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The University of Southern Mississippi

THE SCHOLARSHIP OF TEACHING AT COMMUNITY COLLEGES

by

Patrice Arleanor Williams

Abstract of a Dissertation
Submitted to the Graduate School
of The University of Southern Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Doctor of Education

May 2014

ABSTRACT

THE SCHOLARSHIP OF TEACHING AT COMMUNITY COLLEGES

by Patrice Arleanor Williams

May 2014

This dissertation addresses engagement in the *scholarship of teaching* (SoT) at the community college level. A basic overview of the origin of the concept, a discussion of some of the key publications in the body of literature on the topic, and the details and results of a study on the topic—including suggestions for further research—are provided here.

The study involved full-time community college faculty members, representing institutions throughout the United States. Thirty-nine participants completed a 53-item questionnaire developed by the researcher. The goal of the study was to determine if a relationship existed between engagement in SoT and teaching satisfaction and institutional service. Simple regression analysis was used, and it was determined that level of engagement in SoT shared no significant relationship with level of teaching satisfaction, but level of engagement in SoT did share a significant relationship with the amount of institutional service offered by faculty members. Educational level was not a significant predictor of amount of institutional service. Results of the analysis further indicated that specific types of institutional service were not significant predictors of level of teaching satisfaction.

The primary beneficiaries of knowledge gained from the study will be faculty members who are currently engaging in or considering engaging in SoT. Higher education administrators who struggle to determine if there is institutional value in

supporting such engagement may also benefit. Additionally, those who conduct research in the field of higher education may find motivation for initial or continued research on the evolving topic of SoT.

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A Dissertation
Submitted to the Graduate School
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TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGEMENTS	iv
LIST OF TABLES	vii
LIST OF ILLUSTRATIONS	viii
CHAPTER	
I. INTRODUCTION	1
Problem Statement	
Distinguishing Between Scholarship of Teaching and Excellent Teaching	
Definitions	
Theoretical Basis	
Research Questions	
Limitations	
Delimitations	
Assumptions	
Justification	
Summary	
II. REVIEW OF RELATED LITERATURE	19
Theoretical Framework	
Understanding Scholarship and the Scholarship of Teaching	
Scholarship and Community Colleges	
Practicing Scholarship	
Researching Scholarship	
Teaching Satisfaction and Institutional Service	
Discussion	
III. METHODOLOGY	47
Overview	
Participants	
Survey Instrument	
Design	
Procedure	
Analysis	

IV.	ANALYSIS OF DATA	56
	Results	
V.	DISCUSSION	69
	Conclusions	
	Recommendations	
	Summary	
	APPENDIXES	79
	REFERENCES	89

LIST OF TABLES

Table

1. Frequency of Sample by Current Discipline (Field of Study)	58
2. Simple Regression Model Summary of SOT Level of Engagement and Teaching Satisfaction Score	65
3. Simple Regression Model Summary of SOT Level of Engagement and Institutional Service	66
4. Simple Regression Model Summary of Type of Institutional Service and Teaching Satisfaction Score	67
5. Simple Regression Model Summary of Educational Level and Institutional Service	68

LIST OF ILLUSTRATIONS

Figure

1. Histogram of Normal Distribution of Scholarship of Teaching Level and Teaching Satisfaction Score	61
2. Histogram of Normal Distribution of Scholarship of Teaching Level and Institutional Service	61
3. Q-Q Plot of Scholarship of Teaching Level	62
4. Q-Q Plot of Teaching Satisfaction Score	62
5. Q-Q Plot of Institutional Service	62
6. Scatter Plot for Homogeneity of Variance: Scholarship of Teaching and Teaching Satisfaction Scores	63
7. Scatter Plot for Homogeneity of Variance: Scholarship of Teaching and Institutional Service.....	63

CHAPTER I

INTRODUCTION

Higher education faculty members have engaged in various forms of *scholarship* since colleges and universities have been in existence (Boyer, 1990). However, a renewed emphasis was placed on the concept when the scholar George B. Vaughn offered a succinct, yet specific, definition of it. Vaughn (1988) defined *scholarship* as a general term that refers to the methodical development and dissemination of a product by an educator. His definition further suggested that scholarly products can take varying forms and are only valid when accepted and used by competent peers:

Scholarship is the systematic pursuit of a topic, an objective, rational inquiry that involves critical analysis . . . Scholarship results in a product that is shared with others and that is subject to the criticism of individuals qualified to judge the product. This product may take the form of a book review, an annotated bibliography, a lecture, a review of existing research on a topic, a speech that is a synthesis of the thinking on a topic. (Vaughn, 1988, p. 27)

Shortly after Vaughn's definition appeared in the article *Scholarship in Community Colleges: The Path to Respect*, Boyer (1990), on behalf of the Carnegie Foundation for the Advancement of Teaching, prepared and presented *Scholarship Reconsidered: Priorities of the Professoriate*. In this report he expanded the meaning of *scholarship* by identifying four primary types: *scholarship of discovery*, *scholarship of integration*, *scholarship of application*, and *scholarship of teaching*. Prior to this report,

scholarship had not been formally divided into types. In “Enlarging the Perspective,” Chapter II of *Scholarship Reconsidered*, Boyer (1990) provides a preliminary explanation of each type. He begins by emphasizing that the *scholarship of discovery* has been the mark of great institutions and their scholars dating back to the 19th century, noting that it is engagement in research that oftentimes invigorates faculty members and that the *scholarship of integration* is necessary so that the new knowledge acquired during research can be connected to existing knowledge and disseminated to individuals inside and outside of the field. The *scholarship of application*, as explained by Boyer (1990), is what institutions have traditionally referred to as service. However, in clarifying the meaning of this type of *scholarship*, he emphasizes that application may also be a motivator for research and not just a result of it.

The final type of *scholarship* extolled by Boyer in his now well-known report is the *scholarship of teaching* (SoT), which he describes as the planned, documented, and publicized actions of faculty members related to the improvement of their instruction and that of their peers. Other similar definitions of SoT have also been offered. According to Bender and Gray (1999), SoT is more than simply conveying knowledge and doing so effectively. It involves using the same level of thinking when considering instruction that is used when engaging in research. Braxton (2008) contends that scholarly teaching takes place when faculty members explore questions regarding student learning in a systematic way with two primary goals: improving personal instruction and sharing pedagogical knowledge.

Problem Statement

In identifying application and teaching as forms of *scholarship*, Boyer (1990), unlike Vaughan (1988), gave value to the processes in which educators often engage and not just to the products they create. Other Carnegie Foundation reports prior to *Scholarship Reconsidered: Priorities of the Professoriate* (hereafter called *Scholarship Reconsidered*) had addressed key higher education topics, but none had focused exclusively on the issue of *scholarship*. The unique nature of the report resulted in it becoming the “best-selling publication in the history of the Carnegie Foundation” (O’Meara & Rice, 2005, p. 21). Since its release, several researchers in the field of higher education have focused their efforts on the various forms of scholarship that Boyer (1990) identified, particularly SoT.

