art | 2 |
| Biology | 2 |
| Business | 1 |
| Chemistry | 1 |
| Communications | 1 |
| Computer Information Technology | 1 |
| Computer Science | 3 |
| Computers | 2 |
| Criminal Justice | 2 |
| Developmental | 1 |
| Early Childhood Education | 1 |
| Economics | 2 |
| Education | 1 |
| English | 9 |
| English as a Second Language | 2 |
| Health Professions | 1 |
| Information Systems | 2 |
| Information Technology | 1 |
| Interior Design | 1 |
| Library | 1 |
| Math | 3 |
| Psychology | 3 |
| Reading | 3 |
| Social Science | 1 |
| Sociology | 1 |
| Speech | 1 |
| Did Not Report | 1 |
| Total | 51 |

## Data Collection

As is typical for qualitative research, this researcher was the primary instrument for the study. In qualitative research, data are interpreted by the researcher through personal analysis and insights, rather than through a standardized statistical instrument. The researcher is able immediately to make adjustments to data collection processes in response to information learned during the process of data collection (Merriam, 1998, p.7). This flexibility facilitates the researcher's depth of understanding of participants' perceptions. This researcher was aware of her possible bias due to her position as a director of a Midwestern community college CTL, though that center was not included in the study. Further, she actively worked to mitigate that bias through the process of continuous data analysis utilized in grounded theory research. The researcher had previous experience interviewing faculty about their teaching and had previously assisted in conducting a focus group interview. She drew on these experiences to facilitate data gathering in this study.

This study utilized focus group interviews with faculty members to discover their experiences with and perceptions of community college CTLs. A focus group interview is essentially a group interview on a specific topic that is facilitated by a moderator (Sim, 1998). Focus group interviews were chosen for this study because they are useful in learning the array of ideas or thoughts that people have and the diversity in viewpoints between distinct groups of people (Krueger & Casey, 2000). Bender and Ewbank (1994) also recommend the use of focus group interviews as a way to gain insight on a topic from multiple perspectives. Participation in focus group interviews often stimulates thought among participants as they listen to one another that would not arise in individual

interviews. This researcher sought to discover how groups of faculty with varying levels of involvement with the CTL view its impact on teaching strategies and the extent to which faculty and administrators direct the center's activities. Since focus group interviews allow individuals' ideas to be synthesized into ideas that come from the group as a whole (Krueger & Casey, 2000), participants within each focus group interview for the most part reached consensus on the CTL's impact on teaching, who primarily directs the centers' activities, and how those activities are directed. The researcher compared and contrasted conclusions reached by the varying faculty groups. Further, through the focus group interviews with faculty who had infrequent or no interaction with the CTL, the researcher discovered the groups' ideas about why some faculty elect not to participate in CTL programming.

According to Bender and Ewbank (1994), discussion amongst colleagues yields more detailed and vivid comments as compared to comments made during individual interviews. This researcher sought detailed and vivid descriptions of the ways faculty are involved with the CTL, which provides further support for the use of focus group interviews in this study. Specifically, focus group interviews were likely the best way to facilitate faculty members' recollection of not only specific CTL events, but also recollection of the extent to which collegiality was experienced through interactions with the CTL.

However, there are limitations to relying on focus group interviews (Bender & Ewbank, 1994). For example, it is more difficult to keep discussion focused on topics relevant to the research than with other research tools such as individual interviews and surveys. To facilitate useful discussion, the researcher utilized a discussion guide and

called on participants by first name. Use of first names for this purpose is the reason the first question in the focus group interview guide asks participants to state their first names. The researcher utilized a research assistant to allow the researcher to focus fully on facilitating the discussion and to ensure accurate attribution of comments to specific individuals. The research assistant also noted non-verbal communication between the participants.

To analyze focus group interview data effectively, the researcher must be aware of cultural context. This researcher strove to mitigate this limitation of focus group interviews through analysis before the focus group interviews of archival data that provided insight into the culture of each institution. Review of archival documents is discussed further in the Procedures section of this chapter. A logistical difficulty of conducting focus group discussions is scheduling times and places that are convenient to enough participants to have an appropriate group size. To address this limitation, this researcher invoked the assistance of the CTL director at each institution in scheduling times, locations and participants.

Participants at each institution were placed in one of three groups; faculty with frequent interaction with the CTL, faculty with less frequent interaction with the CTL, and faculty members who had infrequent or no interaction with the CTL. The homogeneity within each group was intended to elicit confidence in the participants to facilitate voicing of opinions (Sim, 1998). Based on guidelines provided by the researcher, directors of the CTLs at Colleges 1 and 3 determined to which group individual faculty members were assigned. At College 2, the researcher worked with an administrative assistant and a full-time faculty member to determine the appropriate

group for individual faculty members. Ideally, focus group interviews consist of 8-12 individuals (Sim, 1998) and this was the researcher's goal. The number of participants in the Infrequent or No Interaction groups did not meet this ideal. There were no participants in this group at College 3, two participants at College 2, and four participants at College 1. Difficulty in recruiting faculty for the Infrequent or No Interaction groups is discussed in Chapter Four. The number of participants in the Frequent and Less Frequent groups ranged in size from 6-10 which is more in line with the ideal.

The following questions were included in the focus group interview guide for faculty who had either frequent or less frequent interaction with the CTL:

1. Tell us your first name, your discipline, and how long you've taught here.
2. How did you first learn about the CTL and what was your initial reaction?
3. In what ways have you been involved with the CTL or made use of the CTLs' offerings?
4. What draws you to participate in CTL programs?
5. How has your involvement with the CTL impacted your teaching and your students' learning?
6. In what ways, if any, do faculty influence the activities of the CTL?
7. In what ways, if any, does administration influence the activities of the CTL?
8. Assuming faculty members have differing approaches to teaching, does the CTL have something of value to offer all faculty? If so, please explain.
9. If a new person took over the center here, what advice would you give to him or her to ensure faculty find the center beneficial?
10. Is there anything else you'd like to say about the CTL?

11. (This follow-up question will be used if nothing negative about the CTL has been mentioned during the focus group interview.) What suggestions could you make that would improve the CTL?

The following questions were included in the focus group interview guide for faculty who had infrequent or no interaction with the CTL:

1. Tell us your first name, your discipline, and how long you've taught here.
2. How did you first learn about the CTL and what was your initial reaction?
3. Are you aware of professional development opportunities provided by the CTL?
4. Do you have the opportunity to make suggestions for the CTL?
5. What professional development resources do you make use of?
6. How has your involvement with these resources impacted your teaching and your students' learning?
7. In what ways, if any, do faculty influence the activities of the CTL?
8. In what ways, if any, does administration influence the activities of the CTL?
9. Assuming faculty members have differing approaches to teaching, does the CTL have something of value to offer all faculty? If so, please explain.
10. If a new person took over the center here, what advice would you give to him or her to ensure faculty find the center beneficial?
11. Is there anything else you'd like to say about the CTL?
12. (This follow-up question will be used if nothing negative about the CTL has been mentioned during the focus group interview.) What suggestions could you make that would improve the CTL?

In addition to focus group interviews with faculty members, the researcher conducted semi-structured interviews with the three directors of the CTLs. Semi-structured interviews use open-ended questions, hypothesis-directed questions and confrontational questions to reveal interviewees' "subjective theory," their in-depth knowledge, about a topic (Flick, 2006). According to Flick, semi-structured interviews best allow for focus on specific topics. A semi-structured format was chosen for these interviews to gain access to each director's comprehensive knowledge of the respective institution's CTL and to discover each director's assumptions about effective centers.

The format of the CTL director interviews was issue-centered, utilizing postscripts and interviewing guidelines basic to problem-centered interviews (PCI) (Witzel, 2000). The interview guidelines dictate that the interview begins with an open-ended question to insure that the researcher's views on CTLs are not superimposed on the data (Witzel). One challenge this researcher anticipated and worked successfully to address was effectively asking follow-up questions without interfering with the interviewee narrative.

The following questions were included in the interview guide:

1. Tell me about how you make programming decisions for the CTL.
2. Do you encourage faculty to actively engage students? If so, how?
3. Are faculty at different levels of acceptance of and utilization of student-centered approaches to teaching? If so, how do you address these varying readiness levels?
4. Do you try to impact the teaching of faculty who are committed to and largely rely on the lecture format as a teaching approach? If so, please describe how you try to do this.

5. How are faculty involved in directing the CTL?
6. How are administrators involved in directing the CTL?
7. How do you measure the CTL's impact on student learning?
8. Is there anything else you'd like to tell me about the CTL?

Immediately following each interview, the researcher wrote postscripts, noting nonverbal aspects of the interview and spontaneous ideas for data interpretation.

## Procedures

To find participants for this study, the researcher began by asking the Chief Academic Officer (CAO) of the institution where she worked to e-mail CAO's of other community colleges in the state to determine which community colleges have Centers for Teaching and Learning, as defined by the researcher. Additionally, through a listserve, teacher education faculty members at community colleges in the state were asked if the institutions where they taught had CTLs, as defined by the researcher. Very few of the community colleges had CTLs that met the definition set for this study. Of these, most were not well-established, resulting in the researcher selecting just one center in the state for inclusion in the study. The researcher then broadened the scope of the area in which to conduct the research. Through a review of the literature and resources on the Professional and Organizational Developers (POD) website, two additional well established CTLs were located in the Midwest.

Following approval of the research proposal, the researcher next sought IRB approval from the appropriate committees at the University of Missouri-St. Louis. Once IRB approval was granted, the researcher contacted directors at the participating CTLs to ask for assistance with obtaining IRB approval from their respective institutions, which

was granted, accessing documents related to the CTL, and selecting faculty participants for the study.

The researcher asked each director to provide three lists of faculty qualified to participate in the study; one group with significant interaction with the CTL (three or more interactions with CTL programming within the last year), a second group with limited interaction (one or two interactions within the last year), and a third group with no interaction with the CTL. The researcher suggested to the directors that faculty for the limited interaction group be selected from faculty members who attended a recent CTL event, but whom the director did not remember seeing at other CTL events. The directors were asked to include both adjunct and full-time faculty members, at all career stages in each of the groups of faculty. Initial discussions with the three directors indicated a willingness to assist with this selection process.

Together with the director at Colleges 1 and 3, the researcher invited the listed faculty in each group to participate in focus group discussions for the respective groups. At College 2, the director and her assistant provided the researcher with attendance data, and the researcher, with the help of a full-time faculty member, placed faculty into respective groups and then invited faculty to participate. Invitations to faculty indicated the day, time and location of the focus group discussion and that a meal would be provided.

Prior to conducting the focus group interviews, the researcher reviewed archival documents related to the CTL such as brochures, websites and program descriptions. The researcher gained access to these documents through the directors. Review of these archival documents familiarized the researcher with events likely to be discussed in focus

group interviews and provided a sense for the kinds of activities common to that particular CTL. Analysis of archival documents was also conducted to gather additional data related to faculty perceptions and to inform recommendations for programming decisions.

To facilitate honest dialogue, the directors did not attend the focus group interviews. At the beginning of the focus group interviews, the researcher distributed IRB informed consent forms, insured that each person understood the voluntary nature of participation, that participation may be terminated at any time, and that comments will remain anonymous. Then, participants signed the forms. The signed forms were collected and participants were given a copy of the form to keep. A paid assistant accompanied the researcher to the focus group interviews to assist with logistics. Immediately following the focus group interviews, the researcher interviewed the respective directors. A digital recorder was used to record all focus group conversations and interviews with directors. After returning home from the participating institutions, the researcher used the transcription process as a preliminary analysis to inform any modifications that might be called for before conducting the next set of interviews. No modifications were made. The researcher and a paid assistant transcribed the recordings using an agreed upon procedure. Line numbers were assigned to the transcribed text to facilitate data analysis and reference to participants' comments in the discussion of the findings. The quotations have been edited, without altering their accuracy, to make them more readable and to remove identifying information. For example, specific names of CTL programs unique to an institution were replaced with generic terms.

## Data Analysis

Data analysis utilized a grounded theory approach in which "data collection and analysis are interrelated processes" (Corbin & Strauss, 1990, p. 6). Analysis began at the start of data collection and continued throughout the data collection process. Coding of transcripts utilized constant comparative methods (Corbin & Strauss, 1990), in which the researcher continually looked for similarities and differences to identify concepts and relate emerging themes. Researcher memos were kept to document impressions from focus group interviews, semi-structured interviews, and decisions made during the coding process.

According to Strauss and Corbin (1998) analysis in grounded theory starts with a microscopic examination of the data, termed microanalysis. Microanalysis begins with open coding, a line by line look at transcripts to identify concepts. Discovery of the properties and dimensions of categories begins during open coding.

Describing the properties and dimensions of a category differentiates it from other categories (Strauss & Corbin, 1998). According to Strauss and Corbin, properties are the defining features or characteristics of a category, and typically each category has more than one property. Dimensions are the location of each property along a continuum. For example, the property of size ranges from small to large.

Open coding leads to axial coding, in which categories are related to subcategories. Strauss and Corbin emphasize that coding is not a strictly linear sequential process, but a creative process where the researcher "moves back and forth between types of coding … in response to the analytic task before analysts" (p. 58). If a dominant category emerges during axial coding, selective coding is used to generate a theory.

A Grounded Theory approach to data collection and analysis is an especially good fit for this study because Grounded Theory is based on Pragmatism and Symbolic Interactionism (Corbin & Strauss, 1990), which maintain that change is part of process and individuals make choices based on their perceptions. Similarly, CTLs operate on the assumption that individual faculty members will make changes to instruction when involved in professional development they perceive to be of value. Through the use of grounded theory tools, this researcher demonstrated how the Stages of Change Theory (Prochaska et al., 2001) explained how faculty interactions with CTLs resulted in improved teaching and increased student learning. Specifically, this researcher uncovered the conditions under which faculty best interact to discover teaching strategies that they then utilize to make changes to teaching that they perceive as increasing student learning.

## Trustworthiness of the Data and Conclusions

Internal validity, how well the findings represent reality (Merriam, 1998), was accomplished through triangulation; multiple lines of sight including focus group interviews, individual interviews, review of archival documents, and multiple institutions. Ninety minute focus group interviews and hour long interviews with directors ensured a sufficient amount of data. Additionally, sections of the transcripts were coded by a colleague to corroborate the coding of the researcher. External validity, generalizability to other situations (Merriam), was addressed through rich description of setting and participants, and inclusion of quotations from participants that describe the CTLs' services and programs in detail. To ensure reliability, replication of the findings (Merriam), questions for focus group interviews were reviewed prior to data collection for clarity by faculty members who had interaction with a community college CTL and

procedures and interview guides are provided. The researcher maintained a detailed audit trail, including field notes and researcher memos such as postscripts noting impressions from focus group interviews and individual semi-structured interviews, and theoretical notes of data reduction, emerging themes, and relationships. These notes were referenced frequently throughout data analysis.

## Limitations and Delimitations

This study is limited in several respects. Only centers that met the criteria established by the researcher for a fully-functional center were included, so faculty members' perceptions of newly founded CTLs or less sophisticated centers are not included in the study. The study was also delimited to community colleges in the Midwest, and it might be assumed there is a faculty culture in this part of the country that is not representative of other parts of the nation. Due to the qualitative nature of the study, generalizations of the findings to other institutions cannot be made. The suggestions made for programming decisions must be carefully considered by readers to determine, based on similarity of institutions, whether applicability to other institutions and centers is appropriate.

## Summary

Qualitative research methods were chosen for this study because they provide the best way to discover how and why faculty members develop their views about CTLs. Specifically, this generic qualitative study utilized a purposeful sample and selected tools of grounded theory for data gathering and analysis. Data was collected through focus group interviews, semi-structured interviews, and review of archival documents. Focus group interviews and individual semi-structured interviews were recorded and

transcribed. An assistant was utilized during the focus group discussions to insure accurate attribution of comments to individuals and full attention by the facilitator to the process at hand. Constant comparative methods were used as transcripts were coded through microanalysis. A colleague also coded sections of the transcripts to confirm the coding of the researcher. Notation of field observations by a paid researcher and a detailed audit trail kept by the researcher ensure trustworthiness of the data.

# Chapter Four: Findings

## Introduction

This study explored faculty members' perceptions of community college Centers for Teaching and Learning, the impact of CTL participation on faculty teaching behavior, and the implications of the findings for CTL directors' programming decisions. This chapter presents findings concerning faculty members' perceptions of Centers for Teaching and Learning through the description of the categories and subcategories that emerged during analysis of faculty focus group interview discussions. Additionally, findings from interviews with directors and a review of documents are related to the thematic categories and subcategories.

A total of three individual interviews with directors and eight focus group interviews with faculty members were conducted. At each of the three colleges, the director was interviewed. Additionally, at Colleges 1 and 2, three focus group discussions were held with faculty members; at each of these colleges, one group consisted of faculty with frequent interaction with the CTL, another group included participants with less frequent interaction, and the third group included participants with infrequent or no interaction with the respective CTL. At College 3, two focus group discussions with faculty members were conducted; one group consisted of faculty with frequent interaction with the CTL and the other group included participants with less frequent interaction.

As faculty focus group interview responses were analyzed, interest in answering the following research questions guided identification of thematic categories and subcategories:

1. In what ways are faculty involved in the CTLs' offerings such as face-to-face stand alone events, cohort groups, individual consultations, etc.?
2. How has faculty involvement with the CTLs impacted teaching strategies?
3. Are there changes in teaching strategies and behavior resulting from participation in CTL programs and services that indicate faculty are making changes that are consistent with modern organizational change theory?
4. To what extent and in what ways such as suggesting topics, delivery formats, and presenters do faculty and administrators influence the activities of the centers?
5. Why do some faculty members have no interaction with the CTL?

## Emerging Themes and Categories

Similar thematic categories and subcategories consistently emerged across all levels of faculty interaction with the CTL. For example, faculty in the frequent interaction groups mentioned the importance of the director's professionalism, as did faculty in the less frequent interaction and infrequent or no interaction groups. Themes also remained consistent no matter the expressed level of satisfaction with the CTL by faculty. While relatively few of the faculty members interviewed were displeased, those who did express dissatisfaction desired the same benefits and services that the satisfied faculty appreciated having. Further, the varying levels of satisfaction with the CTL among the faculty members had less to do with their levels of interaction with the CTL and more to do with the specific institution where faculty members taught. Specifically, most of the displeased faculty members were participants in the Less Frequent focus group discussion at a single institution.

The first themes to emerge related to the director's professionalism, CTL relationship to the institution, and CTL usefulness to faculty. As analysis continued the director's professionalism and CTL relationship to the institution rose to the level of categories, and three additional themes emerged and assumed categorical status; CTL atmosphere, CTL programming, and CTL impact on teaching and student learning. Sub-categories in each of the six categories also became apparent. CTL usefulness to faculty, one of the first themes to emerge became a subcategory of the CTL Programming category. Further, by the conclusion of analysis, the relationship between categories was evident and a core category, a central category that represents the primary theme of the research (Strauss & Corbin, 1998), was identified.

## Categories and Subcategories

The five categories identified in this study are: CTL Director's Professionalism, CTL Atmosphere, CTL Relationship to the Institution, CTL Programming, and CTL Impact on Teaching and Perceived Impact on Student Learning. Table 4 lists each category along with its subcategories.

Each of these categories, and subcategories that emerged within each, are reviewed in detail in the following section. The quotations have been edited, without altering their accuracy, to make them more readable. For example, when a respondent began a sentence, paused, then started again with the same words, the sentence is presented without the repeat. The line numbers after quotations reference transcripts of focus group interviews and individual interviews with directors.

| Table 4: Categories and Subcategories | |
|---|---|
| Categories | Subcategories |
| CTL Director's Professionalism | Demeanor<br>Responsiveness |
| CTL Atmosphere | Physical Space<br>Emotional Support |
| CTL Relationship to the Institution | Administrative Support<br>Departmental Support<br>Budget Considerations<br>Sense of Importance to the College |
| CTL Programming | Usefulness<br>Logistics<br>Faculty Influence |
| CTL Impact on Teaching and Perceived Impact on Student Learning | |

## *CTL Director's Professionalism*

Faculty participants in every focus group discussion mentioned the professionalism of the director as having a considerable influence on their desire to be engaged with the center. Even though the researcher did not ask a question related to the director's professionalism, faculty members repeatedly mentioned the demeanor and responsiveness of the director as an important element in the Center's success.