Kreber (1999, 2001a, 2002, 2003, 2005), Prager (2003), Shulman (2004), and Trigwell, Martin, Benjamin, and Prosser (2000) have all conducted research and created publications with a focus on SoT. However, their primary emphasis has been on how engagement in SoT fits into the overall requirements of faculty members at the university level. Most notable among these was a Delphi study that Kreber (2002) conducted from September 1998 to May 1999, the goal of which was to determine the extent of consensus among higher education experts regarding the meaning of and problems associated with SoT. Kreber (2002) sought answers to three questions: 1) What is the extent of agreement on the nature of SoT? 2) Are experts’ conceptualizations of SoT compatible with any specific perspectives concerning the concept? and 3) Is there agreement on the obstacles to implementation of SoT at postsecondary institutions? The researcher consulted a panel of 11 experts between September 1998 and May 1999. Using a constructivist approach,

she opted to have the panelists offer their own perceptions of SoT instead of requesting that they complete a questionnaire. In the article, Kreber (2002) explains that the impetus for her decision to gather information via a subjective method was to acquire information about SoT that had not been identified in the literature. During the initial phase of the study, each panelist provided potential items for use in the final questionnaire. Each panelist was then allowed to rate the items. The final phase allowed each panelist the opportunity to amend his or her rating based on the information provided by peers. The responses were grouped into two categories: high expert consensus and lower expert consensus. Ultimately, 11 factors on the subject of SoT emerged. Six of the factors were high consensus and included 23 items. Five were lower consensus and included 20 items.

In a subsequent study, Kreber (2003) again used the Delphi survey method to gain information about SoT from experts but opened participation to anyone who was interested in the topic and who self-identified as experts; ultimately, 99 participants took part. She also invited academic staff members, via two listservs, to complete a questionnaire that had been developed during her 1998-1999 study. The goal was to compare the views of experts to those of academic staff members when it comes to the concept of SoT. The instrument was posted online from March to May of 2000. Once data had been collected, the researcher used a *t*-test to compare the group mean from 99 of the academic staff members to the group mean of the 99 “experts.” In addition to the *t*-test, Kreber (2003) also conducted a factor analysis. The results indicated that the participants reached agreement with the “experts” from the earlier study on specific actions that are indicative of the SoT: exploring the relationship between researching pedagogy and integrating knowledge gained from such research; using wisdom of

practice to promote effective teaching; engaging in reflection to gain knowledge about teaching and learning; developing relevant skills, attitudes, and products; engaging in reflection to gain pedagogical content knowledge; and disseminating knowledge by sharing information with colleagues and engaging in peer review. However, despite the consensus present between the two groups, there were also significant differences between them in some areas.

Kreber (2003) identified the shortcomings of her study: 1) Academic staff members were asked to respond to features initially suggested by the “experts,” which may have influenced their responses or barred them from mentioning features associated with SoT that they deemed important; and 2) Participants who signed up for a listserv likely had an interest in teaching not typical of all academic staff members. The researcher further noted that the staff members reported viewing teaching, or the act of engaging in traditional pedagogy, as the most important facet of SoT.

Prior to outlining the specifics of the comparative study, Kreber (2003) provides information about how SoT has typically been interpreted and outlines four varying perspectives that have been revealed in the literature, emphasizing that there is no unified definition of the concept. With the first perspective, SoT is evidenced by publications that are products of the scholarship of discovery. The second perspective is that excellent teaching and the SoT are simultaneous occurrences. Similarly, those who adhere to the third perspective maintain that SoT is directly associated with the knowledge held by teachers in each discipline. Finally, those who view SoT from the fourth perspective give value to the knowledge that teachers have gained from experience, in addition to the knowledge they have gained from the act of teaching and from research endeavors.

Only a few research endeavors, Bernstein and Bass (2005), Kelly-Kleese (2003), Mahaffey and Welsh (1993), and Townsend and Rosser (2009), have sought to explore *scholarship*, in general, and SoT, specifically, at the community college level. Because existing studies have focused almost exclusively on universities, additional research at the two-year level is needed. The existing studies that deal specifically with university faculty populations cannot be applied to two-year institutions, especially community colleges, because 1) community colleges have atypical institutional missions and 2) community college administrators convey different faculty expectations.

Cohen and Brawer (2008) define the *community college* as “any institution regionally accredited to award the associate in arts or the associate in science as its highest degree” (p. 5). In the same text, they contend that, historically, those who teach at community colleges have not concentrated their efforts on research or other forms of scholarship and have, therefore, been free to focus their attention on instruction. Prager (2003) notes that because community colleges have traditionally defined themselves by the primary mission of teaching, the faculty members who work at those institutions perceive scholarship as neither a job duty nor an essential skill. She also emphasizes that among higher education institutions, including research colleges that focus primarily on teaching, such as Redlands Community College in Oklahoma and Finger Lakes Community College in New York—where there have been concerted efforts to place a greater emphasis on student research—there have been no demands for faculty members to conduct individual research (Coggins, 2009). This perspective of viewing scholarship as inconsequential is unique to community colleges. An Association for the Study of Higher Education [ASHE] Higher Education Report by Townsend and Twombly (2007)

revealed that the focus at community colleges is on teaching lower-division courses to many different types of students and that faculty members typically carry loads of five courses per semester, with little or no time for other endeavors. This report also discloses that at most community colleges no expectation exists for faculty members to conduct research and no system is in place for rewarding such efforts.

The same ASHE report by Townsend and Twombly (2007) emphasizes that, because of the practice of open access to admittance and the primary mission of teaching, community college faculty members spend the overwhelming majority of their work week on instructional activities. Additionally, the report includes Rosser and Townsend's (2006) data, which revealed that the typical full-time community college faculty member spends approximately 85% of his or her time on preparing lessons, teaching classes, and grading papers, as compared to 73% of time spent by comprehensive college faculty members and 66% invested by university faculty members. Based on the data included in the report, the authors concluded that the lack of focus on research, or what Boyer (1990) identified as the *scholarship of discovery*, by community college faculty members, is likely the result of the absence of an expectation for such engagement.

With knowledge from the literature that community college faculty members typically have no obligation to engage in SoT, researchers who have a desire to explore this topic must focus on faculty actions that, although voluntary, are often expected and how engagement in SoT might affect these actions. Consequently, the researcher for the current study made the decision to explore two primary factors that may be associated with voluntary engagement in SoT: teaching satisfaction and institutional service.

A review of the literature revealed that, up to this point, only one study has focused exclusively on engagement in *scholarship* at the community college level. It was conducted by Mahaffey and Welsh in May of 1990 at Midlands Technical College in South Carolina. The researchers used Vaughan's definition of *scholarship* as the basis for determining engagement in scholarly activities. The method for the study was a survey involving 127 faculty members; 40 of the participants were employed full-time and were identified as *scholar-teachers*—based on honors received and works published. Mahaffey and Welsh (1993) used an 18-question instrument, along with structured interviews, to collect responses. Ultimately, only eight of the 40 scholar-teachers were interviewed. The researchers sought answers to three primary questions: 1) Will faculty members who engage in scholarship self-report positive benefits to their teaching? 2) Will faculty members who engage in scholarship experience more job satisfaction than faculty who are not involved in scholarship? and 3) Will faculty members who engage in scholarship exhibit more value-added, skill-development, influence-sharing, and community-building measures of vitality than faculty who do not engage in scholarship? The results indicated that “faculty members who engaged in scholarship at Midlands Technical College self-reported positive benefits to their teaching” (Mahaffey & Welsh, 1993, p. 34).

This one study on the specific topic of SoT at the community college level is not enough to add support to the argument that scholarship is an integral part of teaching at the two-year level. Moreover, it has been 20 years since the study was conducted. There is little doubt that changes have occurred in terms of scholarly teaching at community colleges since that time. Therefore, a study that addressed a topic very similar to the one

tackled by Mahaffey and Welsh (1993) was warranted. It may be a valuable contribution to the literature on the topic of *scholarship*.

Distinguishing between Scholarship of Teaching and Excellent Teaching

Of the four primary types of *scholarship* outlined by Boyer (1990), SoT continues to be the greatest enigma, even despite attempts by Boyer (1990) and several others (Glassick, Huber, & Maeroff, 1997; Metzler, 1994; Paulsen & Feldman, 2003; Rice, 2002; Theall & Centra, 2001), to distinctly delineate the actions, standards, and assessment strategies related to the concept. A major aspect of the inability to define the abstract term is its strong resemblance to what many consider to be merely teaching excellence. Hutchings and Shulman (1999) note that SoT occurs when good teaching involves “creating practices of classroom assessment and evidence gathering, when it is informed not only by the latest ideas in the field but by current ideas about teaching in the field, when it invites peer collaboration and review” (p. 13). In a more recent article, Shulman (2004) identifies additional characteristics that distinguish SoT from exceptional teaching by noting three criteria of scholarly work: that it 1) is shared with the public, 2) is critiqued by peers, and 3) serves as a basis for building future knowledge.

In an additional attempt to clarify the difference between good teaching and SoT, Townsend and Rosser (2009) identify several specific teacher actions that constitute *scholarship*: remaining current in one’s teaching field, participating in curriculum development, performing service, and presenting knowledge in a public setting. Other examples of actions that signal engagement in SoT include pursuing advanced degrees, conducting research, and creating publications. They make the argument that “productive scholars are better teachers than those who do not practice some form of scholarship”

(Townsend & Rosser, 2009, p. 670). In short, a teacher can be excellent without engaging in SoT, but a teacher who consistently engages in the actions that are indicative of SoT is exhibiting teaching excellence and is therefore an excellent teacher.

Regardless of the difficulties associated with clarifying the meaning of SoT, researchers have continued to conduct studies with the concept as a focal point. This focus has been accompanied by a requirement to formulate and convey operational definitions that cannot be validated by a consensus among the experts in the field of education. Such a requirement is challenging, but the challenge is amplified when seeking to define SoT as practiced by faculty members at institutions where it is neither a priority nor an expectation (Prager, 2003).

In such cases researchers may choose to operationally define SoT as a series of actions by faculty members that are manifested in ways that are easier to define, as is the case with the current study, which explored the relationship of SoT to both the teaching satisfaction and institutional service of full-time faculty members at community colleges.

Definitions

For purposes of the study, the *scholarship of teaching (SoT)* was defined *as the methodical and documented study by postsecondary faculty members of either their own teaching or the art of teaching, the results of which are used to improve personal instruction and to help peers improve their instruction*. It typically involves specific actions such as conducting research, creating publications, participating in continuing education, making presentations, and recording the materials, procedures, and assessments associated with effective lessons. At the community college level, unlike at the university level, these actions are primarily voluntary. Moreover, the results acquired

from conducting research as a part of SoT are used to improve one's own teaching or to help peers improve their teaching.

It must be noted that the specific actions that constitute SoT can be and typically are far more complex than they are perceived to be because they involve subcategories. For instance, conducting research may involve designing and conducting traditional research, designing and conducting action research, or gaining new knowledge from a review of existing literature. As well, publications may be created individually or in conjunction with a colleague or group of colleagues, may be written in the form of an article or a book, or may be written in a practical or scholarly tone. Engagement in SoT by way of making presentations can take place at the departmental, institutional, local, state, national, or international level. Likewise, participation in continuing education can be divided into several types, such as pursuing an advanced degree, attending departmental or institutional workshops, or attending local, state, national, or international conferences and doing so either in person or in an online environment. Finally, recording the materials, procedures, and assessments associated with effective lessons can take place individually or collaboratively.

Also, participating in SoT can, and often does, result in actual products—materials that faculty members can utilize as a part of instruction, thus enhancing the learning process. For example, conducting research, whether traditional or action, often yields findings that are published as articles in professional journals. Even the scholarly act of publication itself can result in subsequent publications in which peers offer responses to topics addressed initially, thus giving rise to an increased number of articles and books on various topics, both technique and content specific. Furthermore, when

individuals take part in continuing education, the resulting products can be numerous and oftentimes cannot be easily quantified. Continuing education endeavors such as the pursuit and attainment of an advanced degree by a teacher can certainly give birth to concrete items such as publications but can also produce materials that can be used and shared, such as novel teaching techniques. Lastly, information regarding effective lessons can be converted into practical articles and books on pedagogy.

In addition to providing a working definition of SoT, it was also necessary to clarify the meaning of *teaching satisfaction* and *institutional service* as they related to this study. The definition of *teaching satisfaction* provided by the authors of the article “Teaching Satisfaction Scale: Measuring Job Satisfaction of Teachers” was employed. Accordingly, ***teaching satisfaction*** was defined as “*a function of the perceived relation between what one wants from one’s job and what one perceives teaching as offering or entailing. This is the product resulting from attitudinal and affective responses of teachers*” (Ho & Au, 2006, p. 172). Due to the fact that full-time faculty members in the community college setting are often expected, but not required, to serve the institution in various capacities, it was necessary to define *institutional service*. Within the confines of this study, ***institutional service*** referred to *service provided by a full-time faculty member that helps to meet the mission of the community college where he or she is employed. It involves the voluntary performance of one or more of the following actions: serving as a committee member, serving as a mentor, being a student club sponsor, or assisting with a campus or community event.*

When using the term ***community college*** in describing the details of this study, the researcher used *the definition provided by Cohen and Brawer (2008) and previously*

stated in this chapter. A *full-time faculty member* at this type of postsecondary institution was defined, for purposes of this study, as *a faculty member whose primary obligation each semester is to teach four or five courses of three or four credit hours to freshmen and/or sophomore students.*

Theoretical Basis

At a community college, more than at any other type of higher education institution, the focal point is teaching and consequently, learning. Because SoT involves actions that explore ways to improve instruction and increase learning opportunities, a study involving this concept as one of the variables required *constructivism* as a basis.

Constructivism is a type of learning theory that some educators use as a guiding premise for how they deliver instruction and interact with their students. According to Webb (1980) and Yilmaz (2008), constructivism posits that learners use existing knowledge to make meaning out of new information that they encounter. Therefore, the teacher must provide opportunities for such encounters to occur. Of the several types of constructivism, it is *psychological constructivism* that offers a theoretical basis for this study because it emphasizes that the responsibility for the acquisition of knowledge rests with the learner and that the teacher is a knowledgeable facilitator in the learning process (Yilmaz, 2008).

Research Questions

Based on the aforementioned operational definition of SoT, there was a probable relationship between engagement in the various facets of this form of scholarship and the teaching satisfaction and institutional service of full-time community college faculty members. Therefore, the researcher sought answers to the following specific questions: 1)

Is there a relationship between engagement in SoT and the teaching satisfaction of full-time community college faculty members? and 2) Is there a relationship between engagement in SoT and the institutional service of full-time community college faculty members?