### *Demeanor*

Faculty greatly appreciate a director with a personable demeanor, someone who is welcoming, open, helpful, and non-judgmental. This was made clear at all three colleges and by faculty in each of the three levels of interaction with the CTL, with faculty in the Frequent Interaction, Less Frequent Interaction, and Infrequent or No Interaction groups all mentioning the director's professionalism.

At College 1, the founding director of the CTL retired recently and a new director was hired. A faculty member in the Frequent Interaction group shared her thoughts about

the previous and current CTL directors: “We're very fortunate that [the previous director] was very good and [the current director] was the perfect person to step in. We were very, very lucky” (lines 686-687). The preceding line numbers reference the transcript of a focus group discussion. A faculty member in the Less Frequent Interaction group at College 1 also commented on the director’s demeanor: “Yeah, and [the current director] is really approachable. I mean, she's just so easy to talk to” (line 316). Another faculty member in the same group pointed out the importance of the director’s demeanor:

> I think too, that just the friendliness of the people in the center is huge 'cause it makes you feel comfortable coming when somebody greets you when you come in or just says, "I'm so glad you came" and "Do you know this person?" I think that's part of the welcoming and making us feel closer to each other … And I think we've had that with [the previous director] and with [the current director]. (lines 347-351)

A faculty member in the Infrequent or No Interaction Group at the same college stated of the current director that “she’s a very open person, listens to people, looks at both sides of every situation, never assumes anything. You know those are some good qualities to have in a leader of a center, I would think (lines 850-852).” Another participant in the same group also noted the director’s demeanor, stating, “Yeah, [the director] puts a little personal touch on it (line 896).” A statement by the director at College 1 confirms that she works to be open to people and to listen to them: “Oh yeah, people will stop by. People will see me in the hall and say, ‘Hey, [director’s name], I got an idea for a session.’… I occasionally get phone calls. I often get e-mails” (lines 382-384).

This appreciation of the director's demeanor was also communicated at College 2. A faculty participant in the Frequent Interaction Group explicitly stated the importance of the demeanor of the CTL director and staff: "I think that's key to being successful, to have the right people in there, people that know how to be in touch (lines 644-645)." Another participant in the same group elaborated on the director's demeanor:

> You know, they [CTL director and CTL staff] have servants' hearts. And I think if you don't have that approach, just in your heart of hearts, it really doesn't matter what you say or do, you know, it just comes from your core, you know, that you want to help people be effective, and therefore those people [faculty] will come to you. (lines 799- 802)

Comments made by the director of the CTL at College 2 indicate that she tries to be open and non-judgmental:

> Our job here [in the CTL] is not to judge faculty on what they do, not to try to get them to do something different, but rather to make them the best at what they choose to do. And then if what they are doing isn't working, we may be able to offer them some alternative practices that others have tried that they may find that work for them. But, you know if lecture is working for you, then go ahead and lecture them. It's not working for me but, you know, really but, honestly, if it's working for you go ahead and do it. (lines 8-12)

The director went on to say that, "I'm paid to educate [faculty] where they are right now. Hopefully, I move them a little closer to behaviors that are gonna be successful in the future" (lines 32-33). These observations demonstrate a consistency of behaviors with those expressed by faculty; that she is helpful and open to faculty members' views.

Appreciation for the director's demeanor was emphasized most at College 3. A faculty member in the Less Frequent Interaction group stated, "I think one of the draws …what's the magnetic force? is the director. She's not only competent as a teacher, a master teacher, but she's warm, she's authentic, she's extremely honest, and welcoming" (443-446). Another faculty member in the same group mentioned the director's listening skills and attentiveness to the CTL: "Yeah, [the CTL director] is good at conversation and drawing out what is going on. She listens well, she's proactive in trying to do everything she can to make this place [the CTL] function better" (lines 1144-1145). Other faculty members in the same group used the following words to describe the director: "non-judgmental", "innovative", and "happy". The importance of the director's demeanor was plainly noted by a participant who stated, "It makes a difference whether somebody's doing something in a cheerful way or in a grumpy way, and [the CTL director's] always, always upbeat" (lines 1148-1149). Comments made by the director at College 3 regarding her approach to faculty with an instructor-centered approach to teaching are reflective of her helpful and non-judgmental demeanor:

> So I just look for baby steps and I feel like if people try something and it doesn't go well their tendency is not to do it again. So I would rather they make some small gains and have a better understanding of how students learn and just start thinking about it than get them to go from lecturer to all active learning, or cooperative learning, or whatever. I'm happy if they make a few strides. Because the literature pretty much says even if they take some small steps, or maybe they're big steps, there are big gains. So based on that I don't think they have to be a me. You know I think sometimes just a few little things can make a big

> difference in their teaching and how engaged students are and how much they learn. (lines 284-293)

A faculty participant at College 3 in the Frequent Interaction group succinctly summarized the importance of director demeanor on a Center's success when she noted:

> Yeah I think [the director] is just the perfect person for this. I don't know if it would be different, how much is really her, how much she sort of puts her personality on this, but I think she's just great …Well, she's always calm and she has such great ideas, and she is very friendly, and she remembers names…And it's just, she's impressive. (lines 534-540)

*Responsiveness*

Faculty also repeatedly commented on the responsiveness of the director and the staff under her direction to faculty interests and needs. A faculty member in the Frequent Interaction group at College 3 expressed appreciation for the director's responsiveness, stating, "You can make an appointment with [the CTL Director] any time. If you have issues with a particular thing you're trying to do, or a particular student, and she'll meet with you and help you" (lines 460-462). Another faculty member in the same group agreed that the director promptly responds to faculty:

> She's also, she's really quick on e-mail, which is fun. But, sometimes you're talking to her about something here [in the CTL] and by the time you walk to the other end you'll have an e-mail waiting. Yeah, she's really on the ball like that. (lines 547-549)

A third faculty member in the same group explained how her idea very quickly became a CTL session:

> We were talking over the copier and she and I worked through [logistical details] and within maybe a half an hour we had something solidified for an hour workshop that she felt comfortable with and it was a bit more focused that the original idea. (lines 732-735)

Faculty at the other two colleges echoed these sentiments about responsiveness. A participant in the Less Frequent Interaction group at College 1 stated, "I will [call the CTL] and there's somebody to answer and they always do a fabulous job, they always know, and, it's just that there's always somebody there to help you" (lines 814-816). A faculty member in the Frequent Interaction group at College 2 stated: "I just saw [the CTL director] out, you know, walking, and I said, Oh, you know, I just started talking about [future programming] and she said, oh well we can help you with that" (lines 448-449).

The importance of responsiveness was also reflected in negative observations. Some faculty members at College 2 expressed frustration about the director's lack of responsiveness and desired the director to be more responsive to their ideas. For example, in the Less Frequent Interaction group at College 2, a faculty member shared dissatisfaction with the director's response to the advisory committee's suggestions, stating that the director would say "whatever" (line 927) and fail to follow through on suggestions. Another faculty member in the same group also shared dissatisfaction with the director's lack of follow-through:

> We came over to a tea and made a specific request and were told "we have that in the box if you want to use it." Well, yeah, but we need some training. Well, that's just not something that is important. (lines 384-386).

A third faculty member in the Less Frequent Interaction group at College 2 also expressed frustration:

> I was the developmental ed coordinator and then I was in charge of the college orientation program. And I repeatedly said, "We need session where developmental teachers can come together to talk to each other." And I was always told, "We don't know anything about developmental ed, do that yourself." And I even said, "Could you schedule me a room on Tuesday the twelfth from four to five." And they would say, "You know how to schedule things." (lines 469-473)

It is worth noting that each of these three expressed concerns about director responsiveness came from faculty members who were making less frequent use of the CTL at College 2. No concerns about director responsiveness were mentioned at the other institutions.

### *CTL Atmosphere*

Responses that led to identification of the category of "CTL Atmosphere" very naturally fell into two subcategories; Physical Space and Emotional Support. Each contributes to the overall atmosphere of the CTL. The Physical Space subcategory includes the functionality and essence of the CTL's general appearance, physical size, layout and physical equipment. The Emotional Support subcategory recognizes the importance of interactions with the people encountered in the CTL and at Center sponsored functions.

*Physical Space*

Documents from each of the colleges reveal that a physical space for faculty is a mainstay of CTLs. Most explicitly, at College 3, a CTL flyer presents a list of information under the subheading "A Place for Faculty," including the item, "Lounge area for meeting, working, and utilizing CTE resources." Similarly, the perceived importance of the CTL space at College 2 is demonstrated by a flyer that includes before and after photographs of the CTL, highlighting construction of a new space for the Center. The physical space of the CTL at College 1 is highlighted through multiple photographs of the Center's rooms on the college's CTL website.

The importance of the physical space was also reflected in faculty comments at all three colleges. A faculty participant in the Less Frequent Interaction group at College 3 shared that the CTL space is especially nice for adjunct faculty:

> As an adjunct there are places one could go to get some work done, but I really have valued being able to come [to the CTL] and do grading in the lab facility or just come here and have a really good spot to perch and get some work done. (lines 136-139)

A full-time faculty member in the same group said that the CTL is her refuge when she has to be out of her office due to maintenance and other issues: "The [CTL] is my refuge at that point in time, a place to come and stay. I can do my printing, you know all of that good stuff, and work in an environment that's very calm" (lines 398-401). Yet another faculty member in the same group found the CTL physical space to be a place of refuge: "the quiet, the ambience here, is almost relaxing" (line 448-449). Several other faculty in the group concurred that they use the CTL as a quiet escape where they get work done.

Other faculty members in the Less Frequent Interaction group at College 3 appreciated the "mechanics" of the CTL space, specifically mentioning the scanner and laminator (lines 459-465).

The CTL physical space and equipment were also pointed out by faculty in the Frequent Interaction group at College 3. One faculty member referred to the CTL as an oasis for reading and computer work:

> [The CTL is] just a nice, sort of oasis. [The CTL staff are] friendly and they'll help you and you can sit and you can read and you can do computer work. It's just a great place. And [the director] sets out these little synopses of teaching publications, and if you're interested you can just come in and read whatever you want, sort of look at a little more in depth. (lines 317-320)

Building on the oasis analogy, two faculty members in this group mentioned the refreshments provided at the CTL, noting that "they always have hot water, so you can make yourself tea" (line 316) and "they have coffee made and different kinds of tea and sugar" (line 340).

Another faculty member in the same group appreciated the equipment:

> The equipment too, because once in a while I need a color picture for a lab because it just doesn't look right in black and white, and they can scan it [in the CTL], and they have a color printer. (lines 323-326)

Other faculty members in this group added that the CTL has software for faculty use that is unavailable elsewhere on campus (lines 327-328).

At College 2, a dissatisfied faculty member in the Less Frequent Interaction group also commented on the equipment available in the CTL and its potentially negative

impact on image: “The one time I was going to use [the CTL computer classroom], I was told the computers didn’t work, so what good is that going to do?” (lines 1001-1002). Two other participants in the Less Frequent Interaction group at College 2 were more positive about the space saying “it’s really a pretty good space for [webinars]” (lines 1043-1044) and “I was happy to see that it had good accessible space” (line 133).

At College 1, a faculty member in the Less Frequent Interaction group asserted faculty ownership of the CTL space: “I really think that’s important to feel like this is your place and that you can come in whenever you want to” (lines 677-678). Faculty members in the Frequent Interaction group at College 1 also commented on the physical space, saying, “There’s kind of a magic that’s happening here [in the CTL]” (line 849), “Yeah, it’s nice to get away [to]” (line 850), and “There’s windows over on this side [of the CTL] so it’s nicer…Yeah my [department’s] wing doesn’t have windows” (lines 852-854).

When asked for any suggestions that would improve the CTL, several faculty members in the Frequent Interaction group at College1 mentioned improvements to the CTL’s physical space. One faculty member said, “Sometimes space, because there are so many people. Space and delivery, the TV almost seems too small. I have problems reading the print” (lines 834-837). Another faculty member added, “Right, when you have a larger crowd in there it's a small screen for that size room and we often run out of space on certain topics” (lines 838-839). Yet another concurred, saying, “We do run out of space” (line 840).

*Emotional Support*

The director at College 1 eloquently commented on the emotional support faculty receive at the CTL, referencing support that comes not from herself and the CTL staff, but from colleagues who come to the Center: "People come to the center for reprieve, renewal, retraining, and they make connections across the college. It's one of the places that people really get to know their colleagues that they wouldn't get to know otherwise (College 1 director interview, lines 578-580)." The director's sentiment that the CTL is a place for renewal and collegial support is reflected in the description of the Center on the College 1 website, with the use of the words "empowers" and "fostering" in the description, stating: "[The CTL] empowers professionals to address challenges while fostering the scholarship of teaching."

Comments by faculty members in each of the three focus group discussions at College 1 indicate that faculty members also see the CTL as a place where they are supported emotionally. A faculty member in the Less Frequent Interaction group at College 1 said that going to the CTL is a good way to connect with other people:

> It just feels like time stops for a bit and I get to just focus on whatever's right here…I'll get to know other people. I hear names and then I see faces. You know, and it's just such a nice thing, so it's really helpful to be able to connect with people. (lines 333-343)

Another faculty member in the same group more straightforwardly connected the collegiality experienced at the CTL with emotional support:

> I think too, that just the friendliness of the people in the center is huge 'cause it makes you feel comfortable coming when somebody greets you … that's part of

> the welcoming and making us feel closer to each other and more of colleagues that are collaborating for a total picture. (lines 347-350)

This idea of the CTL as a place where faculty can get closer to colleagues was also shared by another faculty member in the same group:

> I like the atmosphere of [the CTL] because everybody kind of is a family. It's a working atmosphere. You can talk to each other, but being a faculty … I know that's sometimes lonely…And that's very important, you don't feel alone, you don't feel like you [are] the only one [with] this problem. (lines 117-124).

Another faculty member in the group put it succinctly when sharing the enthusiasm of a colleague recommending the CTL: "She was talking about how wonderful it was to have the support and working with others and she just was excited about making her teaching better" (lines 35-37).

A specific example of emotional support from the CTL was shared by a faculty member in the Less Frequent Interaction group at College 1 who found reassurance that her approach to online teaching was valid:

> What I've been to is online stuff or how to do something new and I think that basically what it's done is it's made me feel more comfortable with some of the technology things or seeing different ideas. Or sometimes I think it's simply validated some of my [practices], it's made me feel more comfortable in the way I do things versus [the way] somebody else does things. (lines 421-425)

A faculty member in the Frequent Interaction group, also at College 1, gave a specific example of emotional support when she spoke about presenting in the CTL:

> You always feel like you have the support of your audience [in the CTL] … because that was a little bit overwhelming the first time I had to [present in the CTL] because it's harder to teach in front of your peers…I think the audiences [in the CTL] are always very supportive of the presenter and you know conversation is always, you don't ever have a quiet room, which is good. (lines 956-965)

Another faculty member in the College 1 Frequent Interaction group noted that "It's been a really safe place to ask questions of people that have been here for longer that have a background that was different than mine. It was really very helpful" (lines 72-75). Yet another faculty member in the same group commented that in the CTL "you don't feel the pressure that you have to do it right" (lines 110-111). A third member in this group pointed out how programming options contribute to the safe and pressure-free atmosphere of the CTL: "We've had…like book clubs kind of thing. Some kind of non-threatening things to have for faculty and staff" (lines 1061-1062).

Even faculty in the Infrequent or No Interaction group at College 1 recognized the CTL's reputation as a supportive place: "I think if I had an idea I could definitely come [to the CTL] … it's a very open environment" (lines 227-229). Another faculty member in the same group commented that he was "pleasantly surprised by…the recognition [from the CTL] that we received as faculty" (lines 570-571). Yet another faculty member in the same group said the CTL helps him feel like he fits in at the college: "When I first came here I thought, especially taking part in the center and also on campus, I thought this [college] is a place that I fit and the center helps that" (lines 993-995).

At College 2, support for the idea that faculty find emotional support from colleagues at the CTL is alluded to in a CTL flyer which includes, as part of the listed

CTL mission statement, the intent to "offer opportunities for informal interaction on campus." However, it is noteworthy that no faculty member at College 2 in any of the participation groups indicated receiving emotional support from the CTL. Rather, one faculty member in the Frequent Interaction group at College 2 implied just the opposite when describing colleagues' initial reactions to the CTL:

> I got the impression some faculty felt threatened by the idea, like, "What can a Center for Teaching and Learning teach me about teaching? I've been teaching for 35 years"…. I think one comment was even, you know, "I have a PhD, what can the center do for me?" (lines 119-123)

In contrast, at College 3, many faculty members, including faculty with considerable teaching experience, commented on the emotional support they receive through their involvement with the CTL. A faculty member in the Frequent Interaction group said that she gets rejuvenated at the Center:

> We just get together and talked about …what is inquiry-based learning. Because there's so many ways to kind of look at it, and then from there, kinda went to "Oh, I found this. Do you think this would work?"And showing stuff to each other and bouncing ideas off, and that really got me rejuvenated. So, I would say that my main reason for showing up here [ at the CTL] is just to change gears for an hour and try to reboot and get back to something meaningful in the classroom. Because you can get so burnt out, you know, eleven years. It doesn't feel like eleven years exactly, but when I say I'm tired I think, "well, it has been eleven years working the same position'" (lines 514-521).

Another faculty member in the same group shared similar sentiments about the emotional support she gets at the CTL, "Sometimes it helps to talk about it with other people and [faculty in the CTL are] always a good group to talk to about stuff" (lines 563-565).

Faculty at College 3 who used the CTL less frequently also commented on the CTL as a place to go to for emotional support. A faculty member in the Less Frequent Interaction group said the CTL "was very supportive and people were actively trying to improve and do better and I found that really encouraging" (lines 132-133). Another faculty member in the same group commented that "the impact that [listening to other faculty present] has on some of our colleagues, you know, I mean, you talk to them and all of a sudden you realize that people are doing interesting stuff" (lines489-490). A third faculty member in the Less Frequent Interaction group at College 3 added that the CTL "gives, especially adjunct faculty, a chance to get together with just talking" (lines 499-500).

### *CTL Relationship to the Institution*

The category of "CTL Relationship to the Institution" is comprised of four subcategories; Administrative Support, Departmental Support, Budget Considerations, and Sense of Importance to the College, each of which contributes to the overall relationship of the CTL to the institution.

#### *Administrative Support*

One of the faculty members in the Less Frequent Interaction group at College 2 philosophically suggested that the very existence of the CTL is dependent on the approval of the administration: "If they [the administration] don't want to do it, they're not going to do it" (line 528). Others in the group agreed and when the researcher asked

for clarification about who in administration they were referring to, faculty said the "dean" (line 532) and "the vice president" (line 531). Another faculty member explicitly stated that the influence of the administration is "Major" (line 522).

Administrative support emerged, however, as both a positive and negative component of the CTL's image on campus. At College 2, when the faculty members in the Less Frequent Interaction group were asked by the researcher, "How does administration influence the activities of the CTL?" five responded to the question, agreeing that the CTL was the idea of the "Administration Big A" (line 540), with one faculty member clarifying, "This was the [top administrator's] dream …This is what she wanted, that was her mark" (lines 544-547). This was not, however, necessarily viewed as a positive, and faculty members in this group seemed to be somewhat indignant about the CTL being thrust upon them by the administration:

> I don't know about other subject faculty, but I know in the library there was still kind of this, this was a directive from the [top administrator] thing and I think that kind of put some people's backs up. So that has nothing to do with the people in the CTL, but I think they've got some kind of hurdle that they need to overcome to get everybody on board with them." (lines 986-989)

This situation demonstrates that support of the CTL by the administration does not automatically have a positive influence on the efficacy of a CTL.