Limitations

The primary limitation of this study was the use of a self-reporting instrument to collect responses from participants. It was also limited by the probable dissimilarity of the participants in terms of interest in engaging in SoT and opportunities to engage in it. Furthermore, respondents from some content areas were represented to a greater extent than those from other areas. A final limitation was the variation in number of years of experience of the participants.

Delimitations

This study was delimited to full-time community college faculty members across the United States whose primary job duty is to teach a full load of courses each semester. At these types of institutions, a full load is comprised of five 3-hour credit courses per semester. Occasionally, a load of four courses per semester constitutes full-time teaching. Faculty members who are full time are also provided a benefits package by the institution where they teach. Only full-time faculty members who are employed at community colleges in the United States were asked to participate in the study because their direct engagement with a large number of students each semester allows them more opportunities to engage in SoT. Despite the claim by Conley and Leslie (2002) that nearly two-thirds of the instructional faculty members at community colleges are employed on a part-time basis, these faculty members were not considered for this study.

This is because restrictions placed on their course load limit student engagement. Specifically, their course load is contingent upon the desire of full-time faculty members to teach overloads of courses in any given semester. Cohen and Brawer (2008) note that it is the practice of most community colleges to give full-time faculty members the opportunity to teach extra courses before offering them to part-time faculty. Also, those faculty members who teach at community colleges on a part-time basis normally do not have access to institutional resources that would allow them to engage in some of the key aspects of SoT, such as continuing education and professional development. Thus, they were excluded from the present study, considering that engagement in SoT served as the predictor variable.

Community colleges were the type of two-year institutions targeted because teaching is the primary duty of the faculty members they employ. Specifically, only individuals teaching at two-year institutions that issue the Associate of Science (A.S.) and the Associate of Arts (A.A.) degrees, exclusively, were sought out for participation. State colleges—two-year institutions that issue A. S., A.A., and Bachelor of Science (B.S.) degrees—were not included because their power to confer four-year degrees may lead to *mission creep*, causing them to require their faculty members to engage in scholarly activities as one of their primary job duties.

Assumptions

The researcher assumed that the faculty members who participated in this study were truthful and thorough when providing responses to the items on the survey questionnaire. Moreover, the researcher assumed that participants answered questions of their own volition, without fear of negative consequences imposed by the administration

as a result of the nature of their responses. The researcher guarded against such potential feelings of fear by assuring participants of complete anonymity.

Justification

The value of conducting a study to determine the extent to which, if at all, engagement in SoT is related to teaching satisfaction and institutional service is to inform the decision making of community college faculty members regarding professional activities and to inform the decision making of administrators regarding institutional planning. Results which indicate no difference in teaching satisfaction between faculty members who did engage in varying levels of SoT and those who did not suggested that activities which comprise SoT might be unworthy of faculty time and attention. Conversely, results which indicate a positive difference in teaching satisfaction based on engagement in SoT may motivate faculty members to consider such engagement in the future.

Regarding institutional service, results which suggest that engagement in SoT is related to institutional service might serve to motivate administrators to offer support for faculty members wishing to engage in scholarly activities directly related to their teaching. However, results which indicate that engagement in SoT is not related to faculty members' participation in institutional service, gives administrators reason to question the value of faculty members engaging in SoT. Answers to these and similar questions add missing knowledge to the field of higher education, regarding the value of scholarly endeavors by faculty members at community colleges.

Despite an absence of consensus regarding the meaning of SoT, it is an important concept, worthy of examination. The results of careful examination of engagement in

SoT can benefit both faculty members and administrators, helping them to determine if it merits time and support.

Summary

The presentation by Boyer (1990) of SoT as one of the four primary types of scholarship marked the beginning of several strands of continued research on the topic. One strand of research includes a series of publications by scholars seeking to more clearly define the concept. Although a consensus has yet to be reached on a basic meaning of the term, there is a commonality among all of the definitions that have been offered: actions and products that constitute SoT must be deliberate, documented, and disseminated. Another strand of research involves determining what educators consider to be SoT. Much of the knowledge gained in this area has been the result of studies conducted which involved university faculty members. Little research on the topic of SoT has been conducted at the community college level; thus, it remains the area where the least amount of knowledge has been acquired. The final strand of research involves attempts to help educators, scholars, and others who are concerned about instruction differentiate between SoT and excellent teaching. Research endeavors that have been a part of this strand have resulted in the conclusion that a teacher can be excellent without engaging in SoT, but a teacher cannot engage in SoT and avoid being excellent. However, despite research findings, there are teachers whose engagement in SoT has not yielded excellent teaching on their part.

The subsequent chapter provides a detailed discussion of key publications in each of these strands. It also includes a discussion of other literature describing research studies and practical experiences related to SoT that have taken place over the past few

decades. The study introduced in this chapter and detailed in Chapters III through IV is a contribution to the existing body of literature concerning SoT at the community college level.

CHAPTER II

REVIEW OF RELATED LITERATURE

Although much research has been conducted on the broad topic of the *Scholarship of Teaching and Learning* (SoTL), researchers have given very little attention to SoT, one of the primary types of *scholarship* defined by Boyer (1990). The literature discussed in this section highlights the limited focus by educational researchers on this topic in relation to universities. Also provided is a discussion of the small number of research endeavors on the topic of SoT at community colleges. This review serves as evidence to support the need for further exploration of engagement in SoT at community colleges and specifically as it relates to full-time faculty members.

Theoretical Framework

A study on the topic of SoT requires a focus on the specific actions of faculty members, including how they acquire knowledge and how they choose to share that knowledge with their students and with their colleagues, all of which tend to be driven by how they perceive the learning process. One view of learning held by a number of teachers is that the primary goal of instruction is creating opportunities for students to build meaning by using existing knowledge. According to Yilmaz (2008) this perspective is based on *constructivism*, a learning theory which originated in opposition to *objectivism*, a school of thought that once dominated Western culture and held that meaning was inherent in objects and external to critical thinking. Unlike objectivism, constructivism's central tenet is that meaning is created from an individual's experiences and depends on critical thinking. McLeod (2003) suggests that, when compared to objectivism, constructivism is more "open-ended in expectation where the results and

even the methods of learning themselves are not easily measured and may not be consistent with each learner” (p. 41). *Constructivism* began in the 18th Century and is based on philosopher Giambattista Vico’s contention that individuals reach understanding via self-construction. The learning process involves matching new information with existing information to make a personal connection (Thanasoulas, 2002). Although typically referred to as a singular theory, it is, in essence, a combination of several social and philosophical perspectives.

In light of the complex nature of the theory, Phillips (1995) identified three primary categories of constructivism: social, radical, and psychological. *Social constructivism* centers on the idea that human knowledge is the result of societal influences such as economics, politics, and religion. In contrast, *radical constructivism* is based on the notion that it is solely an individual’s perspective that results in knowledge. Containing elements of both *social* and *radical constructivism*, and having the most relevance in the field of education, is *psychological constructivism*, which rests on the premise that individuals acquire knowledge by actively pursuing it; meaning is formulated when learners combine existing knowledge with new knowledge (Webb, 1980; Yilmaz, 2008).

As a part of his social cognitive theory, Piaget (1963) referred to the existing pieces of knowledge alluded to in psychological constructivism as *schemas*. He suggested that understanding is acquired through fitting these pre-existing structures to new information encountered in one’s immediate environment. Webb (1980) notes Piaget’s assertion that every person uses assimilation and accommodation in unique ways to connect novel experiences to these existing structures. Powell and Kalina (2009)

describe assimilation as occurring when a learner incorporates new knowledge into existing schemas and accommodation as occurring when a learner adjusts schemas to allow room for new understanding. In “Between Constructivism and Connectedness,” Gordon (2008) alludes to Mark Windschitl’s similar contention that, in educational settings, learning occurs most often when teachers design instructional experiences that allow students to maximize the utilization of their schemas. McLeod (2003) declares that learning theories such as constructivism provide “clarity, direction and focus throughout the instructional design process” (p. 35). In the case of *constructivism*, those who design and execute instruction must do so with the understanding that their role is not to merely transmit knowledge directly to their students, but instead it is to allow each individual student to construct his own knowledge.

Powell and Kalina (2009) differentiate between two constructivist views regarding classroom practice, both of which involve an active learner. The first is individual constructivism, which is based on Piaget’s aforementioned theory. According to this view, the learner only needs to interact with his environment in order for learning to occur. The second is social constructivism, based on the theory of development put forth by Vygotsky (1962). His theory rests on the notion of scaffolding, which takes place when a student is asked to perform a task meaningful to him, with help from his peers. Further, Vygotsky’s theory maintains that scaffolding is necessary for a learner to enter the zone of proximal development, a mental place of greater understanding. Powell and Kalina (2009) note that, with this view, it is necessary for the learner to interact with others in order to acquire new knowledge. Despite their differences, the two views of

constructivism regarding classroom practice have a commonality: both result in the creation of new knowledge for the individual that is contingent upon existing knowledge.

Like the constructivist theories of Piaget (1963) and Vygotsky (1962), Bruner's (1961) theory informs classroom practice. It also maintains that learning is the result of existing knowledge, but the nature of that knowledge differs. According to Bruner (1961), learners use existing strategies to make sense of new information they encounter. He also contends that discovery learning takes precedence over all other learning: "The most uniquely personal of all that [man] knows is that which he has discovered himself" (p. 22).

Teachers who look to *constructivism* as a theory to guide their instruction primarily serve as facilitators of learning. There are times when they simply distribute information, but it is up to the students to make meaning out of it in order to achieve the established goals. Education philosopher John Dewey (1938), whose ideas on learning reflect constructivism, offered words of support for a learner-centered approach; he remarked that, "The plan, in other words, is a cooperative enterprise, not a dictation. The teacher's suggestion is not a mold for a cast-iron result, but is a starting point to be developed into a plan through contributions from the experience of all engaged in the learning process" (Dewey, cited in Hubbard & Power, 1999, p. 52). A willingness to allow students the freedom to take charge of their own learning is indicative of a commitment to constructivism.

Faculty members also demonstrate their allegiance to constructivism when they engage in reflective practice. McLeod (2003) cites reflective practice as one of the primary strategies used during constructivist learning. By considering their own past

actions, the teacher becomes the student and creates new knowledge about pedagogy by coupling information learned from past teaching experiences with the basic tenets of instruction. Fishman and McCarthy (1998) explain John Dewey's claim that we learn by using information from the past to study and test the present. In pedagogy, reflective practice manifests itself in actions such as professional publications, conference presentations, institutional presentations, continuing education, professional blogs, and novel instruction. Engagement in any of these includes drawing upon lessons learned from past instructional experiences, a primary aspect of constructivist learning.

Regarding a study on SoT, the theory of constructivism serves as a framework by determining how teachers acquire knowledge in order to improve their instruction. Likewise, it determines how they gain new information that they can formally share with their colleagues. Moreover, constructivism affects how they perceive student learning and consequently structure learning environments. They understand that their students learn by using existing knowledge to make sense of new knowledge. Hutchings and Shulman (1999) note that, "scholarship of teaching is not synonymous with excellent teaching. It requires a 'going meta,' in which faculty frame and systematically investigate questions related to student learning" (p. 13). Constructivist teachers are willing to assume the role of the learner, to develop instructional techniques, and to share their knowledge. In short, they are willing to engage in SoT.

Understanding Scholarship and the Scholarship of Teaching

Scholarship. Subsequent to the publication of Boyer's (1990) *Scholarship Reconsidered*, educators and researchers — to an unprecedented extent — focused their attention on the concept of *scholarship*. In the unparalleled report, Boyer (1990) outlined

four basic forms of scholarship typically engaged in by faculty: the *scholarship of discovery*, the *scholarship of integration*, the *scholarship of application*, and the *scholarship of teaching*. Because this delineation of types was a novel occurrence, it created some confusion among those teaching and those conducting research at higher education institutions. Consequently, some teachers and teacher affiliates, in the form of calls and letters, requested that the Carnegie Foundation provide additional information regarding the four aspects of *scholarship* extolled by Boyer (1990) in *Scholarship Reconsidered*. The major concern was with the assessment of the types of scholarship presented in the landmark report (Boyer, 1990).

Metzler (1994) added to the ambiguity caused by Boyer (1990) in *Scholarship Reconsidered* when he identified a fifth form of scholarship: the *scholarship of engagement*; in “Scholarship Reconsidered for the Professoriate of 2010” the author refers to his assertion as the “Boyer plus one model” (p. 453). According to Metzler (1994), experts in their fields take part in this type of scholarship each time they share their knowledge in a public forum in a way that positively affects public opinion.

In his presentation “From Scholarship Reconsidered to Scholarship Reassessed,” at the National Association for Physical Education in Higher Education conference, Boyer (1995) provided greater clarity for the four forms of scholarship he had initially introduced by outlining categories of assessment: the personal and professional qualities of the professor, the nature of faculty performance, the sources of evidence for evaluation, and the type of evidence used for evaluation. The text of the speech was one of many publications that helped to form a body of literature on the topic of *scholarship*.

Shortly after Boyer's (1995) keynote address, Glassick et al. (1997) offered *Scholarship Assessed: Evaluation of the Professoriate*. In this publication, the authors outlined six standards to which all forms of scholarly work must adhere in order to be considered *scholarship*: clear goals, adequate preparation, appropriate methods, significant results, effective communication, and reflective critique. Moreover, Rice (2002), a Carnegie Foundation affiliate who had been instrumental in helping to develop *Scholarship Reconsidered*, published "Beyond Scholarship Reconsidered: Toward an Enlarged Vision of the Scholarly Work of Faculty Members," which helped to further articulate the meaning of the various forms of scholarship that had been presented by Boyer (1990). This article was primarily reflective in nature, but also contained a discussion of how the identification of distinct types of scholarship would affect teaching and learning in the future.