Another pitfall of the CTL and its director having strong support from administration is the possible commandeering of Center resources for administrative initiatives. In defending what was perceived as unresponsiveness of the CTL director, a College 2 faculty member pointed out that the Director has limited time to devote to the

CTL because the administration has her working on administrative duties: "Sometimes I think [the CTL Director] just really does get tied up. She has a lot of administrative duties that doesn't [sic] have anything to do with running the CTL" (lines 1020-1021). Another individual in the group concurred saying, "Yeah, so her, her time is not her own" (line 1027). A third person in the group agreed, saying, "I think it is a good point that [the CTL director] is stretched as thin as she can be with everything else they're asking her to do" (lines 1094-1095). This situation demonstrates that "support" may not necessarily be thought of as "allowing the Center to sustain and enhance its mission," but may be interpreted as "being an area of personal interest to the administration."

At College 3 the director also indicated the potential for administrative tasks to distract her from the work of the CTL, and viewed this as an issue:

> I do need to be careful that I'm spread so thin and I can't function and do much else other than go to meetings and I don't want to do that. Because really what I love to do is faculty development. ..is to develop things and facilitate. So I don't want to stray too far from that. (lines 387-391)

While support of the CTL by administration can have unwanted effects, administrative support is necessary and can be advantageous. A faculty member in the Frequent Interaction group at College 3 spoke positively and definitively about the impact of administrative support of the CTL because it facilitates faculty participation in CTL programming:

> Nobody questions you if you walk out of your office and say, "I'm going to a [CTL] presentation." Which, I mean this is a 40-hour job and yet you can just

> walk out and say, "Oh, I have something in the [CTL]." And that's it. It's a valid part of your job. (lines599-602)

The director of the CTL at College 3 also indicated that the CTL had the support of administration:

> I recently met with someone who was my interim boss and he said wow [I heard] you're [the CTL] quite an autonomous unit. And I wasn't sure how to take that 'cause I felt like maybe so, but I still need leadership. I mean I'm glad, I think we're viewed as very low maintenance for the college. I think we're kind of viewed [by administration] as something to be proud of. (lines 345-349)

At College 1, faculty in the Frequent Interaction group also spoke positively of administration's support for the CTL saying, "They're [administration] a pretty supportive presence, but I don't think they have any real direction [of the CTL] at all" (lines 501-502). Another faculty member in the same group concurred, stating that the CTL director reports to the Chief Academic Officer and that the CAO is supportive of the CTL director: "I would call her [the CAO] a supportive guide" (line 520).

This hands-off support of the CTL by administration is also reflected as a positive factor in a statement by the director:

> Not a call from the administration [in response to a controversial CTL session]. Because they know that we have the students' best interests at heart …Like I said, they are respectful. They [administration] don't really want to make decisions about the learning and development of faculty and staff. They want the faculty and staff leaders on our campus to take care of that and to lead that effort. (lines 515-521)

Another faculty member in the Frequent Interaction group at College 1shared that the administrators actively support the CTL by serving as presenters:

> The president comes in [to the CTL] and just talks to you about what it's like to be president of the college or, I remember, when I took it [new faculty program] we had our former vice president and he came in and told us the full history of [the College] and, you know, they'll answer any questions for you. So, the president and vice president are very active. The deans present things a lot, too. (lines 495-499)

A faculty member in the Less Frequent Interaction group at the same college also indicated that the administration more actively supports the work of the Center: "We had a bunch of sessions in the center about it [the college's mission] and those were initiated by the administration and center together" (lines 579-581).

*Departmental Support*

At each of the colleges, the relationship between the CTL and specific departments was pointed out as having an important impact on both the image and the utilization of the Center. Within a department, the chair and the faculty influence the relationship between the department and the CTL. Department Chairs attend CTL programs, consult with the CTL when planning departmental professional development, encourage faculty to use the CTL, require faculty participation in specific CTL programs, and welcome the CTL director at departmental meetings. Faculty members within a department also encourage each other to use the Center.

At College 1, a faculty member in the Frequent Interaction group shared that department chairs are connected early with the CTL through training specifically for department chairs:

> Most of them [department chairs] are elected from the faculty…in the departments, and so there's also department chair training that goes on in the center. So there's a series for new department chairs. (lines 1087-1092)

This was confirmed by the director who told the researcher "about our learning series for our department chairs. And so they are a group of academic leaders … they drive their own programming for their learning series" (lines 460-462).

In some cases, use of the CTL is mandated by department policy. A faculty member in the Frequent Interaction group at College 1 said that the CTL training to teach online is required by his department: "In Social Sciences, before someone teaches online we have them take it [CTL course on being an online instructor]" (line 152). Another faculty member in the same group commented that the CTL director attends department meetings to ascertain department needs: "She meets at our fall department, spring department meetings [and] ask[s], 'What topics do you want us [the CTL] to have?' You know, gets feedback from, I'm sure every department." (lines 249-250). Another faculty member in the same group, who is responsible for adjunct instructor faculty development specific to her department works with the CTL to develop and provide training:

> We do use the center … we offer faculty development for our [department's] faculty, for our part time … So we get them [adjunct instructors] involved and, and get them up to speed on teaching methodologies, and all those things we need

> for accreditation…We use the center to develop our own faculty development series and our own program. (lines 256-263)

At College 2, a faculty member in the Less Frequent Interaction group mentioned that he attended a tea "where they [the CTL] invited everybody from the department to go over and kind of talk about how, what needs we had that could be served with them" (lines 224-225). He went on to say that while he could not name specific trainings, the CTL responded to the department's needs "in some of the trainings that they've rolled out" (lines 238-239). In the Frequent Interaction group at the same college, a faculty member in charge of adjunct instructors for her department purposefully scheduled a department staff meeting in the CTL to encourage the instructors in her department to use the CTL: "I had it [department meeting] here very deliberately after it [the CTL] opened, so that the adjuncts would know it existed. And they'd know where it was and make their way over… So, I wanted them to know that" (lines 231-235).

At College 3, a faculty member in the Less Frequent Interaction group said it was colleagues talking in her department that prompted her to seek out the CTL: "It seems like it [what got me involved with the CTL] was more just word of mouth maybe somebody talking about [what] they heard about in the department, and so I came over and visited" (lines 246-248). The director at College 3 also indicated that departments are supportive of the center saying that "I think most chairs encourage their faculty to attend [the new faculty program]" (line 118). Struggling faculty are also encouraged to use the CTL. A faculty member in the Frequent Interaction group at College 3 explained the division chair's approach to helping struggling faculty:

> Our department chair in science sends struggling instructors over here [to the CTL]… They're struggling by their own admission or whether their evaluations have come back in a way that shows they need a little help… one of the things the chair can do is say, "Hey, why don't you go talk to those experts over at the CTE. So I know he does that. (line 803-809)

*Budget Considerations*

Faculty at all three colleges referred to the institutional budget during the discussions about the CTL. They noted that funding for the Center comes out of the institution's budget. Some faculty saw this as a positive, and shared concerns about the possible negative impact of shrinking higher education budgets on the CTL. Other faculty resented the allocation of institutional funds to the Center. As with administrative support of the CTL, allocation of institutional funds to the CTL is not always viewed positively.

At College 1 a faculty member in the Frequent Interaction group pointed out that the administration, specifically the Chief Academic Officer, "probably is involved [with the CTL] as far as some of the financing" (line 52). Another faculty member in the same group concurred saying "Yeah, I'm sure funding requests [go] that route" (line 523). A faculty member in the Infrequent or No Interaction group at the same college said, "I think we're lucky to be in an institution that values the center, funds the center the way that they do" (lines 969-970).

A faculty member in the Less Frequent Interaction group at College 3 connected the worsening budgets in higher education to the importance of the CTL: "I think [the CTL] is going to get even more important as the budgets for academia get worse" (lines

472-473). He went on to say that the CTL workshops are a viable alternative to conferences for academic stimulation in the context of budget concerns:

> These [presentations in the CTL by colleagues] are in the list of workshops and I think that level of academic stimulation, we're going to get less and less. I mean the travel money is gone. The conference budget is gone. (lines 486-488)

Also at College 3, a faculty member in the Frequent Interaction group connected the college budget to the CTL, but in a less optimistic way:

> I'm so afraid for it [the CTL] moneywise. I just mean, I don't know how much it costs, but I would be afraid that this would be a resource we could lose to a budget cut…It would be terrible. (lines 1092 – 1100)

The CTL director at College 3 was astutely aware of the importance of effectively managing institutional funds:

> They [administration] are very happy with the center. So I think that's probably why we haven't been under fire too much in this current economy. I mean yeah, we've lost resources, and we've had to look at how we do things a bit more efficiently and we don't order cookies anymore for workshops. And there are many things we don't do as much of or we have to look at differently. They [administration] do see this center as somewhat autonomous and as long as we're accountable I think they're okay with whatever we're doing. (College 3 Director Interview lines 351-360)

The connection between the budget and the CTL's physical space was mentioned at College 2 by a faculty member in the Less Frequent Interaction group:

> Well, here, I think, you can tell just from the physical space [of the CTL] that they have the, the amount, you know, the nice stuff that they have, that there was a clear commitment by the college as a whole to pump some big bucks in this…Yeah, so it was very well resourced I, I think. (lines 533-537)

Though this comment about resource support could be viewed as neutral in terms of whether this resource allocation was appropriate, another faculty member in the same group resented the allocation of considerable funds to the CTL:

> So much money, so many resources were put into those [the CTL] rooms. Where we [a different department] have a completely ADA in-accessible classroom that's terrible. And [our department] needs a lot of help itself, and all this money … which was badly needed [by our department], but that money first went to the CTL. (lines 269-273)

Another faculty member in the group felt the same way; she referenced the "really fancy coffee, hot chocolate, chai maker thingy that they have" (line 297). As these comments suggest, allocation of institutional funds to the CTL is much like perception of administrative support of the CTL and does not automatically have a positive impact on image.

*Sense of Importance to the College*

At all three colleges, faculty mentioned the role of the CTL as it relates to the functioning of the college. For example, the CTL facilitates college-wide initiatives and the work of institutional committees, helps to maintain accreditation, and develops the skills of college leaders. At College 1, many faculty members view the Center as an entity that is essential to the functioning of the college as an institution. To a lesser

extent, faculty at Colleges 2 and 3 also commented on the importance of the CTL to the college.

The CTL director at College 1 stated, "One of the greatest things about our center is that I really feel like our center is sort of the heart of our college" (lines 576-578). A statement by a faculty member in the Frequent Interaction group at College 1 echoed the director's sentiment: I think the infrastructure is in place for the center it's, [the CTL is], the center of the college" (lines 687-688). She went on to say the CTL is the place where development of the college, as an institution, happens:

> Because we are a learning-centered college the student is learning somewhere wherever the student goes in the college. So this [the CTL] has to be the place where development of those qualities and skills and knowledge base can happen and keep transforming as our college has to keep transforming. (lines 780-782)

Another faculty member in the same group pointed out the importance of the ongoing nature of the professional development provided by the CTL:

> I came from another … community college and there was just a remarkable difference [here] in the amount of emphasis put on continuing training for instructors and the availability of it. So I think that's really what strikes me the most is that it's not a once a year thing. It's a constant availability for instructors…I think it's remarkable. (lines 1074-1079)

Another faculty member in the same group gave a specific example of a college-wide initiative which the CTL helped to facilitate:

> We have an all-college read book. The library does that, but then the center [CTL] always does sessions on how to put them into your curriculum, like what kind of things you can do to encourage your book in your classes. (lines 1035-1040)

The director at College 1 also said the CTL "include[s] a lot of dialogue about college-wide initiatives. And so depending on what major projects, efforts, are being focused on at the college during the year, we often provide programming to support that dialogue" (lines 34-37).

Another faculty member in the Frequent Interaction group at College 1connected the CTL to maintaining accreditation from outside agencies:

> For some of our accreditations we have to speak to each of those things [concepts presented in the CTL], so not being familiar [with] "Bloom?" So when you see that it's here [in the CTL] and I see it's in my accreditation and I have to write to it, you know, can all kind of be tied together. (lines 352-355).

Another example of the importance of the CTL at College 1 is its organization of an in-depth summer leadership program for a group of 25 people comprised of faculty, staff, administrators and trustees:

> [The summer leadership program is] kind of organized by the center [CTL]. There's a three-day retreat…where they go over the different departments, not just academics, but administrative and, so it's a good time to meet. You apply to do it, and 25 I think, is the max number. (lines 1097-1104)

A group member added, "that's kind of the end of the year and you go and you do everything from learning how they figure out a budget to…it's out of town" (lines 1109-1113).

A faculty member in the Less Frequent Interaction group at the same college especially valued the Center's role in helping faculty feel like they belong: "The thing that, I think, has been the most exciting thing about it [the CTL] is when you get to meet the other faculty and feel like you're a part of the college" (lines 102-103). Another faculty member in the same group stated of the CTL, "You know, [the CTL is] why we stay at [College 1]. That's why we love it here. That's one of the reasons."(lines 862-863).

A faculty member in the Infrequent or No Interaction group at College 1 also pointed out the CTL's role in college-wide initiatives:

> I think a lot of times the center will try to pick up on initiatives that are going on on campus. So, there was an initiative about civility awhile back, and so the center offered something about civility and the administration had some ideas that were happening concurrently with the center, and the student leadership had some things happening concurrently. So, it seems like if there's an initiative, generally the center will pick up on that. Along with these other bodies some things will happen concurrently. Which I think is really great. (lines 626-631)

Another faculty member in the same group added that the CTL develops and moves college-wide initiatives along: "Here at the center, [they] assist that [college initiatives], you know. And help to develop and move it forward" (lines 665-666). Later in the discussion he said, "It's [the CTL is] part of it. It's part of the larger whole that makes us what we [the college] are (line 993).

The fundamental role of the CTL at College 1 is embedded into the culture of the institution. Even faculty in the Infrequent or No Interaction group at College 1 said they

had never heard anyone on campus say a bad word about the CTL. One group member added that, "I think that would be against our institutional culture to say something like that [a negative comment about the CTL's worth] out loud" (lines 1008). Another group member went on to say, "Well, even [in] confidential conversations between colleagues … never heard a bad word" (lines 1011-1012).

At College 3, the CTL also plays a role in facilitating college-wide initiatives. A faculty member in the Frequent Interaction group at College 3 commented on the role the CTL plays in providing workshops on information that is needed by multiple departments:

> So sometimes things happen at the college that need to be more college wide than just the advising department, because other people do that similar work. And so, I have found that it's easier for us to get it through the CTL because they'll do all that publicity and sending and getting the room and having coffee and that's the stuff that I wouldn't have to worry about. Just bring my workshop here and be able to do it. (lines 794-798)

A faculty member in the Less Frequent Interaction group at College 3 pointed out that the CTL facilitated faculty compliance with a requirement included in faculty contracts:

> As a full-time faculty member, one of the things that was in the last contract…was that we have to do a faculty portfolio…and [the CTL] ran at least two, maybe three sessions, on this portfolio thing. What's the difference between a curriculum vitae and a resume?, How do you write your philosophy statement?, What goes into it?, and all this stuff like that. (lines 330-336)

Another faculty member in the group added, "And it [the CTL] also speaks to our core mission in a way that nothing else on the campus does…teaching students" (line 916).

At College 2, a faculty member in the Frequent Interaction group pointed out the role of the CTL in facilitating the work of institutional committees:

> [The CTL Director] is great about working with committees if we need assistance on things. So the [Annual College Book] committee would be an example of a committee that would come and say, "We want to have this function." Sometimes she gives support by providing registration, by providing space, by providing food or snacks. I'm the co-chair of the diversity committee and we're working with her. We're doing some safe zone training. She's great at that. She's great at helping promote it and e-mail out. So it may not be something that originated from the CTL, but she's for it. She's an advocate. She's a co-sponsor on things. (lines 291-307)

Another faculty member in the same group attested to the worth of the CTL pointed out the benefit of cross-disciplinary interaction to the institution:

> I think any entity, whatever you title it, Center for Teaching and Learning, but, any entity that encourages cross-disciplinary, cross-departmental interaction that gets you, as faculty, out of your trench in your own department, I think is a force for good on campus. (lines 191-195)

The director at College 2 also noted that the CTL responds to college-wide initiatives: "So the school has certain initiatives that the school is working on … So we respond to the colleges' initiatives" (lines 56-57).

A faculty member in the Less Frequent Interaction group at College 2, who compared a previous system of dean-appointed mentors to the CTL, clearly found the CTL a more effective resource for the college:

> Then they would have the dean appoint someone else and say, "You're their mentor." [Someone] who was a horrible teacher. There was no hope of anything being changed because. But I think any CTL that's organized is better than no CTL where faculty has no input. (lines 492-495)

However, some faculty at College 2 who used the CTL less frequently questioned its benefit to the college:

> I'm very frustrated because we have a very nice space, we have an awful lot of people …The output is nowhere near what the input is … I'm a little concerned that the same kinds of issues [others] are talking about that … I just don't see exactly what all we're getting out of it. (lines 315-325)

### *CTL Programming*

Analysis of comments made by faculty members and directors led to the emergence of "CTL Programming" as a category. The three subcategories of Usefulness, Logistics, and Faculty Influence reflect participants' thoughts related to Center programming. The subcategories identify properties faculty perceived as influencing the image and utility of the Center on their campus, and faculty comments about each reflect a range of opinions. The Usefulness subcategory includes faculty perceptions of the types of programs that faculty consider useful and the way the CTL considers the varying needs of faculty when planning programs. The Logistics category includes faculty comments about the busy lives of faculty and the impact of program time of day and location on

faculty participation. The Faculty Influence subcategory describes three ways faculty influence CTL programming.

*Usefulness*

When speaking about CTL offerings, faculty most appreciated programs they considered to be useful. Further, faculty perceived that a wide variety of programming was offered to ensure all faculty members, no matter where their teaching approach is on the instructor-centered to student-centered continuum, will find programs they consider useful. Many faculty considered CTL programs most useful that provided information to use with students or to help students become more successful. The few negative comments about the usefulness of CTL programs were made exclusively by faculty members at College 2 in the Less Frequent and Infrequent or No Interaction groups.

A faculty member in the Less Frequent Interaction group at College 3 said, "I started going to workshops which I thought were wonderfully handy, and it was love at first activity… It just seemed like everything that was happening at the [CTL] was really useful to me" (lines 127-132). Another faculty member in the same group spoke about a session in which she learned about "starting the class on the right foot. Doing the right kind of warm-up activities and a variety of warm-up activities that help people interact well in the beginning. I learned those here and I'm really delighted" (lines 577-581). She went on to say "that's been very helpful. The small group work and interactive learning, teaching has been very useful" (lines 585-586). Another faculty member in this group spoke more broadly about the usefulness of the CTL: "[The CTL is] a place where pedagogy could be talked about where one could really focus on what it means to teach

well. And they're doing it. And so I think that this place is highly credible" (lines 452-454).

A faculty member in the Frequent Interaction group at the same college also said she wants CTL workshops that are useful: "to me it's not necessarily whether it's fun or not, it's whether I feel that it's going to get me something that's of value that I can use with my students" (lines 920-922). Another faculty member in the same group highlighted the usefulness of the CTL by comparing it to the union that represents faculty:

> I've often said I'd give up my union dues and give them to the [CTL]. I always get bad reports back from people when they hear me say that, but, you know, on a given basis, as a teacher, I get more from this [the CTL], you know, on a daily basis. Thank you for my union, I mean they're there, they help us, I understand that, but to do my job this is more beneficial to me. (lines 1103-1107)

The director at College 3 shared that she works to make CTL programming useful to faculty by keeping in mind the varying readiness levels and developmental stages of faculty:

> [I address varying levels of faculty readiness] with a lot of acceptance, and a lot of take them [faculty] where they're at. That's my philosophy. I can't walk in the door and assume they're not doing anything that's student centered. So, I try not to make any assumptions in my approach. I've really gained a greater appreciation or I keep reminding myself what it was like when I first started teaching. And I was so content-focused. And I realized I've read some literature about faculty development in terms of [how] we develop. We go through stages.