The Scholarship of Teaching. Almost immediately following Boyer's (1990) introduction of the term into the field of higher education, The Carnegie Academy for the Scholarship of Teaching offered the following definition: "The scholarship of teaching is problem posing about an issue of teaching or learning, study of the problem through methods appropriate to disciplinary epistemologies, application of results, reflection, and peer review" (Vaughan, 1991, p. 11). In terms of literature directly addressing the nature of SoT, Kreber (2001a) offered what is perhaps the most popular publication to date: *Scholarship Revisited: Perspectives on the Scholarship of Teaching*. In this volume, various scholars expound upon the meaning of SoT and the controversy created by the concept. Nevertheless, it is in the conceptual article "Teaching Excellence, Teaching Expertise, and the Scholarship of Teaching" that Kreber (2001b) helps to illuminate the

meaning of the often vague concept of SoT by explaining how it differs from teaching excellence and teaching expertise. The author notes that the differences can best be understood in the context of Trigwell's et al. (2000) four dimensions of SoT: conceptions of teaching, sources of information, focus of the reflection, and communication of insights. Kreber (2001b) presents three pedagogical scenarios—one representing teaching excellence, one representing teaching expertise, and one representing SoT—to illustrate how a teacher's application of the various dimensions determines their level of instruction. In essence, teachers who have an understanding of how students learn, who reflect on how their teaching encourages or discourages learning, and who also reflect on their teaching practices might be considered excellent teachers. However, a teacher who is considered to be an expert conceptualizes teaching, reflects on teaching, and either consults sources of information in order to improve instruction or shares insights in order to help peers improve their instruction. In contrast, a scholarly teacher is an excellent teacher and an expert teacher but engages in actions that represent all of the dimensions outlined by Trigwell et al. (2000). Ochoa (2011) explains that Weimer (2006) offered an alternative to the often confusing term SoT by coining the term *pedagogical scholarship*, defined as “published work on teaching and learning authored by college faculty in fields other than education” (p. 19). Nevertheless, this is not to suggest that a professor who specializes primarily in the field of education cannot also practice *pedagogical scholarship* in another subject area.

While it is certainly important to understand the meaning of SoT as a guiding concept for higher education, it is equally important to understand the associated actions. According to Theall and Centra (2001), each action fits into one of two major categories:

1) Scholarship and Improvement or 2) Criteria and Sources of Information. In the first category, scholarship refers to research endeavors, which include reviewing existing research, contributing to existing research, and utilizing existing research. Improvement occurs as a result of investigating teaching and learning in an academic environment and using the findings to improve pedagogical content knowledge (PCK). In the second category, the established criteria for specific acts reflective of SoT are grouped by individual, departmental, and institutional level into three categories: “1) a shared public account of teaching, 2) an emphasis on learning outcomes and relevant teaching practices, and 3) discipline and pedagogical knowledge and innovation” (p. 37). At each level, specific criteria are used to assess engagement in the scholarship of teaching. For instance, a shared public account of teaching can be demonstrated at the individual level by inviting peer evaluation, providing peer evaluation, making class materials available to the public, discussing course information with peers in an informal setting, discussing pedagogy with staff members, discussing educational findings with peers, demonstrating a willingness to discuss student evaluations, serving as a mentor to colleagues or students, taking part in conferences or workshops that focus on teaching and learning, and/or preparing publications on teaching and learning. At the departmental level, a shared public account of teaching is expressed by establishing a system for peer review for the act of teaching, encouraging discussions about pedagogy during departmental meetings, promoting the preparation of teaching portfolios, providing a mentoring program for junior faculty members, encouraging informal discussions about pedagogy, publicizing departmental student evaluations, and supporting the attendance of conferences and workshops. At the institutional level, the shared public account of

teaching can be shown by supporting active departments and programs, establishing a policy that values student and peer evaluations, supporting mentoring programs, supporting teacher training programs, valuing pedagogy during the tenure and promotion process, providing information sessions on teaching and learning, requiring a review of both non-tenured and tenured faculty, and making public the results of learning outcomes and contextual surveys (Theall & Centra, 2001).

The criterion of placing an emphasis on learning outcomes and relevant teaching practices can be met at the individual level by conducting classroom research and using it to improve personal teaching, promoting team and interdisciplinary teaching, considering various learning styles during instructional design, exploring publications about learning styles and instructional innovations, and discussing classroom research findings with peers in formal settings. At the departmental level, placing an emphasis on learning outcomes and relevant teaching can be achieved by administering exams that cover content in a specific major, promoting team and interdisciplinary teaching, embracing innovation, promoting research on teaching and learning, soliciting student evaluation of learning outcomes and teaching practices. Institutionally, an emphasis on learning outcomes and relevant teaching is shown by supporting research endeavors on learning outcomes via faculty grants, providing a campus-wide testing program that addresses learning outcomes, conducting surveys to gather data on students' learning experiences, and considering student learning in personnel decisions (Theall & Centra, 2001).

According to Theall and Centra (2001), the final criterion, discipline and pedagogical knowledge and innovation, is met at the individual level by exploring the literature to find ways to connect with students, planning coursework that involves

practical applications, planning course content that incorporates new knowledge, and encouraging students to do research in specific content areas. Departmentally, discipline and pedagogical knowledge and innovation are accomplished by providing seminars and workshops in specific content areas, encouraging innovative teaching strategies, and rewarding publications and presentations on the topic of teaching and learning.

Institutions as a whole can meet the criteria of discipline and pedagogical knowledge and innovation by placing equal emphasis on content knowledge and pedagogy, fostering a faculty development program supported by staff, and fostering a faculty development program that focuses on original teaching techniques. Specific sources of information that are reflective of meeting the three types of criteria at each level are as follows:

- Individual level: portfolios, course syllabi, assignment analyses, student evaluations, and peer evaluations.
- Departmental level: annual review, content area tests, departmental publications, and departmental statements.
- Institutional level: faculty handbook, catalog, annual calendar, professional development attendance records, and faculty/staff survey results.

These examples of tangible evidence to support the views of the panelists who participated in Kreber's (2002) Delphi study are helpful to researchers in need of a basis for assessing engagement in the scholarship of teaching.

Scholarship and Community Colleges

In addition to the publications provided by Metzler (1994), Boyer (1995), Glassick et al. (1997), and Rice (2002), which provided ancillary explanations regarding

the nature of *scholarship* and Kreber's (1999, 2001a, 2003), Ochoa's (2011), and Theall and Centra's (2001) writings that attempted to clarify the meaning of SoT, Weimer (2006) proposed that other publications created on the topic since Boyer's (1990) *Scholarship Reconsidered* can best be divided into two primary categories: Wisdom of Practice and Research Scholarship. The first category, Wisdom of Practice, is subdivided into personal accounts of change, recommended-practices reports, recommended-content reports, and personal narratives. This type of literature includes publications prepared with the goal of helping educators to improve their teaching by engaging in scholarship. The suggestions offered by the authors of these works are based on reports about institutions where the faculty members have embraced the concept. Many of the publications in this category have focused on scholarship at the university level, but others have addressed scholarship at two-year institutions, including community colleges. Publications that deal with the practice of scholarship by faculty at community colleges are significant contributions to the literature because of the unique nature of these institutions.

Community colleges were born from the desire of key figures in higher education such as Henry Tappan (University of Michigan) and William Folwell (University of Minnesota) to relieve universities of the burden associated with providing general education to the masses. Other leaders in higher education also promoted the idea of developing two-year institutions but for other reasons that were equally objectionable. In 1892, William Rainey Harper, who is considered to be the "Father of the Junior College," divided The University of Chicago into an academic college for freshmen and sophomores and a university college for juniors and seniors. He was also instrumental in

developing Joliet Junior College, the oldest public junior college, in 1901. Harper's motive for dividing The University of Chicago and for helping to develop a junior college was to ensure the purity of universities by creating an institution where those not suited for university study could receive an education. To achieve this goal, he emphasized the careful diagnosis and proper placement of students who sought a higher education. Similarly, David Starr Jordan, the President at Stanford University, encouraged the development of community colleges out of fear that the masses, if not properly educated, would be a detriment to the educationally talented. Moreover, Alexis F. Lange, a faculty member and dean at The University of California Berkeley, supported the creation of community colleges as institutions that could serve as capstones of secondary education, an extension of high school. She emphasized the establishment of a relationship between the junior college and the community. There were three key periods of growth in the development of community colleges in the United States: 1911-1920, 1941-1950, and 1991-2000. In the 1960s, although there were no new institutions established, several changes occurred in the form of key legislation designed to make sure that access and service were equally provided to all populations (Cohen & Brawer, 2008).

During the 1970s and 1980s, community colleges flourished. They redefined their mission of service to the community by adding offerings such as vocational programs, recreational/community interest courses, continuing education/certification for business professionals, remedial courses, and advanced courses for current degree holders (Thelin, 2004). Since community colleges were first formed, they have had multiple missions to include student services, career education, community engagement, and university transfer. Nevertheless, their primary mission remains a focus on instruction. Faculties at

community colleges execute the mission by focusing primarily on instruction. The typical community college faculty member holds a master's degree with a minimum of 18 graduate hours in a specific discipline, and they have some experience in teaching at the secondary level. Their teaching load consists of four or five classes each semester, with a requirement of maintaining a set number of office hours each week. In addition, some community college faculty take part in institutional service by serving on committees, sponsoring student clubs, and assisting with campus and community events. Some even participate in professional development activities such as attending and making presentations at workshops and conferences, conducting research, and publishing articles and books. However, the institutional service, professional development, and research endeavors are voluntary actions (Cohen & Brawer, 2008). Levin (2006) writes that the central function of community colleges is to meet the needs of learners, which requires an emphasis on teaching. He suggests that faculty are the “gatekeepers of knowledge” and should “position themselves more aggressively as the intermediaries between student learning and institutional mission” (p .141). The author further notes that the way faculty members are perceived in terms of professionalism is directly related to the identity of the community college.

Practicing Scholarship

Given that community college faculties are so deeply focused on instruction in an effort to carry out the missions of their institutions, there may be little time to focus on engagement in *scholarship*. Kelly-Kleese (2004), Parilla (1991), Sperling (2003), and Vaughn (1988, 1991) have addressed scholarship at the community college level by suggesting that the concept needs to be redefined and reevaluated to include knowledge

that is generated and shared in the classroom setting. Shulman (1991) referred to this joining of content knowledge and teaching practice as pedagogical content knowledge (PCK). This type of knowledge, although typically shared with colleagues, can also be shared by teachers with their students in the form of discussions regarding how lessons are planned, executed, and revised—depending on subject matter and teaching style. According to Boyer (1990), knowledge acquisition and knowledge dissemination are key facets of SoT. Paulsen and Feldman (2003) maintain that SoT can best be understood by researchers and educators when it is viewed within the framework of a social action system, specifically, the four-function paradigm (Parsons & Platt, 1973). In a four-function paradigm there are four primary functions associated with an action system: pattern maintenance, adaptation, goal attainment, and integration. Existence of the system is contingent upon the successful independent performance of each identified function. In the case of *scholarship*, the four functions would be the scholarship of discovery, the scholarship of application, the scholarship of integration, and the scholarship of teaching. Paulsen and Feldman (2003) assert that, although SoT is a subsystem, it has its own primary functions that include pedagogical content knowledge which accomplishes pattern maintenance, graduate training which accomplishes application, reflective teaching and service which address goal attainment, and faculty evaluation and development which accomplishes integration. The authors further assert that the four primary functions of the scholarship of teaching subsystem exist within the context of an internal and external realm. Pedagogical content knowledge (PCK) and faculty education and development are internal in that they occur primarily within the microcosm of academe and involve mostly other educators and researchers. In contrast, graduate

training and reflective teaching can occur in the world at large and can involve and benefit individuals outside of the academic world. Regardless of whether or not each function of the scholarship of teaching subsystem is situated internally or externally, they are all critical to its continued existence, pattern maintenance through PCK being the most critical because the acquisition of it makes all of the other functions possible.

Several Wisdom of Practice publications have focused on the art of instruction and, therefore, support Paulsen and Feldman's (2003) claim that specific functions must be performed for SoT to survive. Kelly-Kleese (2004) suggests that the best way for community college faculty members to redefine scholarship is to do so within the context of a newly-formed discourse community. She suggests the use of a definition of *discourse community* provided by Bizzell (1992). Based on this definition, community colleges qualify as their own discourse community within the larger discourse community of higher education. The author further notes that community colleges have their own language which they must use to express the meaning of *scholarship* within their own discourse community. According to Kelly-Kleese (2004), this will involve establishing an internal entity that outlines standards for assessing the work of community college faculty to determine if it is scholarly.

Sperling (2003) explains how the faculty and staff at Middlesex Community College in Bedford and Lowell, Massachusetts embraced the notion of *the scholarship of teaching and learning* and implemented its primary components at their institution. The author emphasized how they first worked to understand the origin and substance of the concept. They then collaborated to develop a campus culture that saw the concept as valuable to all parties involved and set goals for their institution and worked to achieve

them. Although the author does not clearly indicate the extent to which the educators at the institution were or were not successful, it serves as a practical example of how a community college can work to understand and eventually to embrace the concept of *scholarship*.

Other authors have addressed the barriers to engagement in scholarship. Regarding this topic, quite a few authors have focused exclusively on community colleges. For instance, Palmer (1994) and Vaughn (1992) contend that the primary barriers to faculty members fully understanding scholarship and ultimately participating in scholarly activities are time, budgetary constraints, and an inferiority complex that faculty members who work at two-year institutions, such as community colleges, have developed by comparing their scholarly endeavors to those of faculty members at four-year institutions. Additional barriers to the engagement in scholarship, identified by Tinberg, Duffy, and Mino (2007), include pessimistic faculty attitudes toward scholarship and a tendency to succumb to *pedagogical solitude*—defined by Shulman (2004) as a faculty member being unwilling or unable to share their teaching methods and research findings. Tinberg et al. (2007) cite a lack of time and money as factors that influence such attitudes and isolated actions. The authors also identify the difficulty of faculty members at these institutions to see scholarship as being an integral part of the overall mission, as a factor that contributes to their viewing scholarly endeavors in a negative light. Tinberg et al. (2007) further suggest that overcoming the obstacles associated with pursuing scholarship will allow community college faculty to showcase the range of their students' accomplishments and will help to improve their intellectual standing in the field of higher education.

Despite the barriers to engagement in scholarship, faculty members at some community colleges have managed to practice various forms of scholarship. Beginning in the years immediately following Boyer's (1990) *Scholarship Reconsidered* and continuing into the next decade, several authors, including Bernstein and Bass (2005), Duffy (2006), and Hutchings and Shulman (1999), have chronicled their success, with emphasis on the ability of institutions to develop campus-wide initiatives toward scholarship and bring them to fruition.