> We can get stuck at stages, but if I go along with the theory that initially we're quite content-focused and then we start to think about our performance a little bit. And then we start to look at the students and go what are you getting out of this? Then we're more open to giving up some of that control in our teaching and having them more engaged. (lines 217-227).

The director takes faculty from their current comfort level with teaching approaches so that faculty will at some point be open to using student-centered teaching strategies. The director explicitly stated she keeps seasoned faculty in mind when planning CTL programs:

> I do think about the seasoned faculty member; will this be something that might be more appealing to them? Are we doing enough to reach out to those faculty? I think the teaching circles are an avenue for that a bit. (lines 261-263)

The reasons faculty gave for attending CTL sessions at College 2 also related to usefulness. A faculty member in the Less Frequent Interaction group at College 2 said he attended a session on how to use a course management system "to become proficient in [it] so I could help the students" (lines 553-555). Another faculty member in the same group commented that she attended a CTL presentation to gain useful tools on using data to increase student success in a gatekeeper course in her department: "Well, I thought that I could find some tools to gain more information about the bread and butter course in my department and student success" (lines 562-565). Another faculty member in the same group commented on the software assistance she received from CTL staff: "Now we've [the college] just rolled out a new software program and they [CTL staff] have just been, I couldn't have done it without their assistance (lines 213-214). Yet another faculty

member in the Less Frequent Interaction group At College 2, reflecting on transitioning from a teaching assistant role to full-time faculty, found the CTL program for new faculty useful:

> I was straight out of grad school, I had never truly run my own classroom, being a teaching assistant is [a] much different than being, I don't want to say the star of the show, but, responsible for, head bottle washer and ticket taker. And so I think I got a lot out of the new faculty experience which is probably why I wanted to extend it as long as possible. (lines 652-656)

Similar sentiments were shared by faculty in the Frequent Interaction group at College 2. One faculty member said because he finds the CTL sessions useful, he continues to attend: "I picked up something that was useful at virtually all [the CTL sessions] that I've attended. So, I guess it's momentum, I guess it's they've been decent in the past, so I think they're worthwhile" (lines 373-374). Another faculty member in the same group added that the CTL offers sessions that provide useful content-specific information: "The CTL has things that aren't teaching strategies, but are instead content driven, so I think some of the things that were around 9-11 for instance, were more about, here's information that might be useful as a content person" (lines 725-727). The importance of CTL sessions that focused on areas other than teaching strategies was pointed out by another faculty member in the group:

> [Some faculty are interested] not in the strategies used to teach, but in the actual information that you use for teaching. I think even for those people there are things that aren't, if they're not interested in teaching strategies, there are still other things that are useful to them. And I think never underestimate the value of

> those just community building activities. You know, those sharing out scholarship presentations that happen (lines 729-732).

One faculty member in the Infrequent or No Interaction group at College 2, who did not see any possible benefits of participating in CTL programs, attributed her perception to a lack of knowledge about what the Center does: "I don't understand what it [the CTL] is now, I'm sorry to say….which is why probably I didn't identify any perspective benefits" (lines 120-124). But she went on to connect her possible future use of the Center to usefulness:

> I think if I'd understood a little bit more of what it was…and if things can help my students more, then I'm willing to use them. If it's just to keep abreast of what's going on, but it's not meaningful in the classroom, I'm not that interested. (lines 125-132)

Later in the discussion, she added, "I see the CTL as big campus-like applications that can't likely be personal enough to benefit me or my students" (lines 437-439). The other faulty member in the Infrequent or No Interaction Group at College 2 communicated the uselessness of CTL programming designed to please administrators: "I am open to professional development opportunities…[but] if I perceive that it's some way to make the administrators feel better about something, I'm not interested. And so yeah if my BS detector goes off at all I'm not interested" (lines 296-303).

At College 1, faculty also spoke to the usefulness of CTL programs. A faculty member in the Frequent Interaction group at College 1 compared the usefulness of CTL programming to University credit courses:

> A lot of people take classes and work on advanced degrees and that kind of thing, but this [the CTL] is practical. You can come here and use it tomorrow kind of stuff. This is like everyday stuff. And I think the fact that it can be kind of a "just in time" thing, that it could be what you need right now and it's not a huge process to get to what you need, I think that's helpful. (lines 935-937)

Another faculty member in the Frequent Interaction group at College 1 said the CTL helped her successfully make the transition from a technical background to working in the academic world: "I had a technical background, not academics, so I found the center extremely helpful to kind of learn the world of academia beyond my technical knowledge, so that was very helpful" (lines 55-57). A colleague in the same group shared similar sentiments about the role of the CTL in helping her make the transition from working in the health professions to teaching at the college:

> I agree with [colleague's name], same thing, when you work in health professions, you don't have education in your undergraduate…and finish your Bachelor's it's not in teaching methodology at all. So, I agree. I jumped in and started using the center right away to help me as teacher. (lines 61-71)

Another faculty member in the same group concurred. He said, "moving into academia is challenging and it's [the CTL has] been extremely valuable" (lines 81-82).

Faculty in this group also gave examples of specific CTL programs considered useful: "I think that assessment piece [of the CTL programming] has been really helpful (line 437). Another faculty member in the same group commented on sessions that deal with topics of civility:

> We've [the CTL] done a bunch of stuff, recently, on civility. Those have been really good. Conversations about what that means. We have a civility statement and because a lot of faculty are concerned about the things that are going on in their class, and students weren't really acting civil to each other or to them and that's been kind of the timely issue. (lines 1026-1032)

A faculty member in the Less Frequent Interaction group also at College 1 clearly stated that she wanted useful CTL programming such as sessions dealing with classroom management and cheating:

> If I see something that I'm interested in … to do with student life or classroom management stuff … I taught high school, but I never really taught college. So, I'm taking one [CTL program] right now that's on cheating and the title of the class was "Are [College Name] Students Just Stupid or Lazy?" (lines 196-199)

Another faculty member in the same group spoke to the usefulness of a specific CTL training:

> I took a great workshop on power and privilege. It was on race and the race issues and I still have my folders from that. And I still refer to those and that was a long time ago. Over ten years ago. (lines 94-95)

A faculty member in the Infrequent or No Interaction group at College 1, though not using the Center, noted the variety of topics addressed by CTL programming:

> It seems like there's a really wide variety of things that come out in the e-mails. I mean, it seems like almost anything. The CAT [Classroom Assessment Techniques] things [that] come up would be more for maybe a lecture class and they had something on Clickers a while back which would be more for a lecture

> class. But I've also seen classroom management techniques that have come out, so it seems like it's a really wide variety of things. (lines 671-675)

Other faculty in the group mentioned sessions on "disruptive students" (line 677), "disengaged students" (line 680) and "cheating" (line 707). Another faculty member in the same group said that because the CTL provides programming on a wide variety of topics, everyone can benefit from the CTL:

> There are enough different things [CTL programs] to choose from, I think that, although they may not all be universal, somebody, everybody can get something from them. But [also] there are probably enough things that maybe will appeal to a certain segment of faculty. (lines 691-694)

He went on to say, "So they're [faculty] given as many possible hooks that they can grab. One of those hooks, should, should get there, right?" (lines 697-698).

The relationship between faculty members' perceived usefulness of CTL programming and faculty attendance was made clear by a faculty member in the Frequent Interaction group at College 1:

> It was a Friday when we did the academic freedom forum. It was like a Friday afternoon in the spring and it was the most beautiful day at three o'clock and we had like 57 people at it, which was amazing…I talked about what it means in our classes. (lines 967-986)

The faculty member's statement demonstrates that CTL sessions that are perceived as useful by faculty are well attended.

At College 1, the director's answer to a question about how she addresses varying readiness levels of faculty to embrace student-centered approaches to teaching supports the idea that faculty attend sessions they perceive as useful:

> We have faculty from different disciplines. So, if we have a faculty member who's teaching chemistry, or math, or computer science, or some of those types of courses, it's more likely from those types of courses that we're gonna hear faculty say, "You know what, I don't have time for this. What I do works." However, the faculty who signed up for the course have an interest in it. And so we know that they [faculty] realize that this is a priority and it's an important thing for them to sort of focus on….I think that they're realizing that there is a need for them to acquire some more tools in their toolbox for engaging the students. I feel like we've heard over the last couple of years students are different, students are changing… And I don't know how to engage them the way that I used to. (lines 276-288)

In this case, faculty are seeking a CTL program that will give them tools to use to meet the needs of students with new attitudes to learning.

Of the discussions with faculty at all three institutions and in all three levels of interaction, only one faculty member offered a specific example of Center programming considered to be of no use. A faculty member in the Less Frequent Interaction group at College 2 commented on his participation in a required program for new full-time faculty:

> I think my problem was that I'd been teaching for 13 years [at another institution and as an adjunct at this institution] before I went [to the CTL program] and to be

> reminded how to put together a ten minute class is not exactly a challenging exercise. If I was right off the boat it would have been a different story. I would have really appreciated it. (lines 716-721)

Although the faculty member did not personally find the program useful, he admitted that it would be useful for some faculty.

*Logistics*

Many faculty members across all institutions and all levels of interaction mentioned logistical reasons as either facilitating their attendance at CTL programming or contributing to their absence. Specifically, the timing and location of CTL events can positively or negatively impact faculty members' attendance at CTL programs. Faculty also attributed lack of participation to competing work-related and personal demands on their time. Participants offered several solutions to logistical barriers to participation including using the Internet to deliver programming.

A faculty member in the Frequent Interaction group at College 1 said, "Timing is big" (line 223) and another added, "Timing is huge. If it [CTL workshop] fits into your schedule…" (line 224). Another faculty member in the same group pointed out that faculty are very busy and the ability to fit in time to attend CTL programming impacts whether or not a faculty member participates:

> I think it's [CTL programs on online teaching] made available to everyone, but it's just a question as to whether you can make it or not. When I was working full time it was rather difficult, but I still managed to come to some, and now that I have more time I tend to go to more of them [CTL programs]. (lines 160-164)

Another faculty member in the same group said, “I wish I could come more often. I think there is more than most of us even have time to do” (lines 949-950).

A faculty member in the Less Frequent Interaction group at the same College gave a specific example of how timing of a program can prevent faculty from attending: “I couldn't actually make most of the sessions 'cause they schedule them on Tuesday afternoons and I had a lab Tuesday afternoons. And amazingly enough, nobody else wanted to take over my second semester Organic Chemistry Lab!” (lines 48-51). A statement by a faculty member in this same group indicates that in addition to work-related conflicts, CTL programs compete with personal demands on faculty time:

> And even people, I mean, I hate saying this, but even people who have young children sometimes are less likely to come at a time when they could go home and be with their family earlier and do their grading and all that kind of thing after their children are asleep. (lines 777-779)

Faculty members in the Infrequent or No Interaction group at the same college also attributed lack of participation to timing. One faculty member in the group said, “I’m always really interested. But … I just don't have a lot of time to be going to extra, not extra but, going to things that are scheduled during the day” (lines 94-96). Another faculty member said, “I’m always pleased, glad to see the e-mails, but my first reaction is often, I'm teaching right then, or I’m not able to be in the building right then when it's happening” (lines 111-112).

Faculty at College 3 repeated the sentiments of College 1 faculty. A faculty member in the Less Frequent Interaction group at College 3 shared the frustration she felt when the scheduled time of a program prevented her from attending: “You know,

something like that [program on disruptive student behavior] would draw me, but like somebody said that sometimes the timing just doesn't work out with your schedule. And that's kind of frustrating" (lines 438-439). Another faculty member in the same group, commenting on why she doesn't get to more CTL programs, even though she would like to, attributed lack of participation in CTL events to the generally busy life of faculty, interruptions and timing of CTL events:

> Busy life. It's really tricky and the interesting part about teaching here is that when you walk down the hallway anybody that you're acquainted with wants to chat and any student who's ever been in class before wants to show you what they're doing now. And unless you're really good at hiding or getting through the buildings in between, when everybody's in session, sometimes [it's] really tricky to get here [the CTL] and be really productive…sometimes it's just bad timing. My classes are often at night and there aren't generally sessions for the [CTL] in the evening, but, if I've been here til 10, I don't want to be here early in the morning the next day. (lines 312-322)

This faculty member seems to be at a loss for recommending a time that would work with her schedule, indicating that some faculty are simply too busy to attend CTL events no matter when they are offered. A faculty member in the Frequent Interaction group at the same college also spoke to the very busy lives of faculty. She shared how required attendance at CTL programs can be tough:

> You know, I was just hired full time and then to add that [12 week CTL program] on top of that, I would have like[ed] to have had an option. I got a lot out of it. I really did, but it, it was tough to do that the first semester … It was a big time

> commitment. I teach an eight o'clock class. I'm here very early in the morning and then to stay a night a week until six [was tough]. (lines 207-212)

Other faculty in the same group echoed that experience saying, “We were kind of in the same boat” (line 213).

This view that the busy lives of faculty members limits participation in CTL programming is supported by a faculty member in the Less Frequent Interaction group at College 1 who cut back on the amount of CTL sessions he attended so he would have the time he needed for grading: “Well, it, it just sounded like a great place, so the first semester I came to a lot of sessions. I then realized I need time to grade. [laughter]” (lines 39-40). The laughter by others in the group attested to the busy lives of faculty.

Similar statements about the importance of logistics and its impact on faculty participation in CTL events were made by faculty at College 2. A faculty member in the Less Frequent Interaction group shared how a conflict with the timing of program sessions and other work-related responsibilities prevented her from attending regularly:

> Although I think … it does kind of need to meet their [faculty] schedule. There's a program [I’m interested in], and I've only participated once, and that was because the [faculty in my department] very rarely have a set class schedule. They are often guest lecturers in other classes, and I would say, "I would like to participate and here's my schedule of classes I have so far." But it was too difficult to schedule me with someone else, so a lot of times I would just be told it was too difficult to schedule me in, so I wasn't able to participate. (lines 462-467)

A faculty member in the Infrequent or No Interaction group at the same college also commented on her busy life and its impact on participation in CTL events. Specifically,

she cited personal responsibilities as impacting her lack of participation in CTL programs:

> I'll be honest, I'm at a stage in my professional and personal life where if it's not on fire. So, my reason for not using whatever I don't use these days is that I'm in a lean and mean. I have a two year old and a nine year old, and I'm a recently single mom. (lines 212-215)

She went on to specifically clarify that her lack of participation in CTL programming is not due to an objection to the CTL's mission: "It's not like it's an ideological position taken" (line 218).

In addition to the busy lives of faculty and the timing of when sessions are offered, the location of the CTL was mentioned as either facilitating or contributing to lack of participation. One faculty member in the Less Frequent Interaction group at College 2 related her frequent use of the CTL to its close proximity to her work area: "I guess I spend so much time over here downstairs dictating in the studios, so whenever I would ever need anything, I just, I didn't even really realize that they were 'people in the Center for Teaching and Learning.' I just went and got help whenever I needed it…" (lines 163-166). A faculty member in the Frequent Interaction group at College 3 also stated that the close proximity of the CTL to her office facilitated her use of the CTL: "Our building is right across from this, so basically any time you run into some kind of issue, you just walk in here" (lines 311-312).

A faculty member in the Frequent Interaction group at College 1 shared exactly the opposite; since the CTL was far away from her office, it discourages her and her colleagues from attending CTL programs: "See we're way over there, so we don't come

over here [the CTL] as much, it's really far" (line 540). The adverse impact of the CTL's distant location was also mentioned at College 3. A faculty member in the Frequent Interaction group said her participation in CTL programs was delayed by the CTL's proximity to where she works:

> I remember her [the CTL Director] coming and talking and thinking, "Wow, I really need to go there." And, I really didn't do much the first year except take the [several week long] seminar because I was out at [another location], and I wasn't familiar with main campus. And then finally I had so many questions, I just bit the bullet and came out here, they haven't been able to get rid of me since. (lines 100-103)

Faculty participants suggested several solutions to logistical problems that prevent faculty from attending CTL programs. A faculty member in the Less Frequent Interaction group at College 2 suggested ways to address the complexity of scheduling CTL programming:

> We've talked about how they [the CTL] haven't scheduled things, but I think the book [group], was hurt by being too scheduled. It would have probably been better to find out who was interested in that book and discussing it and then Doodling or something, because I remember I had something that was a conflict for most of the [book group], so I wasn't able to participate. (lines 577-581).

This faculty member is suggesting that before scheduling an event, it may be better to first determine who's interested and then poll those interested faculty, possibly using the web-based Doodle tool, to find out the specific days and times that would work for everyone interested.

Another solution to the problem of finding workable times for CTL programs was pointed out by a faculty member in the Frequent Interaction group at College 3 who commented on a session she was unable to attend:

> But it [the missed session] will come back again, and it will be at a different time, because we all teach at different times. So, what I like is that they offer the same class, and you know it will come again, and then it will be a slightly different time. You can catch it. (lines 349-355)

This faculty member's solution to timing issues is to repeat sessions at alternate times.

A participant in the Frequent Interaction group at College 1 suggested that "sometimes it would be nice for people who have conflicting commitments and hours and whatnot to be able to either see, hear, or access something remotely via the web" (lines 853-864). Another participant concurred:

> We've talked about like an immediate video link. That there's always a camera running for a session and then somebody uploads that link. So if you're not there, you can just watch it. I think that would be really helpful, because I teach clinical and so I'm gone nine hours. So, if it's clinical day then I can't attend, and there's often things that I can get handouts [for], but I'm actually, probably, key in to listen to it. (lines 917-923)

However, another participant in the same group pointed out negatives of web-delivered programs: "Really the benefit is not even really usually the speaker; it's the interaction with colleagues and discussion" (lines 924-925).

*Faculty Influence*

It has already been noted that faculty at all three colleges indicated that their centers were generally responsive to suggestions from faculty about programming. Participants further indicated that faculty have the opportunity to influence CTL programming in three ways; serving as presenters, serving on the CTL advisory board, and completing surveys. Most faculty members in this study perceived that faculty have major influence on CTL programming through these avenues. However, concerns about the efficacy of the advisory board were raised at one institution, College 2. Further, the use of surveys as a means for faculty influence on CTL programming appears to be limited at the same institution.

One way faculty influence CTL programming is by serving as presenters for CTL workshops. At College 3, a faculty member in the Frequent Interaction group pointed out that, "Some of us put on the [CTL] workshops, too. So she [the CTL director] brings in faculty to teach faculty" (lines 551-552). This was also mentioned by a faculty member in the Less Frequent Interaction group at the same college: "the [CTL] also provides many of the faculty with a venue where they can present topics that are of interest to them. So they're talk backs [faculty presentations] about the performing arts, the plays that we do" (lines 473-474). The director also noted that faculty present some of the CTL programs such as the teaching circles:

> Because those [the teaching circles] are more faculty driven. It's a group of faculty, they get together to talk about a certain topic that that they're invested in. And so for them [seasoned faculty] that may fill a void there [in CTL programs]. Sometimes they are the ones that facilitate workshops. (lines 263-266)

At College 1, faculty members also serve as presenters of CTL programs. The director pointed out that "the majority of it [CTL programming] is faculty led" (lines 424-425). One faculty member in the Frequent Interaction group especially found faculty panel presentations effective: "There's always a real diverse group and people [faculty] on the panel. I really find that format to work really well" (lines 994-995). The same faculty member also noted that "it's not always the same people [that present] too and I really like that" (line 1012) and went on to say "they're not afraid to ask somebody new to present and a lot of the seasoned people are sitting there and it's a wonderful way to get a new look or perspective on things" (lines 1018-1019).

Faculty members also serve as presenters of CTL programs at College 2. A faculty member in the Frequent Interaction group said she presented, along with others, at a program for adjunct faculty:

> I've done some service for them [the CTL]. Like, some sessions for them. So I participated, as a purveyor of CTL type stuff…they kind of had a smorgasbord to choose from. I think one night they had several presenters come in." (lines 263-270).

Another way faculty members influence CTL programming is through service on CTL advisory boards. These were in place at all three institutions and were functioning effectively at Colleges 1 and 3. At College 2, faculty were less satisfied with the advisory board's ability to impact CTL programming.

At College 1, the director explained that a sub-committee of the Faculty Senate serves as an advisory board to the CTL. It includes representation from each of the nine academic departments: "There's one full-time faculty member from each academic

department. And we also have one part-time faculty member on that advisory committee" (364-365). A faculty member in the Frequent Interaction group at College 1 who served on the CTL advisory board pointed out that the advisory board addresses the logistics of CTL programming: We've [the CTL advisory board] sort of figured out what time of day most people are able to come" (line 225). Another faculty member in the same group spoke to the role of the advisory board in addressing requests from the administration: "I think that if she [the Chief Academic Officer] said you know, 'Maybe we ought to look at doing da-da-da-da-da,' I think [the CTL director] would bring it to our group [the CTL advisory board] and say, 'Do you think that there's a need for this? Would the faculty be interested?'" (lines 525-527). The director also brings faculty requests to present to the advisory board:

> You know, if [the CTL director] thinks that it [a request from a faculty member to present] would be a good topic she would probably bring it to the advisory committee and say, "What do you think, can we do some sessions on this?" (lines 1025-1026).

At College 2, according to a flyer given to this researcher by the CTL director, the faculty advisory board developed the mission statement and programming directions for the CTL. A faculty member in the College 2 Frequent Interaction group confirmed that an advisory board is in place: "And there's a faculty development advisory committee that's responsible for some of the programming" (lines 602-603). The director at College 2 acknowledged the role of the advisory committee, stating: "Some of it [CTL programming] is driven by the interests that are expressed by the members of the faculty development advisory committee" (lines 57-58). However, a faculty member in the Less

Frequent Interaction group at College 2 expressed concern about the efficacy of the advisory board: “There's this professional gulf here between, I think, what the CTL sees its responsibilities are as an entity, and what the faculty advisory committee and, by extension, the members of the faculty sees (lines 364-367).

At College 3, the faculty advisory board more effectively influences the activities of the CTL. For example, a faculty member in the Less Frequent Interaction group said the committee was instrumental in the continuation of a twice yearly faculty appreciation day:

> It was pretty overwhelming that, by the [faculty] committee, that this [Faculty Appreciation Day] is something we need to keep for the morale if nothing else. It's one of the few things that we do to make people feel good about being faculty…Well, low and behold, it, it still occurred this semester. (lines 830-837)

A faculty member in the Frequent Interaction group at College 3 also explained that faculty influence CTL programming through a faculty committee:

> There is a planning committee made up of faculty who sit with [CTL staff] who helps develop all of the structure and scheduling for the workshops. So, faculty across campus, different areas get to say here, "I think we need to learn about this and that.” (lines 717-721)

In addition to serving as presenters of CTL programming and giving input on programming through formal advisory boards, faculty also influence CTL programming through responses to surveys put out by CTL directors. A faculty member in the Frequent Interaction group at College 1 said that through short surveys after each CTL program

and a yearly survey, faculty let the CTL director know the topics they would like to see addressed by the CTL:

> I think everybody does, not just us or frequent goers or anything like that, does give consistent feedback. Even just you attend one session and you know people write on your little comment thing, "You know, this is good, but I'd really like to see this." Or whatever, and, that's just nice little anonymous things or even doing the survey earlier this year, you know. That she [the CTL director] got a lot of anonymous feedback about what people would like. (lines 691-695)

Another faculty member in the same group said that one purpose of the survey was to determine the best time for CTL workshops: "[The CTL director] put out a survey trying to see when people like to come and things like that" (lines 245-246). The director at College 1 confirmed that faculty feedback on surveys is used to make programming decisions:

> "One of the ways we do it [make programming decisions] is by capturing feedback after all of our sessions ... we do have feedback forms, just half sheets that sorta capture the impact of sessions for each person. But we also ask for programming ideas. And so we keep sort of an ongoing list of programming ideas so that we can track how often we get these ideas." (lines 24-28)

At College 3, faculty also influenced CTL programming through responses to surveys. A faculty member in the Less Frequent Interaction group at College 3 explained that a 12-week CTL workshop on transitional learning begins with a survey to find out what topics most interest the faculty who are participating: "That 12-week class begins with a survey of what the group really wants to focus on. There's clearly tons more

material that's not covered because the group selects what it wants to focus on" (lines 931-932). Another faculty member in the same group commented that after every CTL training, faculty are asked to suggest topics for future trainings: "I think we were asked, actually after each training. Yes, I remember perfectly" (lines 934-935).

At College 2, the researcher noticed a stack of session evaluations in a box on the shelf in the room where the focus group discussions were held. However, the evaluations were not mentioned during any of the discussions with faculty. The director also did not bring up the evaluations when asked to share how faculty influence CTL programming. When the researcher mentioned the evaluations, the director acknowledged that faculty do influence programming through the evaluations, but in a weaker way:

> That's [faculty filling out session evaluations] kind of a weak, a weaker way of influencing [programming] because we're really sort of evaluating history at that point. I mean they can tell you whether they'd like to see that again or like to hear that again or whatever. But you know at that point it's over. So I'm really much more interested in what future programming should look like. And we always ask that question as well. So but again we just have never managed to get as much bang for our buck out of that as we have out of the actual conversations with people. (lines 334-340)

While the director prefers face-to-face conversations as a means for faculty to influence Center programming, a faculty member in the Frequent Interaction group communicated a more positive view of surveys as a means for faculty to request topics for Center programs: "I think probably survey faculty… Survey from CTL to all faculty or a forum,

or something, some way to assess, 'What are you interested in, what do you want to know about?' [is a good idea]" (lines 768-772).

*CTL Impact on Teaching and Perceived Impact on Student Learning*

Responses that led to identification of the category of CTL Impact on Teaching and Perceived Impact on Student Learning did not naturally fall into the two subcategories of CTL Impact on Teaching and CTL Impact on Student Learning, as may be expected. When faculty spoke about impact of the CTL on student learning, they consistently placed it in the context of the CTL's impact on their teaching; comments related to impact on student learning were directly connected to changes in their teaching resulting from interaction with the CTL, making the delineation of two subcategories unnatural and forced.

Many of the faculty interviewed described the direct impact of the CTL on their teaching, and perceived positive impact on their students' learning. Faculty in the Frequent and Less Frequent Interaction groups gave explicit examples of the CTLs' impact on their teaching and spoke of the positive impact on student learning, but admitted that the impact on their students' learning couldn't be irrefutably demonstrated. The directors also indicated it is difficult to measure the impact of the CTL on student learning. Faculty in the Infrequent or No Interaction groups who made use of professional development resources other than the CTL also described the positive impact of those resources on their teaching. However, connections made to student learning by faculty in the Infrequent or No Interaction groups were less specific than some of the descriptions given by faculty in the Frequent and Less Frequent interaction groups.

A faculty member in the Frequent Interaction group at College 3 described the positive experience she had incorporating into her teaching ideas learned in a CTL session:

> [I learned] the different ways that people understand things, whether, the difference between a hands-on learner, someone who's more cerebral and wants to read and have conversations about it, and that type of thing, and it made a huge difference because I used one of the things that [the CTL director] used on us on the students and it was kind of fun because the things I would learn in class [CTL program], I would then then, the next week, try on the kids. It was fun. It was like having a live laboratory. (lines 618-622)

Another faculty member in the same group, who had come to the college from teaching at a university, reflected on her first semester as a teacher at the community college and how participation in CTL sessions impacted her teaching:

> I went from that [university teaching] to here and when I found out about the [CTL] I started showing up for [CTL] sessions…I realized how little I had done of that [active learning techniques] in the two semesters previous at [the university] and it was like, "oh, this has got to work, this [has] got to be better …so I went a little overboard the first time around, but I found a balance to where I can say I'm, like more of a mix of lecture and active learning. And, that all came from those first couple semesters here realizing that there was so much more [than] just flat lecture. (lines 666- 675)

When the faculty member was asked about how student learning was impacted, she mentioned that, in evaluations, students comment positively about the 'hands-on'

learning, but she doesn't have "any proof" but knows that students enjoy it and are more engaged and always ready to learn.

Yet another faculty member in the Frequent Interaction group at College 3 testified to the impact of a CTL session on his teaching and students' learning. He connected his use of student-to-student interaction in his teaching to students' creating outside-of-class study groups and increased student persistence:

> I get ideas from there [CTL] and I've tried some of the things that [the CTL director's] tried cause one of the things I've tried is getting the students to mix together and get to know each other…and then some of those students …became study partners…Of course if they find a friend there they'll want to keep coming (lines 631-657)

Another faculty member in the same group agreed saying, "I think, well studies show that if they [students] feel connected in the classroom then the retention is better" (lines 706-707).

Also at College 3, a faculty member in the Less Frequent Interaction group shared the same sentiment that students who feel connected will continue with their studies. However, she admitted that it is hard to determine the impact of CTL workshops on student learning:

> That's the hardest part, figuring out how it [participation in the workshop] does impact student learning. It's great when people are involved and interactive and the more interactive they are in the classroom the more they take away from it. The more they remember, the more comfortable they are at talking about things, they aren't solo individuals in seats not connecting. So, interactive learning helps

> them do things that are a little different and they end up having much greater rapport with each other, they end up interacting outside the class where they'll uh cooperate more and I think that helps them along" (lines 588-594).

Another faculty member in the Less Frequent Interaction group at College 3 spoke about her participation in a CTL Teaching Circle for textbook selection and its impact on her teaching and on student learning:

> We've been looking at a whole variety of textbooks and debating whether to somehow create our own sort of thing, um, but I think we're getting close to feeling that there's actually some books out there we could be happy with. So, I think that's an important decision for the classroom. It's not that the textbook is the class, but for me, when I am excited about a textbook I do a much, much better job of teaching…I think it [the textbook] does have a big impact on how well the students learn and how well the teacher teaches. (lines 613-622)

Like faculty at College 3, faculty at College 2 shared examples of the CTL's impact on their teaching and perceived impact on students' learning. A faculty member in the Frequent Interaction group at College 2 who includes a sample annotated chapter, created by a colleague, in her teaching attributes her access to the chapter to the CTL: "I don't think all those annotated chapters would have gotten spread out without the CTL (lines 489-490). She also attributes her more effective use of cooperative learning techniques to a class she learned about through the CTL. When asked how the class impacted student learning, the faculty member shared that she has "attempted to quantify that and I can't…We did control groups, and I can't say that their writing was better with or without, but, you know, am I happier? I'm happier." (lines 512-517).

Another faculty member in the same group also suggested that the ideas about teaching specific content gained from participating in a CTL program impacts instructors' attitudes in the classroom:

> Any activity that encourages you to meet with fellow faculty and see how they approach certain content and then bring it to their students simply inspires you to be more dynamic and experimental in your own teaching…which I always think [that] holding students' attention and engaging them in a variety of ways is positive…those interactions with other people doing good work in their fields gives you as an instructor a better sense of what's possible. (lines 546-550 and 553-555).

A colleague in the group agreed that participation in CTL programs energizes teaching and learning: "Things are exciting here that happen, that you learn…I go back into a classroom with those things because I'm excited about it and then it just brings a whole other dimension of content to the class" (lines 556-559).

When it comes to measuring the impact on student learning, the faculty member who was inspired to be more dynamic and experimental was unsure if measuring the impact on student learning could be done: "I sense results, but to [determine if] a certain new type of widget that's being stamped out, that I can weigh the bucket at the end of the process? I don't know about that" (lines 551-553).

Another faculty member in the Frequent Interaction group at College 2 commented that the Blackboard assistance provided by the CTL has enhanced her teaching:

> Blackboard assistance had enhanced my teaching because I teach online and hybrid and face-to-face and I use Blackboard for all courses. So I think whether it's fixing something right now that I have to figure out, or how can I do this a little bit more efficiently? And ideas. So, in that respect [the CTL assistance with Blackboard has] enhanced teaching. (lines 520-523)

When asked how the assistance with Blackboard had impacted the learning of her students, she said, "It has helped them learn or be more successful because I've been able to figure out how to use Blackboard in a better way so the students can navigate it, so it's maybe a little more intuitive to them" (lines 525-527). A colleague in the group elaborated on the impact on student learning:

> It clarifies problems, it clarifies miscommunication, definitely 'cause you know how they write things down, but if it's on Blackboard, they can see it. And I think it's helped with that a lot…It's a place where they can go back and look. (lines 531-534)

In the Less Frequent Interaction group at College 2, a faculty member also commented that the CTL Blackboard training she participated in resulted in a better experience for her students:

> I mean, having a good Blackboard site does help students with that piece of technology. I mean, my reading students benefit from having a site available to them that they have to read. They navigate and that is fairly clear, that it's not insane, like I've seen on some Blackboard sites. And I think that's because I have worked with the CTL to do some things on Blackboard that make it make sense to students. (lines 764-768)

Another faculty member in the same group described a CTL program on cooperative learning and attributed important changes to the way he teaches composition to the CTL program:

> I had a very good thing from the CTL when I did learning circle with [a colleague] and we learned, we focused on cooperative learning. It was just something I had done in a really pretty half-assed way for years, but the fact that the CTL kind of provided a structure for us to explore that extensively for months and then practice all different kinds of stuff was actually extremely, it's made massive differences [in] the way they teach composition. (lines 723-727)

Just as with Colleges 2 and 3, faculty at College 1 testified to the impact of the CTL on their teaching and on students' learning. A faculty member in the Frequent Interaction group at College 1 directly connected a CTL program to changes in his teaching:

> I teach psychology and one of the things I did as a result of the Dee Fink work with significant learning was think about what I really want them to get out of the class and what that long-term goal is. And I think one of the things I've done in classes is be more aware of what their majors are and try to have a lot of my examples and…a lot of my comments in class be related to those areas. I have a lot of nursing students, lot of health professions take, uh, my Psych[XXX] Lifespan class. And [I] try to talk about the nurses and teachers, that kind of thing. (lines 358-366)

Another faculty member in the Frequent Interaction group at College 1, who did not have a background in teaching methodology, cited two CTL sessions that impacted her teaching:

> I know the way that I've changed is I've never delivered a classroom assessment technique before I attended the [CTL] class. I use those, not all the time, but at least once or twice a semester. And another thing is through Bloom's Taxonomy and Dee Fink. I mean, I started looking at my objectives and where am I? Am I at knowledge? Am I at evaluation? Am I at? I mean, all those things. Are we testing to that or are objectives following that? I mean, that's been a real eye opener for me. To learn that in the center and that not having teaching methodology in undergrad. (lines 341-349)

A faculty member in the Less Frequent Interaction group at College 1shared that a simple comment she heard in the CTL confirmed for her the efficacy of her teaching practice:

> I was here [in the CTL] and I heard someone talking about having one due date a month and how that was working and I was like, "Okay, now I'm sure that my frequent due dates were the right thing to do." (lines 440-442)

In this case, information heard in the CTL reinforced faculty use of effective teaching strategies. Another faculty member in this same group said her involvement with the CTL has helped her to see the "whole student" which she believes helps students to be more successful:

> I think it [the CTL] has helped me to be a better advisor to my students as far as things that aren't necessarily directly classroom related, but helping them

> [students] to, you know … handle financial aid and things like that. So, we have different departments come into the center [CTL] and tell us about how financial aid works, how Compass works and things like that. And how to go back and help[students] get into the right class so that they're successful. But they're successful whole students as opposed to just in our class. (lines 332-338)

A faculty member at College 1 who had no interaction with the CTL for years said that she used techniques she learned in an early CTL training session in her teaching and she found the techniques helpful:

> Yeah, Classroom Assessment Techniques. I came to a class here [the CTL] on that and [the CTL director] actually taught it, and it was very valuable to me, and I actually used some of the techniques in my classroom and it really helped. (lines 70-72)

Establishing the direct impact on student learning of changes in teaching resulting from interaction with the CTL is more difficult than establishing that changes in teaching resulted from faculty interaction with the CTL. In the discussion with the Frequent Interaction group at College 1, the researcher asked, "How do you think that change in your teaching impacted [students'] learning?" (line 368). A faculty member responded, "You find that out, you let us know. We've been trying how to figure that one out and put it in a self-study for many years" (lines 369-371).

All three directors said that demonstrating the impact of the CTL on student learning is challenging. The director at College 1 noted:

> It is so hard… I thought about this a lot. How do we prove that [what] we do is impacting student learning? The way that we do it is through our faculty's

> feedback about the impact that the courses had for them. And they may talk about maybe their students' success and performance. And how that's changed. But, it's all sort of third party. (lines 530-588).

The director at College 3 also pointed out the difficulty of measuring the CTL's impact on student learning:

> Well you know there's so many variables it's tough. It's hard to know how much of what we've done has had an impact…We've talked about it, we've thought about it…I think there are other things in students' lives besides their faculty member that impact their ability to learn. They've got a lot of outside pressures, economic, social, family. Make a best teacher in the world and they still may not be engaged, because they're not at that place in their lives. I think that's a really tough thing to isolate and determine. But we do follow ups. I ask the faculty in their letter, how perceptions of students change. What will you use from the seminar? And they tell me that and they tell me what they've already used and how their students have been impacted. But it's anecdotal, it's more their impression. (lines 415-432)

The director at College 2 acknowledged that like others she finds it difficult to measure the CTL's impact on student learning: "I'd say we're struggling right along with everybody else. And you know, in terms of assessing impact, it's hard to get a good assessment plan together" (lines441-443).

It's important to note that several faculty in the Infrequent or No Interaction groups, who made use of professional development resources other than the CTL such as discipline-specific conferences, related work experiences, support groups, and

department websites, also described the impact of the resource on their teaching. While *some* of the faculty in the Frequent and Less Frequent Interaction groups did not give detailed descriptions of how participation in CTL programs impacted student learning, *none* of the faculty in the Infrequent or No Interaction groups described in detail their perceived impact of professional development activities on student learning, even when prompted by the researcher to do so.

A faculty member in the Infrequent or No Interaction group at College 1 attributed changes in her student attendance policy to her attendance at a discipline-specific conference for Speech faculty:

> One of the things that I've done is I've moved away from a punitive model of attendance to a reward-based mode of attendance…It actually really revolutionized the way that I could talk about attendance in class and I was really happy about that…I'm involved with this project called "Great Ideas for Teaching Speech." It actually puts out a book every year and a couple other different things about teaching speech specifically…And it was part of a presentation at a conference. (lines 441-460)

However, even when prompted by the researcher for the resulting impact on student learning, the faculty member only spoke very generally: "I think the idea that [students] were getting something as opposed to having something taken away. I don't know why, it's just something that really seemed to resonate with them" (lines 521-522).

Another faculty member in the same group uses her full-time job in business as a source of professional development. She built on the comments about attendance made

by her fellow group member, attributing her attendance policy to her work experiences in the business environment:

> I also do a similar rewards system for attendance…I try to keep them interested. Business 101 is kind of easy because I try to say that I'm pretty much running this classroom as if this was a business and I'm your boss, you're my employees, so, you want to come to class on time, because you want to get into that practice, you don't want to be late for that reason. (lines 537-542)

She did not connect the attendance policy to student learning.

As with the faculty in the Infrequent or No Interaction group at College 1, the faculty in the Infrequent or No Interaction group at College 2 connected changes in their teaching to their source for professional development, but did not offer specifics about the resulting perceived impact on student learning. A faculty member in the Infrequent or No Interaction group at College 2 utilizes a support group of professional women for professional development: "I'm part of a group of five women who are professionals…We meet once a month and we have a problem solving forum" (lines 422-426). She prefers getting teaching ideas such as assignments and ways to address student behavior from this group rather than from colleagues in her department at College 2 because "there's too much paranoia about 'will you judge the way I do things?', and 'will you then try to make us all the same?'...So I go outside of the institution" (lines 525-533). When directly asked how the ideas from the informal network have impacted student learning, she commented that "there are so many variables, I guess I trust…that when I'm being my best it has an effect on them [students]" (lines 577-580).

Another faculty member in the same group participates in professional development provided through a website created by her department in which faculty "exchange strategies that we use in the classroom" (line 464). In her first few semesters of teaching, she used sample quizzes from the website: "So, at first I was using sample quizzes until I became confident enough and I felt able enough to begin to write my own quiz instruments" (lines 500-502). Despite explicit prompting by the researcher to describe how utilization of the website impacts students' learning, the faculty member's comments were limited to how her teaching was impacted.

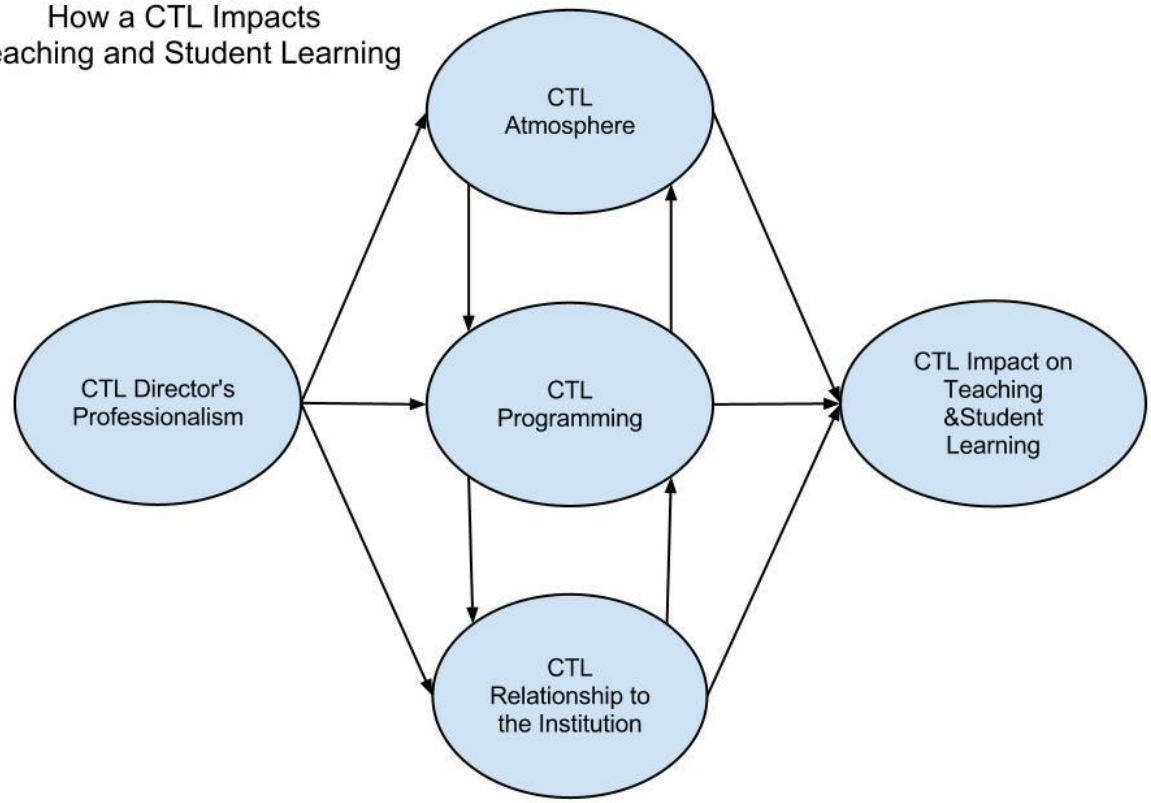
The lack of detailed examples of how professional development resources outside the institution impact student learning given by faculty in the Infrequent or No Interaction groups is in contrast to the specific examples of perceived impact on student learning given by some faculty in the Frequent and Less Frequent Interaction groups. Examples of *measurable* impact of professional development on student learning were not given by faculty in any of the interaction groups at any of the colleges.

## Relationships Between Categories

Relationships exist between the five categories detailed in the previous section. See Figure 1. This section describes the relationship of each category with each of the other categories and identifies the central thematic category, a core category that represents the main theme (Strauss & Corbin, 1998), which evolved during analysis of the data.

The Category of CTL Impact on Teaching and Learning is directly dependent on the categories of CTL Atmosphere, CTL Relationship to the Institution, CTL Programming and indirectly dependent on CTL Director's Professionalism. It is only as a

Figure 1
How a CTL Impacts
Teaching and Student Learning




result of the properties of CTL Atmosphere, CTL Relationship to the Institution, and CTL Programming that the CTL is able to impact teaching in a way faculty perceive as positively impacting student learning. For example, one subcategory of CTL Atmosphere is Physical Space and a property of that subcategory is equipment functionality. When the available technology in the CTL is working properly, faculty are able to participate in training on the use of learning management systems such as Blackboard, and then incorporate the web-based platforms into their teaching. This makes online discussions available to students outside of class and facilitates student access to course materials. When technology is unavailable or not working, the training doesn't take place and the changes to teaching are not made. CTL Impact on Teaching and Learning is also

dependent on CTL Programming. For example, when faculty influence program topics and the programs are considered useful by faculty, they are more likely to attend. CTL Impact on Teaching and Learning results from faculty participation in programming. CTL Impact on Teaching and Learning is also directly dependent on CTL Relationship to the Institution. For instance, when departments have a strong connection to the CTL, programs tailored to department needs result in changes to teaching specific to that discipline. A relationship between the CTL Director's Professionalism and CTL Impact on Teaching and Learning also exists, but is less direct. As described in the discussion of the core category later in this section, the director's professionalism directly impacts the atmosphere, programming, and institutional relationships of the CTL, and CTL Impact on Teaching and Student Learning directly results from those three categories.

The category of CTL Atmosphere is also related to every other category. As indicated above, it provides for CTL Impact on Teaching and Student Learning. CTL Atmosphere is also related to the CTL Director's Professionalism because the CTL Director creates the CTL Atmosphere. CTL Atmosphere is also influenced by CTL Relationship to the Institution. For example, Budget Considerations is a subcategory of CTL Relationship to the Institution. When the institution has limited funds, money may not be available to provide furnishings in the CTL that make it an environment conducive to work. Lastly, CTL Atmosphere impacts CTL Programming and vice versa. A subcategory of CTL Atmosphere is Emotional Support which includes the property of Interaction with Colleagues. When the atmosphere facilitates positive interaction with colleagues, faculty are more likely to make time to attend CTL Programming. The other way around is also true; CTL Programming impacts CTL Atmosphere. For example,

when faculty serve as presenters, an atmosphere of openness and respect for multiple teaching approaches is accomplished.

The relationship of CTL Programming to each of the other categories is considerable. As with CTL Atmosphere, CTL Programming is created by the CTL Director's Professionalism. As discussed in the previous paragraph, CTL Programming is facilitated by CTL Atmosphere, and impacts CTL Atmosphere as well. The relationship between CTL Programming and CTL Relationship to the Institution is mutually beneficial. For example, administrators' initiatives are advanced by CTL Programming and resources are allocated by administration to the CTL. Most importantly, CTL Programming generates changes in teaching strategies, key to CTL Impact on Teaching and Student Learning.

To some extent the relationship between CTL Relationship to the Institution and the other categories has been established in the preceding paragraphs; administrative support and budget considerations provide for or limit CTL Programming and CTL Atmosphere. Strong relationships between the CTL and departments promote department-specific teaching changes which are part of CTL Impact on Teaching and Student Learning. The relationship between CTL Director's Professionalism and CTL Relationship to the Institution is critical; the relationship between two is dependent on the CTL Director's Professionalism.

The relationship of the CTL Director's Professionalism to the other categories is overarching. The nature of facilities, acceptance by senior and mid-level administrators, the general atmosphere in the Center, and the effectiveness with which programs are offered are all reflections of the responsiveness and demeanor of the director. Only when

a director is welcoming of and responsive to faculty suggestions and cultivates effective relationships with others on campus can faculty influence the activities of the CTL and value it. Thus, CTL Director's Professionalism emerged as the core category. The director must be a person who sees, understands, and can negotiate "the big picture" (line 807, College 1 Frequent Interaction). As one participant in the study put it:

> The infrastructure [of the CTL] is really good. So it has to [have] somebody who says, "I listen to faculty, I listen to staff, I have the supportive administrators."
>
> And, you have to be able to negotiate all of those parameters. (lines 803-804)

In every faculty focus group discussion, without specific questions to prompt the discussion, the importance of the director's professionalism was of primary emphasis. It is not possible for the CTL to impact teaching and learning without a director with the desired professionalism to meet the needs of faculty and the institution. The director must astutely mange administrative support, or lack thereof, to ensure the CTL has an important place within the institution. Without support from the administration, the center isn't funded and doesn't exist. Therefore, the director must interact effectively with administration, without alienating faculty, to ensure resources are provided and faculty utilize what the CTL has to offer.

The overwhelming majority of comments about the CTL made by faculty at Colleges 1 and 3 were positive. Faculty at College 2 also made many positive comments about the CTL, but a considerable number of negative comments were voiced at College 2. Comments indicating resentment of funding for the CTL, dissatisfaction with the administration's involvement with the CTL, lack of emotional support from the CTL, inability of faculty to influence programming, uncertainty about the usefulness of the

CTL, and lack of responsiveness on the part of the director were made at College 2, and only at College 2. At least one faculty member in each of the three levels of interaction at College 2 made a negative comment about one or more of these areas. Of the negative comments at College 2, observations expressing dissatisfaction with the director's lack of responsiveness were most prevalent. In fact, while praise for the director was a central theme at Colleges 1 and 3, at College 2 no faculty member mentioned receiving emotional support from the director and only a few faculty in the frequent interaction group commented positively on the director's nature. The fact that the vast majority of negative comments came from faculty at College 2, and all of the comments about lack of responsiveness on the part of the director came from College 2, supports the idea that the director's professionalism, especially responsiveness to others, is central to a CTL that is valued by both faculty and administration so that teaching and learning are positively impacted. Figure 1 illustrates the relationship between this core category and others that emerged as critical to successful CTL functioning.

Other categories were considered in the process of choosing the core category. Prior to data analysis, it was assumed that the core category would be "Faculty Influence on CTL Programming," as was suggested by Hypothesis 1. But as analysis of the focus group interview data progressed, it became evident that the categories of CTL Impact on Teaching and Student Learning, and CTL Programming appeared more frequently in the data and should be considered in the selection of a core category. However, since CTL Atmosphere, CTL Programming, and CTL Relationship to the Institution are all are directly dependent on CTL Director's Professionalism and CTL Impact on Teaching and Student Learning is dependent on CTL Director's Professionalism through those

categories, it became clear that the four other categories are all largely dependent on the CTL Director's Professionalism.

## Summary of Findings

Analysis of data from focus group interviews conducted at three colleges with established Centers for Teaching and Learning identified five major themes that influence Center success; CTL Director's Professionalism, CTL Atmosphere, CTL Programming, CTL Relationship to the Institution, and CTL Impact on Teaching and Student Learning. The research revealed that among these themes, the most critical ingredient for a Center to function effectively and meet the needs of its faculty stakeholders is an inspired, engaged, and energetic director. It was clear from faculty responses from these three community colleges that a Center with limited resources and lukewarm support from administration could succeed in the hands of a capable director, but a well-funded and well equipped center with strong administrative support and an array of programming would struggle without this inspired leadership. Chapter Five analyzes these findings and recommends directions for further research, based upon questions raised by this study.

# Chapter Five: Discussion and Recommendations for Practice and Research

## Introduction

Why should a portion of a college's scarce resources be allocated to the funding of a Center for Teaching and Learning? The results of this study demonstrate that CTLs are an effective avenue to more active engagement of both faculty and students, a demand being placed on colleges by accrediting bodies, state and federal governments, and foundations dedicated to improving higher education in the United States. Evidence from the study supports that the emphasis placed on student-centered teaching approaches by Centers for Teaching and Learning facilitates changes in teaching that faculty perceive as positively impacting student learning. There is further evidence that these centers serve as catalysts for faculty exchange and collaboration, and as key support units for a variety of other institutional initiatives.

This study explored faculty members' perceptions of community college Centers for Teaching and Learning, the impact of CTL participation on faculty teaching behavior, and the implications for CTL directors' programming decisions. The results of the study indicate that community college faculty members consistently value the CTL's contribution to the institution and to their professional development, and that their perceptions of CTLs are inextricably tied to the professionalism of the Center's director. The extent to which a CTL impacts teaching behavior is dependent on the director's ability to establish effective working relationships with stakeholders throughout the college. Consequently, the results of this study are useful to search committees responsible for the selection of CTL directors, CTL directors as they make decisions about programming, administrators as they decide how best to allocate institutional

resources, and to faculty interested in benefiting from and sustaining a Center for Teaching and Learning.

## How CTLs Facilitate a Shift to a Student-Centered Paradigm

The results of this research contribute to understanding how CTLs facilitate the movement from faculty use of instructor-centered teaching methods to the use of student-centered methods. The two working hypotheses that guided the study are supported by the findings and address how CTLs facilitate changes in approaches to teaching and learning. However, the results indicate that a revision of the first hypothesis is needed.

### *Hypothesis One*

Hypothesis One stated: CTLs that involve faculty at all levels of CTL programming decisions foster changes in approaches to teaching and learning that faculty perceive as positively impacting student learning. This hypothesis was sustained by the analysis of participants' comments, but a factor more critical than faculty involvement emerged as the principal determinant of fostering changes in pedagogy; the professionalism of the Center's director.

#### *Significance of the Director's Professionalism*

Many faculty members in this study attributed changes to their teaching, and consequent positive impact on student learning, to participation in CTL programming. Most faculty also indicated that they are involved at all levels of CTL programming decisions; faculty suggest topics and scheduling paths, and often determine the specific content of programs, especially when serving as presenters. This supports the first hypothesis, but based on the results of this study, involvement of faculty in CTL programming decisions is largely dependent on the responsiveness and demeanor of the

CTL director. Thus, the overriding factor is the director's professionalism. Faculty at College 2, for example, where the director was less engaged and less engaging, believed that the faculty advisory committee was largely window dressing, and viewed the director as often ignoring programming suggestions.

*Revised Hypothesis One*

To be more accurate, a revision of the first hypothesis is needed to incorporate the major role the director's professionalism plays in faculty members' involvement in CTL programming decisions. The following Revised Hypothesis 1 more accurately reflects the role faculty involvement in CTL programming decisions contributes to changes in teaching approaches that faculty perceive as positively impacting student learning:

> CTLs with directors who have positive demeanors and are responsive to the ideas and requests of faculty and other stakeholders at the college foster changes in approaches to teaching and learning that faculty perceive as positively impacting student learning.

Faculty involvement in CTL programming decisions is dependent on the director's demeanor and level of responsiveness. Even when faculty are anxious to play an active role in CTL activities, it takes a positive director who seeks input from faculty, administration and others, and who responds effectively to that input to have a CTL where faculty are involved in creating CTL programming that is widely embraced.

*The Web of Inclusion*

This finding is consistent with and supportive of Helgesen's (1995) Web of Inclusion theory. Helgesen's theory asserts that effective leaders put themselves in the center of the organization and involve people at all levels in the organization in decision

making so that tasks and functions of employees are integrated and a sense of connectedness is created. Helgesen's theory is supported by this study's finding that directors of Centers for Teaching and Learning who are responsive, engaging, and personally interested in faculty members' needs most effectively impact teaching in a way that faculty perceive as positively impacting student learning. These leaders put themselves at the center of the college and reach out and respond to faculty, administration, and other institutional stakeholders. By involving faculty, administration, and others in decision making related to the CTL and in CTL programs, a director establishes and solidifies the CTL's importance within the college. With this importance comes sufficient funding for the CTL, considerable faculty participation in CTL programming, and changes to teaching and learning; the college moves toward a student-centered paradigm that faculty perceive as positively impacting student learning.

In addition to reaching out to all stakeholders, the "web of inclusion" (Helgesen, 1995) structure calls for leaders, regardless of the position held within the organization, to establish nurturing relationships that focus on stakeholders' daily work. This is supported by the study's findings that faculty desire CTL programs, atmosphere, and opportunities to connect that will help them with their work in the classroom and provide the emotional support they desire from the Center. Another essential part of the "web of inclusion" structure is the continual integration of learning into daily work. By definition, the very purpose of a Center for Teaching and Learning is to promote, facilitate, and honor excellence in teaching and learning, which is accomplished in part by supporting faculty as they integrate concepts and strategies they have learned through interaction with the CTL into their teaching.

Findings related to Hypothesis One suggest that search committees for directors of Centers for Teaching and Learning should look for an individual who is not only an excellent organizer and coordinator, but has a positive, welcoming, non-judgmental demeanor that is responsive to the ideas and requests of others. Directors who only have strong organizational skills may be able to construct the web, but it will take a person with interpersonal strengths to build in the element of "inclusion" (Helgesen, 1995) needed to operate a Center that is valued by both faculty and administration. Faculty in the study repeatedly spoke about the value of the Centers in establishing connection, bringing colleagues together across disciplines, and generating cross fertilization of ideas – all critical ingredients in creating an atmosphere of inclusion.

The demeanor of the director also proved to be critical in managing administrative support. Without value to the administration, the Center isn't sufficiently funded, and without value to faculty, use of the Center is limited and the impact of the Center on teaching and learning is diminished. Having a director with a positive demeanor who is responsive to the ideas and requests of others is especially critical at institutions where there is a culture of mistrust between faculty and administration. Faculty at these institutions may associate the CTL with administration and resist involvement with the Center. A director with a positive demeanor who is responsive to the ideas of faculty may better be able to create a sense of ownership among faculty that overcomes other areas of mistrust. Further discussion of faculty resistance to involvement with the CTL is included in the section of this chapter devoted to Research Question 5.

## *Hypothesis Two*

The findings of this study also support Hypothesis Two: CTLs that provide programming options that are aligned to progressive stages of attitudinal change and related change processes foster changes in approaches to teaching and learning that faculty perceive as positively impacting instructional strategies and student learning.

### *Supporting All Faculty*

During the focus group discussions, faculty confirmed that successful CTLs offer a wide variety of topics and that because of this the CTL has something for everyone. Further, faculty expressly said that the CTL has programs that appeal to faculty who primarily rely on lecture as a teaching strategy. The CTL directors indicated that they deliberatively offer a variety of programs to attract participation from faculty at all stages in the attitudinal change process, from instructor-centered to student-centered approaches to teaching. Since many faculty members in this study attributed changes to their teaching, which they believed positively impacted student learning, to participation in CTL programming, and the CTLs in this study offer programming options that can be aligned to progressive stages of attitudinal change and related change processes, the second hypothesis is supported.

### *Aligning CTL Programming with Stages of Change*

According to Valuation Theory (Hermans, 1987b), as the "self-as-knower" a person selects, interprets, and organizes experiences which results in the continuous appropriation or dismissal of perspectives. The individual may choose to modify, substitute, eliminate, or supplement current personal valuations while working through the change process in stages: Precontemplation, Contemplation, Preparation, Action and

Maintenance (Prochaska & DiClemente, 1983; Prochaska et al., 2001; Weatherbee et al., 2009). Providing individuals with experiences that expose them to new ideas gives them an opportunity to bring personal valuations to a conscious level and consider actively new institutional values (Weatherbee et al.). Organizations can facilitate individuals' progression through these stages through five change processes: consciousness raising, environmental reevaluation, self-reevaluation, self-liberation, and helping relationships (Weatherbee et al.).

This research illustrates how the efforts of Centers for Teaching and Learning to support all faculty, as discussed in the previous section, regardless of their position on the continuum of instructor-centered to student-centered approach to teaching, effectively use these change processes, albeit unknowingly, to facilitate faculty members' progression through the stages of Precontemplation, Contemplation, Preparation, Action and Maintenance in their movement from an instructor-centered approach to teaching to a student-centered approach. As increasing numbers of faculty members move through the stages, organizational change occurs (Weatherbee et al., 2009). The college culture is changed from instructor-centered to student-centered.

Table 4 illustrates Hypothesis 2 by aligning examples of CTL programming with progressive stages of change and change processes, as outlined by Weatherbee et al. (2009). It is important to note that CTL Programming associated with a specific Stage of Change and related Change Processes may also foster change in faculty at other stages of change. For example, faculty in the Action and Maintenance stages who participate in a Service-Learning Cohort which aligns with those stages, may also participate in a one-time session on disruptive students that primarily aligns with the Precontemplative stage.

Table 4

| Fostering Changes in Approaches to Teaching and Learning Through Alignment of CTL Programming with Progressive Stages of Attitudinal Change and Related Change Processes (Weatherbee et al., 2009) | | | |
|---|---|---|---|
| Stage | Change Process(es) | Process Description | CTL Programming Examples |
| Precontemplation | Consciousness Raising | Awareness of issue and potential solutions | One-time sessions on cheating, disruptive students, academic freedom, classroom assessment techniques, etc. |
| | Environmental Reevaluation | Understanding the positive impact of change on work and social environments | Presentations by colleagues on teaching-related topics, CTL sponsored celebrations of faculty, newsletters highlighting faculty achievements, etc. |
| Contemplation | Self-reevaluation | Self-change (understanding necessity for reevaluation to complement change) | Training sessions on how to use a course management system, student response systems (clickers), active learning, etc. |
| Preparation | Self-liberation | Commitment to success through change | In-depth CTL courses on how to teach online, implement Service Learning, incorporate cooperative learning, redesign courses for significant learning, etc |
| Action | Helping Relationships | Facilitating change through social support | Groups of faculty that meet regularly through CTL programming such as Learning Circles on specific topics, New Faculty Orientation, Service Learning Cohorts, etc. |
| Maintenance | | | |

The opposite does not appear to be true, however. Faculty in preceding stages of change are unlikely to participate in and be impacted by programming aligned with later stages of change. For example, it is unlikely that faculty in the Precontemplation and Contemplation stages would participate in a Service-Learning Cohort because the Service-Learning teaching and learning technique is a student-centered technique that requires considerable time and effort to implement. It is likely that only faculty with a strong commitment to the student-centered approach, which faculty in the Precontemplation and Contemplation stages would not yet have, would be attracted to the Service-Learning as a teaching technique. Further discussion of Hypothesis Two is included in the section of this chapter devoted to Research Question Three.

## Discussion of Research Questions

Five questions guided this research:

1. In what ways are faculty involved in the CTLs' offerings such as face-to-face stand alone events, cohort groups, individual consultations, etc.?
2. How has faculty involvement with CTLs impacted teaching strategies?
3. Are there changes in teaching strategies and behavior resulting from participation in CTL programs and services that indicate faculty are making changes that are consistent with modern organizational change theory?
4. To what extent and in what ways such as suggesting topics, delivery formats, and presenters do faculty and administrators influence the activities of the centers?
5. Why do some faculty members have no interaction with the CTL?

Each of the questions is addressed separately, with discussion about how it is informed by the findings of this research.

*Research Question One*

In what ways are faculty involved in the CTLs' offerings such as face-to-face stand alone events, cohort groups, individual consultations, etc.? Based on the interviews with the faculty and directors in this study, many faculty frequently participate in face-to-face single session, stand-alone programs such as sessions on classroom assessment techniques, cooperative learning, and technology training. Additionally, some faculty participate in face-to-face programs that have multiple sessions such as new faculty orientations and learning circles. To a lesser extent, faculty participate in programming delivered online such as courses on how to teach online. Formal individual consultations were not mentioned; however, informal individual discussions with CTL directors were common. Faculty members also participate in face-to-face programs on non-teaching related topics such as book discussions.

*Research Question Two*

How has faculty involvement with CTLs impacted teaching strategies? Repeatedly, faculty stated that their involvement with the CTL led to changes in their teaching. For instance, as a result of involvement with the CTL, faculty have incorporated student-to-student learning into their teaching, including the use of cooperative learning techniques. Faculty also frequently mentioned their utilization of Classroom Assessment Techniques (CATs) learned in the CTL. Through the use of CATs, faculty discover the extent to which students understand concepts and identify misconceptions. Faculty use the information to make changes to instruction in an attempt to increase student learning. Faculty also shared that after involvement with the CTL they more effectively relate course concepts to students' interests such as their majors, and plan ways for students to

interact with course content that fit with their preferred learning styles. Additionally, as a result of CTL participation, faculty indicated that they strive to provide learning experiences that require students to think about course concepts as analysis and synthesis, higher levels on Bloom's Taxonomy. Changes to teaching strategies in online courses were also mentioned as resulting from involvement with the CTL. Faculty changed the organization of their online courses, resulting in increased navigability and fewer problems for students. Faculty also increased the frequency of assessment in online courses as a result of participation in CTL programs. More generally, faculty shared that the excitement about teaching generated through interaction with colleagues in the CTL transferred to their classrooms, making their classes more engaging for students.

*Research Question Three*

Are there changes in teaching strategies and behavior resulting from participation in CTL programs and services that indicate faculty are making changes that are consistent with modern organizational change theory? Findings related to this question were discussed at some length as Hypothesis 2 was reviewed. As discussed, the changes in teaching behavior that faculty in this study attributed to involvement with the CTL are consistent with Prochaska's (2001) Stages of Change Theory. In this section of the chapter, comments made by one of the faculty participants are utilized to illustrate further how changes in teaching resulting from faculty participation in CTL programs are consistent with the Stages of Change model of organizational change.

Several comments made by a participant in the Frequent Interaction group at College 3 reveal her progression from using instructor-centered to student-centered approaches to teaching as a result of involvement with the CTL. The faculty member

began her teaching career at a university where she exclusively used the lecture method in her teaching. At that time she considered no other approach and, thus, was at the Precontemplation stage in her progression to student-centered approaches to teaching. When she left the university and began work at the community college, she attended a required twelve week CTL program for new faculty. At the beginning of the twelve week program, she was receptive to the active learning techniques presented to her. This demonstrates her progression to the Contemplation stage. Throughout the twelve week program, she thought of ways to incorporate the ideas into her teaching which shows progression to the Preparation stage. In that first semester of teaching at the community college, she enthusiastically incorporated the active learning techniques shared in the CTL program into her teaching, "throwing stuff in left and right." She had reached the Action stage in her progression from an instructor-centered to a student-centered approach to teaching. She realized she "went a little overboard the first time around" and now utilizes a "mix of lecture and active learning" demonstrating that she has adopted a student-centered approach to teaching. Throughout her 11 years at the community college, she has continuously participated in CTL programs ranging from a one-time workshop about underprepared students to a semester-long cohort group discussing inquiry-based learning, showing that she is in the Maintenance stage. She takes a leadership role in the CTL by presenting programs, which helps to facilitate other faculty members' progression through the stages. As more and more faculty progress through the stages and move toward a student-centered approach to teaching, organizational change can result.

*Research Question Four*

To what extent and in what ways such as suggesting topics, delivery formats and presenters, do faculty and administrators influence the activities of the centers? Faculty at all three colleges influence the activities of the CTL in many ways including suggesting topics and delivery formats, and serving as presenters. Their influence is accomplished through three formal avenues: serving on CTL advisory boards, responding to surveys, and presenting CTL programs. Only when the director of the CTL is responsive to faculty ideas and requests do faculty considerably influence the activities of the CTL.

Administrators also influence the activities of CTLs, for better or worse. This is primarily accomplished through the allocation of resources to CTLs and through communicating to faculty administration's view of the CTL as a worthwhile endeavor. Administrators serve as presenters for some CTL programs and influence faculty participation in CTL programs through acceptance of participation as a legitimate use of faculty time. Administrative support of the Center can facilitate the Center's fulfillment of its mission, but it can also have a negative effect. When faculty perceive that administration is thrusting the CTL upon them or see the CTL as a personal jewel in their administrative crown, some faculty decline to use the CTL. Another way administration can interfere with the work of the CTL is to assign the director demanding administrative tasks related to college-wide initiatives that distract the director from the primary work of the CTL. Administrators can best support the CTL when they fund the Center sufficiently, take a somewhat hands-off approach that encourages faculty to take ownership of the CTL, recognize the value of the CTL and work with the director to advance college-wide initiatives through the Center.

*Research Question Five*

Why do some faculty members have no interaction with the CTL? Based on this research, the primary reason is logistical. Some faculty are simply too busy or CTL programs are not offered at a time and location that fits with their personal schedules. This finding suggests that participation might be increased considerably if directors sought to find times more conducive to faculty schedules, or repeated sessions at times that accommodated those who have conflicts.

To a lesser extent, some faculty do not participate in CTL programming because they distrust administration and associate the CTL with administration. At institutions where there is a culture of faculty distrust of administration, the process of faculty influence on CTL activities that leads to CTL programs of value to faculty is disrupted. However, a director who is friendly, welcoming, responsive and has working relationships both with upper administration and with the faculty, despite the institutional culture, mitigates the impact of the culture of distrust and facilitates faculty input into decisions about CTL programming. This positively impacts the extent to which diverse programming is offered so that the CTL has something of value to offer all faculty, no matter their approach to instruction, and it helps to reduce the number of faculty who make no use of the CTL.

There was also some indication that faculty egos can get in the way of willingness to use the CTL, as in the case of the faculty member who said that he had a PhD, had been teaching for 35 years and wondered, “What can the Center do for me?” (lines 119-123). Directors might respond by inviting these naysayers to serve on advisory

committees, where they see the variety of offerings, or by approaching them individually with a request for a topic the faculty member would find of interest.

Some faculty do not participate in CTL programming because they choose to participate in professional development provided by entities outside of the college, rather than participating in CTL programs. It was of interest to the researcher that those who had participated in extra-institutional professional development had a more difficult time articulating how it contributed to improved teaching and learning. This may suggest that these sessions or experiences are more generic in nature, and not as specifically focused as a CTL session on "utilizing active learning strategies in the classroom" might be. Academic leaders who are making decisions about committing funding to professional development might find additional research in this area to be useful.

It's important to note that it was quite difficult to recruit faculty to participate in the study who did not use the CTL. When contacted in person, several of these faculty expressed suspicion and irritation that they had been singled out as "non-users," even though this was not the case. The lesson to be learned from this experience is that when conducting research that evaluates the value of being engaged in a certain activity, those who do not engage in that activity may be hesitant to participate, and more difficult to recruit. The researcher may have to make greater effort and demonstrate greater creativity when recruiting a representative sample of this group.

### Comparisons between Colleges and Level of Interaction Groups

Comments leading to the categories and subcategories identified in this study were brought up by faculty in all three levels of interaction and at all three colleges. Faculty want a director with a positive demeanor who responds to their ideas and

requests, useful programs, an emotionally supportive atmosphere, and a functional physical space where they can interact with colleagues. Further, faculty commented on the relationship of the CTL to the institution and its impact on teaching. These themes remained consistent at all three colleges and across all three levels of interaction, no matter the expressed level of satisfaction with the CTL by faculty.

The overwhelming majority of faculty in this study, across all three colleges, expressed positive perceptions of the CTLs. Expressions of dissatisfaction with the CTL largely came from a single institution, College 2, with comments expressing dissatisfaction being made by faculty in the Less Frequent and Infrequent or No Interaction groups at that institution. It is useful to examine what differentiated this Center from the other two.

The primary difference between College 2 and the other colleges was that the faculty participants did not find the director as personally engaging, interested in their needs and concerns, and open to their input as did those at the other colleges. This was clearly reflected in the faculty members' negative comments, which largely focused on the director's lack of responsiveness to faculty ideas and requests. Only at this institution did some faculty question the usefulness of the CTL and allocation of resources to it. As discussed in Chapter Four, for the CTL to successfully impact teaching and student learning, the director must respond to faculty ideas and requests.

Another difference between College 2 and the other colleges mentioned by those interviewed included their belief that the Center at College 2 was developed as a personal show piece by the top administrator, and that this function may have been viewed by administration as being more important than how well it served faculty and student

learning. This belief contributed to a sense that resources were often spent on the Center that could have been better used elsewhere, and that the college did not always get a good return on these investments. A third observation by College 2 participants was that the Center Director's time was divided among too many other areas of responsibility, limiting the time she could spend on Center development and activities. Each of these concerns suggests an area where further inquiry might be useful.

It is noteworthy that in the case of each college, Center directors and faculty perceived that changes in teaching resulting from participation in CTL programming increased student learning, but had not given serious thought to how the effectiveness of faculty development focusing on improvements in teaching and student learning could be assessed. With the growing emphasis that is being placed on assessment in all areas of education, Centers for Teaching and Learning will remain vulnerable to budget cuts as long as they are unable to demonstrate in other than an anecdotal way how their activity contributes to improved student success. Future research should look for models of successful assessment to strengthen the position of Centers as they justify their continuing value.

## Implications for Community Colleges

It became clear as this study progressed that Centers for Teaching and Learning may be greatly undervalued resources for community colleges. As the researcher searched for locations to examine well-developed, stand-alone centers, she found that they were few and far between. Yet, the findings indicate that they can be a relatively low cost, but highly effective tool for institutional transformation when properly staffed and creatively programmed. Community colleges without a center should seriously consider

the value of adding a well-directed center to the campus for the potential influence it can have on transforming teaching and learning.

The results of this research inform the following suggestions for community college Centers for Teaching and Learning, and may be useful to directors, administrators and faculty.

*Recommendations for Community College CTL Directors*

1. Work to place the CTL at the center of the institution by seeking out and following through on suggestions for program topics and scheduling paths from faculty, administration, and other stakeholders.
2. Keep abreast of emerging and current campus-wide initiatives and offer related programs to facilitate an essential role for the CTL within the institution.
3. Invite faculty to serve as presenters for CTL programs and establish a CTL advisory board and procedure for surveying faculty to inform programming decisions.
4. Work with Division Chairs to form professional development support alliances and offer discipline-specific programs.
5. Consider logistics such as time of day and location when planning programs in an effort to schedule programs at a convenient time and location for the intended audience. Also, utilize an online course management system to offer programming that isn't limited to a time of day and location. Recording and video streaming programs should also be considered.
6. Focus on making all programs useful to the faculty who elected to participate by explicitly making connections to the classroom and students.

7. Ensure that faculty at all stages in the process of moving from an instructor-centered paradigm to a student-centered paradigm find programs they would like to participate in by offering programs on a variety of topics and of varying duration ranging from one-time hour-long sessions to year-long cohort groups that meet regularly.
8. Create an atmosphere that provides emotional support and collegiality. Make the CTL a place of refuge and a place to seek collaborative relationships with colleagues.
9. Always have an open door, no matter how busy you are.
10. Respect faculty members' experience in the classroom by helping them solve their self-identified teaching problems as opposed to telling faculty how to teach.
11. Ask participants to complete program evaluations that include questions about what they learned and how they will use the information. Use these evaluations for program development, and inform participants of these changes, completing the feedback loop.
12. Encourage faculty who elect to make changes in their teaching to design and implement a way to measure how student learning is impacted. Specifically, provide programming that addresses a variety of ways to assess changes in student learning as a result of changes in pedagogy.
13. Design opportunities to showcase faculty use of student-centered approaches to teaching and learning that they perceive as positively impacting student learning.

*Recommendations for Community College Administrators*

1. Hire the right person to serve as CTL Director by communicating to the Search Committee the importance of finding a person who is positive, welcoming, non-judgmental and who has a track record of responding to requests.
2. Establish and annually fund a Center for Teaching and Learning at a level that is sufficient to facilitate the shift from an instructor-centered paradigm to a student-centered paradigm to increase student learning and persistence.
3. Judiciously leverage the CTL's credibility with faculty to facilitate related college-wide initiatives without diverting substantial CTL resources such as the director's time to the college-wide initiative itself.
4. Build an overall institutional culture of collaboration between administration and faculty to facilitate faculty service on the CTL advisory board and faculty use of the CTL.
5. Conduct a cost-benefit analysis that evaluates the relative return in investment of campus-provided professional development, and off-campus workshops, seminars and conferences.

*Recommendations for Community College Faculty*

1. Ensure the CTL meets the needs of faculty by making it your CTL; serve on the advisory board and present CTL programs.
2. Participate in CTL programs to ensure the CTL continues to exist as a resource for faculty and as a center for teaching and learning on the campus.
3. Recommend the CTL to colleagues as a viable alternative to more costly off-campus workshops and seminars.

4. Advocate for the CTL through faculty organizations such as the faculty senate or unions.

## Recommendations for Future Research

This study found that faculty participation in CTL programs facilitates changes in teaching that faculty perceive as positively impacting student learning. This finding supports the research, largely from four year institutions outside the United States, that professional development has the ability to impact teaching in higher education, and addresses a gap in the literature by demonstrating the efficacy of professional development at two year institutions where teaching is the primary focus. More specifically, many of the faculty members described how participation in short term professional development activities delivered through the CTL empowered them to make changes to their teaching. This supports the conclusion by Ho et al. (2001) that even short professional development programs may lead to improved teaching, and is in contrast to the suggestion by Postareff et al. (2007) that short courses in pedagogical training may actually undermine teachers' confidence in their ability to teach.

In addition to the CTLs' impact on teaching and learning, the faculty in this study appreciated the collegiality they encountered as they participated in CTL programs. They especially enjoyed interacting with faculty from other departments. This supports Rust's (2000) finding that participation in professional development leads to increased enjoyment of work.

This research gives specific examples of the impact of CTLs on the teaching methods of community college faculty, as reported by faculty who have participated in CTL programming. It provides insight into how CTLs facilitate faculty adoption of

student-centered approaches to teaching that faculty perceive as positively impacting student learning. Future research is needed to substantiate the findings and explore questions arising out of the research:

- Longitudinal studies are needed that follow faculty identified as having an instructor-centered approach to teaching from both community colleges with a Center and community colleges without a Center to determine the extent to which the faculty at each adopt a more student-centered approach to teaching over time and the CTL's role in facilitating the change.
- While the faculty perceptions of increased student learning reported in this study provide some support for the assertion that CTLs increase student learning, further research is needed to identify models of successful assessment of CTLs so that a direct link is established between faculty participation in CTL programming and increased student learning.
- Studies are needed that are devoted to hearing directly from faculty who have not made use of available CTL programming to explore further their reasons for not participating.
- Research is needed to compare the impact on teaching and student learning resulting from faculty participation in Center for Teaching and Learning programming with the impact on teaching and student learning resulting from faculty use of other sources of professional development.
- To what extent and how should Administration be involved with a college's CTL so that student learning is maximized and the institution gets the highest possible

return on its investment in a Center? Research is needed to answer this question so that best practices for Administrative involvement with CTLs are established.

- Research into CTL directors' areas of responsibility is needed to determine the optimal ratio of responsibilities directly related to the CTL with responsibilities related to larger college initiatives so that impact on student learning is best achieved.

## Summary and Limitations

In this qualitative study, five major categories emerged as a result of axial coding: CTL Director's Professionalism, CTL Atmosphere, CTL Relationship to the Institution, CTL Programming, and CTL Impact on Teaching and Perceived Impact on Student Learning. The categories were related to each other and through selective coding, a theoretical scheme emerged: the director's professionalism determines the CTL's atmosphere, programming, and relationship to the institution. Through these three avenues, the director facilitates the CTL's impact on teaching and student learning.

The findings demonstrate how Stages of Change Theory (Prochaska et al. (2001) can be used to bring about a change in culture from a teacher-centered paradigm to a learner-centered paradigm. Additionally, the findings indicate that effective directors utilize a leadership style that is consistent with Helgesen's (1995) Web of Inclusion theory, in which leaders reach out to others at all levels within the organization. Further, the findings support the use of professional development, including short duration programs delivered through CTLs, to impact changes in teaching and learning at community colleges in the United States.

This study included three established CTLs at Midwestern community colleges that met the criteria for a CTL set by the researcher. Due to the qualitative methods utilized, generalizations to other colleges cannot be made. Readers must determine, based on the rich descriptions provided, whether the findings are applicable to their situations (Merriam, 1998).

## Researcher's Final Thoughts

In my experience as the director of a Center for Teaching and Learning at a Midwestern community college, I worked diligently to keep abreast of student-centered teaching techniques to share with faculty, and to utilize those techniques effectively in the CTL programs I presented. So, I was surprised that the director's knowledge of and skill in student-centered teaching techniques were not emphasized by faculty as essential to the effectiveness of the director. A few faculty alluded to the director's knowledge of and skill in student-centered teaching methods, but this perspective was not articulated throughout and in any elaborated way, so it did not emerge as a sub-category of Director's Professionalism. Perhaps faculty see this knowledge and skill as a given in an effective director or they see the role of the director as simply to facilitate faculty sharing of expertise with other faculty. With information as readily available as it has become through the internet and with access to specialists as simple as it has become, it is quite possible that the "facilitation" role of the CTL director has become the critical one, with an assumption from faculty that expertise is readily available through other means. Either way, the findings of this study suggest that in the busy life of a CTL director, it may be more effective to allocate considerable time to responding to requests from others and to creating networks of contacts than to focusing on staying abreast of the latest teaching

techniques. A CTL with a director who responds to others regardless of their hierarchical status, can direct faculty to the right resources, and who has a positive, non-judgmental demeanor is a CTL that makes a difference in teaching effectiveness!

Many faculty who participate in CTL programming promptly apply the information learned to their teaching and perceive a positive impact on student learning as a result. In my experience, this is not typically the case when faculty participate in other professional development opportunities such as national and regional conferences. The tangible application of information by faculty to the classroom that results from participation in CTL programming is especially important for community colleges where teaching is the primary focus. This suggests that there is a great return on investment for community colleges that invest in Centers for Teaching and Learning.

# References

Achieving the Dream (2009). Field guide for improving student success, http://www.achievingthedream.org/docs/ Field_Guide_for_Improving_ Student_ Success.pdf (accessed January 23, 2011).

Barr, R.B., & Tagg, J. (1995). From teaching to learning—A new paradigm for undergraduate education. *Change, 27*(6), 13-25.

Bender, D.E., & Ewbank, D. (1994). The focus group as a tool for health research: Issues in design and analysis. *Health Transition Review, 4*(1), 63-79.

Berg, B. L. (2007). *Qualitative research methods for the social sciences: Sixth edition*. Boston, MA: Pearson Education.

Bolman, L.G., & Deal, T.E. (2003). *Reframing organizations: Artistry, choice and leadership.* San Francisco, CA: Jossey-Bass.

Caelli, K., Ray, L., & Mill, J. (2003). 'Clear as mud': Toward greater clarity in generic qualitative research. *International Journal of Qualitative Methods, 2*(2). Article 1.

Chenail, R., Duffy, M., St. George, S., & Wulff, D. (2009). Facilitating coherence across qualitative research papers. *The Weekly Qualitative Report, 2*(6), 32-44.

Cohen, A. M., & Brawer, F. B. (2003). *The American Community College: Fourth edition.* San Francisco, CA: Jossey-Bass.

Corbin, J., & Strauss, A. (1990). Grounded theory research: Procedures, canons, and evaluative criteria. *Qualitative Sociology, 13*(1), 3-21

Coyne, I.T. (1997). Sampling in qualitative research. Purposeful and theoretical sampling; merging or clear boundaries. *Journal of Advanced Nursing, 26,* 623-630.

D'Avanzo, C. D. (2009). Supporting faculty through a new teaching and learning center. *Peer Review, 11*(2), 22- 25.

DeCarvalho, R. J. (1991). *The founders of humanistic psychology*. New York, NY: Praeger.

Deming, W. E. (1982). *Out of the crisis.* Cambridge, MA: Massachusetts Institute of Technology, Center for Advanced Engineering Study.

Dickinson, R. (1999). The changing role of community college faculty: Implications in the literature. *Community College Review. 26,* 23-37.

Dori, Y. D., & Belcher, J. B. (2005). How does technology-enabled active learning affect undergraduate students' understanding of electromagnetism concepts? *The Journal of the Learning Sciences, 14*, 243–279.

Ewing, C., & Sorcinelli, M.D. ( 2009). *The value of a teaching center*. Retrieved July 3, 2009, from Professional and Organizational Development in Higher Education (POD) Website: http://www.podnetwork.org/faculty_development/values.htm.

Farnsworth, K. A. (2007). *Leadership as service: A new model for higher education in a new century.* Westport, CT: Praeger Publishers.

Farnsworth, K. A. (2010). *Grassroots school reform: A community guide to developing globally competitive students*. New York, NY: Palgrave McMillan.

Fayol, H. (1949). *General Industrial Management.* London: Sir Isaac Pitman & Sons Ltd.

Ferman, T. (2002). Academic professional development practice: What lecturers find valuable. *International Journal for Academic Development, 7*(2), 146. Retrieved from EBSCO*host* January 23, 2011.

Flick, U. (2006). *An introduction to qualitative research* (third edition). Los Angeles, CA: Sage.

Fogg, P. (2006, September 29). Young Ph.D.'s say collegiality matters more than salary. *The Chronicle of Higher Education*.

Follett, M. P. (1940). Power. In H. C. Metcalf, & L. Urwick (Eds.), *Dynamic administration: The collected papers of Mary Parker Follett* ( pp. 95-116). New York, NY: Harper & Brothers, Publishers.

Gibbs, G., & Coffey, M. (2004). The impact of training of university teachers on their teaching skills, their approach to teaching and the approach to learning of their students. *Active Learning in Higher Education, 5,* 87-100.

Greenleaf, R.K. (1973). *The servant as leader*. Newton Center, MA: Robert K. Greenleaf Center.

Guskey, T.R, (1986). Staff development and the process of teacher change. *Educational Researcher, 15*(5), p.5-12.

Haidet, P., Morgan, R.O., O'Malley, K., Moran, B.J., & Richards, B.F. (2004). A controlled trial of active versus passive learning strategies in a large group setting. *Advances in Health Sciences Education, 9,* 15-27.

Hampshire College. (2009). *Our mission.* Retrieved July 3, 2009 from, Hampshire College Website: http://www.hampshire.edu/ctl/8803.htm.

Harris, Z., Rouseff-Baker, F., & Treat, T. (2002). Faculty learners create learning college. *Community College Journal, 72,* 29-31.

Helgesen, S. (1995). *The web of inclusion.* New York, NY: Doubleday.

Hermans, H.J.M. (1987a). The dream in the process of valuation: a method of interpretation. *Journal of Personality and Social Psychology, 53*, 163-175.

Hermans, H.J.M. (1987b). Self as organized system of valuations: toward a dialogue with the person. *Journal of Counseling Psychology, 34*, 10-19.

Hermans, H.J.M. (2006). Moving through three paradigms, yet remaining the same thinker. *Counselling Psychology Quarterly, 19*(1), 5-25.

Higher Learning Commission, (2003) *Handbook of accreditation*. Chicago, IL.

Ho, A., Watkins, D., & Kelly, M., (2001). The conceptual change approach to improving teaching and learning: An evaluation of a Hong Kong staff development programme. *Higher Education, 42,* 143-169.

Huba, M. E., & Freed, J. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning*. Needham Heights, MA: Allyn & Bacon.

Johnson, D.W., Johnson, R.T., & Smith, K.A. (1998). Cooperative learning returns to college: What evidence is there that it works? *Change, 30*(4), 26-35.

Keehn, S., & Martinez, M.G. (2006). A study of the impact of professional development in diversity on adjunct faculty. *Action in Teacher Education, 28*(3), 11-28.

Krueger, R.A., & Casey, M.A. (2000). Focus *groups: A practical guide for applied research* (third edition). Los Angeles, CA: Sage.

Kuhlenschmidt, S. (2011). Distribution and penetration of teaching-learning development units in higher education: Implications for strategic planning and research. In J. E. Miller, & J. E. Groccia (Eds.), *To improve the academy: Vol. 29. Resources for faculty, instructional, and organizational development* (pp. 274-287). San Francisco, CA: Jossey-Bass.

Lumina Foundation (2009). *A stronger nation through higher education.* Indianapolis, IN.

Lyons, R., McIntosh, M., & Kysilka, M. (2003). *Teaching college in an age of accountability*. Boston, MA: Pearson Education.

Marshall, M.N. (1996). Sampling for qualitative research. *Family Practice*, *13*(6), 522-525.

Maslow, A.H. (1954). *Motivation and personality*. New York, NY: Harper Collins.

McCombs, B. L., & Whisler, J. S. (1997). *The learner-centered classroom and school: Strategies for increasing student motivation and achievement*. San Francisco, CA: Jossey-Bass.

McGregor, D. (1960). *The human side of enterprise.* New York, NY: McGraw-Hill.

McIntosh, M. (2010). The teaching and learning center at the University of Las Vegas closing. Professional and Organizational Development Network in Higher Education Listserve Archives. Retrieved October 9, 2012 from http://www.podnetwork.org/listserv.htm

Merriam, S.B. (1998). *Qualitative research and case study applications in education.* San Francisco, CA: Jossey-Bass.

Metcalf, H. C., & Urwick, L. (1940). Dynamic *Administration: The collected papers of Mary Parker Follett.* New York, NY: Haper & Brothers Publishers.

Mintzberg, H. (1973). *The nature of managerial work*. New York, NY: Harper Collins.

Mintzberg, H. (1979) *The structuring of organizations*. Upper Saddle River, NJ: Prentice Hall.

Mirvis P. H., & Hall, D. T. (1996). New organizational forms and the new career. In D.T. Hall, & Associates (Eds.), *The career is dead: Long live the career* (pp.72-104). San Francisco, CA: Jossey-Bass.

Missouri Department of Higher Education (2009). Imperatives for change update. Retrieved September 21, 2009. http://www.dhe.mo.gov/mdhe/boardbook2content.jsp?id=667

Morgan, G. (2006). *Images of organization.* Thousand Oaks, CA: Sage.

Nellis, P., Hosman, D., King, J.M., & Armstead, C. (2002). Web-based faculty development using time-revealed scenarios. *New Directions for Community Colleges, 120*, 27-33.

O'Banion, T. (1997). *A learning college for the 21st century.* Phoenix, AZ: American Council on Education and The Oryx Press.

Ouellett, M.L. (2010). Overview of faculty development: History and choices. In K.J. Gillespie, D.L. Robertson, & Associates (Eds.), *A guide to faculty development* (pp. 3-20). San Francisco, CA: Jossey-Bass.

Perrow, C. (1986). *Complex organizations: A critical essay.* New York, NY: Random House.

Postareff, L., Lindblom-Ylanne, S., & Nevgi, A. (2007). The effect of pedagogical training on teaching in higher education. *Teaching and Teacher Education, 23*, 557-571.

Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education, 99*(3), 223-231.

Prochaska, J.O., & DiClemente, C.C. (1983). Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology, 51*(3), 390-395.

Prochaska, J.M., Prochaska, J.O., & Levesque, D.A. (2001). A transtheoretical approach to changing organizations. *Administration and Policy in Mental Health, 28*(4), 247-261.

Professional and Organizational Development Network in Higher Education. *The value of a teaching center.* Retrieved December 11, 2006. http://www.podnetwork.org/development/value.htm

Rogers, R. E. (1975). *Organizational theory.* Boston, MA: Allyn and Bacon.

Rouseff-Baker, F. (2002). Leading change through faculty development. *New Directions for Community Colleges, 120,* 35-43.

Rudolph, F. (1990). *The American college and university: A history.* Athens, GA: The University of Georgia Press.

Rust, C. (2000). Do initial training courses have an impact on university teaching? The evidence from two evaluative studies of one course. *Innovations in Education and Training International, 37*(3), 254-262.

Scott, W. R. (1998). *Organizations: Rational, natural, and open systems.* Upper Saddle River, NJ: Prentice Hall.

Sim, J. (1998). Collecting and analyzing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing, 28*(2), 345-352.

Smith, A.B. (1994). Teaching for learning: Instructional development and change in two-year colleges. In G. A. Baker III (Ed.), A handbook on the community college in America: Its history, mission and management (pp. 205-217). Westport, CT: Greenwood Press.

Sorcinelli, M.D., Austin, A.E., Eddy, P.L., & Beach, A.L. (2006). *Creating the future of faculty development: Learning from the past, understanding the present.* Boston, MA: Anker Publishing.

Spafford-Jacob, H., & Goody, A. (2002). Are teaching workshops worthwhile? In A. Goody, & D. Ingram (Eds.), *Spheres of influence: Ventures and visions in educational development* (pp. 1-13). Crawley, WA: Organisational and Staff Development Services, The University of Western Australia. [Online] Available at www.csd.uwa.edu.au/ICED2002/publication/.

Springer, L., Stanne, M.E., & Donovan, S.S. (1999). Effects of small-group learning on undergraduates in science, mathematics, engineering, and technology: A meta-analysis. *Review of Educational Research, 69*(1), 21-51.

Stes, A., Clement, M., & Petegem, P. (2007). The effectiveness of a faculty training programme: Long-term and institutional impact. *International Journal for Academic Development,12*(2), 99-109.

Strauss, A.L., & Corbin, J. (1998). *Basics of qualitative research. Techniques and procedures for developing Grounded Theory* (second edition). Los Angeles, CA: Sage.

Taylor, F. W. (1911). *The principles of scientific management.* New York, NY: W. W. Norton & Company.

U.S. Department of Education (2006). *A test of leadership: Charting the future of higher U.S. higher education.* Washington D.C.

Watts, G. E., & Hammons, J. O. (2002). Professional development: Setting the context. *New Directions for Community Colleges, 120,* 5-10.

Weatherbee, T.G., Dye, K.E., Bissonnette, A., & Mills, A.J. (2009). Valuation theory and organizational change: Towards a socio-psychological method of intervention. *Journal of Change Management, 9*(2), 195-213.

Weber, M. (1947). The theory of social and economic organization. (T. Parsons, trans.) New York, NY: Free Press.

Weimer, M., & Lenze, L (1994). Instructional interventions: A review of the literature on efforts to improve instruction. In K.A. Feldman, & M.B. Paulsen (Eds.), *Teaching and Learning in the College Classroom* (pp.653-682). New York, NY: Simon & Schuster.

Weimer, M. G. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.

Weisman, I. M., & Marr, J. W. Jr. (2002). Building community: The second century, the same challenge. *New Directions for Community Colleges, 118,* 99-107.

Witt, A.A., Wattenbarger, J.L., Gollattscheck, J.F., & Suppiger, J.E. (1994). *America's community colleges: The first century.* Washington, D.C.: American Association of Community Colleges.

Witzel, A. (2000, January). The problem-centered interview [27 paragraphs]. *Forum: Qualitative Social Research* [On-line Journal], 1(1). Available at http://www.qualitative- research.net/index.php/fqs/article/viewArticle/1132/2521 [date of access: October 27, 2009]

Appendix: Codebook

Category: Director's Professionalism

| Subcategory | Definition | Properties | Dimension Varies From | Dimension Varies To | Example |
|---|---|---|---|---|---|
| Demeanor | Director's exhibited behaviors | Interactions with others | Friendly | Aloof | "and she is very friendly, and she remembers names" |
| | | Attitude toward ideas of others | Open to others' ideas | Closed to others' ideas | "she's a very open person, listens to people, looks at both sides of every situation" |
| | | Approach | Help | Authoritatively tell how | "it just comes from your core, you know, that you want to help people be effective" |
| Responsiveness | Director's reaction to requests and suggestions | Timeliness | Prompt | Never | She's also really quick on e-mail…she's really on the ball" |
| | | Follow-through | Acts on faculty ideas | Faculty ideas not acted on | "We don't know anything about developmental ed, do that yourself" |

Category: CTL Atmosphere

| Subcategory | Definition | Properties | Dimension Varies From | Dimension Varies To | Example |
|---|---|---|---|---|---|
| Physical Space | Functionality and Essence of the CTL office and meeting rooms | Technical hardware | Available | Unavailable | "they can scan it [in the CTL], and they have a color printer" |
| | | Equipment Functionality | Works well | Non-functioning | "I was told the computers didn't work, so what good is that going to do?" |
| | | Size | Adequate | Inadequate | "we often run out of space on certain topics" |
| | | Furnishings | Conducive to work | Do not facilitate work | "do grading in the lab facility or just come here and have a really good spot to perch and get some work done" |
| Emotional Support | Specific examples or mention of "support" found in the CTL and at CTL functions | Interaction with colleagues | Positive | Negative | "it's really helpful to be able to connect with people" |
| | | Emotional safety | Safe | Unsafe | "It's been a really safe place to ask questions" |
| | | Openness | Respect for all ways | One right way | "you don't feel pressure that you have to do it right" |

| | | | | | |
|---|---|---|---|---|---|
| | | Reason for being | Sharing of ideas | Manipulative | "showing stuff to each other and bouncing ideas off" |

Category: Relationship to the Institution

| Subcategory | Definition | Properties | Dimension Varies From | Dimension Varies To | Example |
|---|---|---|---|---|---|
| Administrative Support | Connections between administration and CTL | Administration's approach | Supports | Controls | "those were initiated by the administration and center together" |
| Budget Considerations | Impact of financial circumstances on the CTL | Institutional money available | Plenty | Limited | "I think [the CTL] is going to get even more important as the budgets for academia get worse" |
| Sense of Importance | Relationship of the CTL to the institution as a whole | CTL role in the functioning of the college | Integral part | Unclear | "[the CTL] also speaks to our core mission in a way that nothing else on the campus does…teaching students" |
| Departmental Support | Connection between departments and the CTL | Level of interaction | Considerable interaction | No interaction | "there's also department chair training that goes on in the center" |

Category: CTL Programming

| Subcategory | Definition | Properties | Dimension Varies From | Dimension Varies To | Example |
|---|---|---|---|---|---|
| Logistics | Influences on faculty participation other than quality or usefulness | Availability to participate | Faculty are too busy | Faculty make time | "I just don't have a lot of time to be going" |
| | | Scheduling of programs | Inconvenient | Convenient | "I'm teaching right them, or I'm not able to be in the building right then when it's happening" |
| | | Expectations for faculty | Unreasonable | Reasonable | "I wish I could come more often. I think there is more than most of us even have time to do" |
| Usefulness | Relevance of CTL programs to faculty | Focus of topics | Classroom learning | Other classroom issues | "I'm taking one [CTL program] right now that's on cheating" |
| | | Value of programs | Frequently valuable | Never valuable | "It just seemed like everything that was happening at the [CTL] was really useful to me" |
| | | Technical assistance | Helpful | Unhelpful | "a new software program…I couldn't have done it without their |

| | | | | | |
|---|---|---|---|---|---|
| | | | | | assistance” |
| Faculty Influence | Ways faculty influence CTL programming | Presenters | Faculty can present CTL sessions | Faculty cannot present CTL sessions | “some of us put on the [CTL] workshops” |
| | | Formal process; advisory boards | Implemented | Not implemented | “There is a planning committee made up of faculty” |
| | | Informal input | Frequent | Infrequent | “I think we were asked, actually after each training” |

Category: CTL Impact on Teaching and Perceived Impact on Student Learning

| Definition | Properties | Dimension Varies From | Dimension Varies To | Example |
|---|---|---|---|---|
| Changes in teaching and learning attributed to interaction with the CTL | Clarity of impact on teaching | Strong connection | Weak connection | "Classroom Assessment Techniques. I came to a class here [the CTL] on that…and I actually used some of the techniques in my classroom and it really helped" |
| | Clarity of impact on student learning | Strong connection | Weak connection | "So interactive learning helps them do things that are a little different and they end up having much greater rapport with each other, they end up interacting outside the class where they'll uh cooperate more and I think that helps them along" |