Duffy (2006) explains how Middlesex Community College addressed the *scholarship of teaching and learning* through a community effort. She notes that from 1998 until 2006, the institution engaged in the scholarship of teaching and learning through the faculty's participation in a cross-disciplinary community-of-practice program called The Carnegie Academy for the Scholarship of Teaching and Learning (CASTL). Specifically, faculty members who participate in the program have completed projects that exemplify SoTL, using their multiple courses, and being persistent in their exploration of unifying themes. The author also highlights the fact that Middlesex Community College has been identified as a leading institution on the topic of SoTL. As such, they serve as one of 12 leading institutions charged with the task of forming a cluster group of colleges with the sole purpose of creating communities that focus on pedagogical practices related to SoTL.

The institutions that make up the cluster group led by Middlesex Community College are Fitchburg State College, Holyoke Community College, Northern Essex Community College, Pine Manor College, Salem State College—all in Massachusetts, Valencia Community College in Florida, and Iowa Western Community College in Iowa.

The group goes by the acronym COPPER, which stands for Communities of Practice: Pooling Educational Resources to support SoTL. Hutchings and Shulman (1999) also allude to successful efforts by institutions to overcome barriers in order to successfully promote engagement in the SoT. They provide a firsthand account of the participation by 43 institutions in CASTL, noting how these institutions' willingness to participate signals a public commitment to SoTL. The authors also reference a growing body of literature and a growing number of academies and conferences on the topic as proof that SoT is a concept that garners interest and is one that should be taken seriously. Additionally, they suggest that higher education institutions use their Institutional Research departments as avenues for encouraging and monitoring faculty members' engagement in SoT.

Researching Scholarship

Along with the publications categorized as Wisdom of Practice, other notable contributions to the literature on the topic of *scholarship* at the university and community college level have appeared since Boyer's (1990) *Scholarship Reconsidered*, but have been primarily empirical as opposed to practical and thus, fall into what Weimer (2006) refers to as the Research Scholarship category. The author subdivides this category into quantitative investigations, qualitative studies, and descriptive research. Paulsen (2001) explains the significance of traditional research as it relates to SoT. He notes that an educator who ultimately engages in SoT must first possess PCK, placing an equal focus on the academic content and the learning process. Paulsen (2001) further asserts that once one has acquired PCK, it should be used to conduct what Cross (1998) identifies as *classroom research*, an endeavor that "attempts to provide some insight into how students learn" (p. 8). Cross and Angelo (1988) noted that this type of research should be

conducted only within the framework of traditional theory and research on the topic of teaching and learning. Cross and Steadman (1996) explain how existing theory, traditional research, classroom research and the scholarship of teaching are typically associated in an educational setting: “Observing students in the act of learning, reflecting, and discussing observations and data with teaching colleagues, and reading the literature about what is already known about learning is one way teachers can implement the scholarship of teaching. It is what we call *Classroom Research*” (p. 2).

Several researchers (Bernstein & Bass, 2005; Kelly-Kleese, 2003; Mahaffey & Welsh, 1993; Townsend & Rosser, 2009) have either surveyed community college faculty members regarding their scholarly endeavors or conducted classroom research to assess how engagement in scholarship has affected student learning. In the same year that Boyer (1990) released *Scholarship Reconsidered*, Mahaffey and Welsh (1993) completed one of the earliest studies on the topic of scholarship practiced by faculty at the community college level. The researchers surveyed faculty members at Midlands Technical College to determine if engaging in scholarly activities resulted in positive benefits, increased job satisfaction, and/or increased vitality in terms of their overall teaching. The researchers referred to the participants as *scholar teachers*, based on their previous scholarly actions. Ultimately, they concluded that the participants’ engagement in scholarly activities seemed to contribute to greater vitality with respect to their instruction. This study is often referenced by those seeking support for the argument that engagement in SoT by faculty members at two-year institutions, especially community colleges, is meaningful.

Kelly-Kleese (2003) conducted an intrinsic case study at an unnamed community college in the southeastern United States to assess the views of faculty members regarding the meaning of *scholarship* overall and the meaning of the term as it related to faculty members at their institution. The researcher began with seven participants who were selected based on their colleagues' perception of them as being knowledgeable on the topic of scholarship. Then, the researcher used the snowball sampling method to get additional participants, which ultimately resulted in a total of 25. Each participant was interviewed and responses resulted in the emergence of several common themes: "the need for a new definition of scholarship, one that is applicable to the scholarly work being done in the community college; the faculty and administrators' perceived role within academe; and the importance of support and reward in creating an institutional culture that values scholarship" (p. 71). In addition to the primary themes, the responses from the participants, who were referred to as informants, revealed a consensus that SoT is considered by community college faculty to be a process, not a product to be shared with peers. Kelly-Kleese (2003) indicated that this perception of the nature of scholarship is more in keeping with Boyer's (1990) expanded definition of the term than with Vaughn's (1988) definition. Based on the interview data, the researcher determined that the informants considered themselves to be "disenfranchised within academe" (Kelly-Kleese, 2003, p. 75). During the interviews, informants also noted that scholarship at the community college level is typically neither expected nor rewarded; therefore, those who engage in it do so because they are either intrinsically motivated by their pursuit of an advanced degree or they are researchers at heart who had no desire to exist in the "publish or perish" university environment (p. 79). Ultimately, the author concluded that

the community college alluded to in the study and community colleges in general must address scholarship by engaging in the following practices: 1) Define scholarship within the framework of their type of institution, 2) Encourage scholarship among faculty and administration, 3) Support the pursuit of scholarship, 4) Offer opportunities for faculty and staff to develop skills for discussing scholarship, 5) Share products that result from engagement in scholarship, 6) Reward scholarly endeavors, 7) Evaluate existing policies to ensure that they are not barriers to engagement in scholarship, and 8) Make a commitment to foster a culture that values scholarship.

Bernstein and Bass (2005) explain how they spent several years studying the basic premise behind the concept of the SoTL and overseeing projects to explore faculty members' use of it. Their collaborative article offers details concerning their individual projects and explains how they collaborated to draw conclusions from their work. Bernstein's project lasted from 1995 until 2002. The primary goal was to have teachers formally share their individual classroom experiences with their campus peers and with peers across the country. There were two secondary goals: 1) give faculty members the tools needed to increase the understanding of undergraduate students and 2) illustrate that teaching has value at both the institutional and societal level. Bass's project began in 2000 and lasted until 2005; it was called the *Visible Knowledge Project*. The main goal of this endeavor was to "improve the quality of college and university teaching through a focus on student learning and faculty development in technology enhanced environments" (Bernstein & Bass, 2005, p. 37). The secondary goal of this project was to encourage faculty members to inquire about student learning and to initiate change based on their findings.

The authors emphasize the common thread that connected their individual endeavors: both projects sought to provide answers to questions regarding faculty interactions with students and faculty actions overall. Ultimately, Bernstein and Bass (2005) concluded the following: “a reciprocal effect exists between the scholarship of teaching and learning and pedagogies designed to elicit ‘data’ on learning” (p. 42). They also highlight how important it is for educators to consider collaborative efforts such as theirs if they wish to do further exploration concerning SoTL.

In a more recent publication, Townsend and Rosser (2009) detail a study they conducted that was designed to determine if participating in scholarly activities, regardless of the impetus, takes away from time faculty members could spend focusing on instruction. Townsend and Rosser compared 1993 and 2004 National Study of Postsecondary Faculty (NSOPF) data sets because they are considered to be representative samples of faculty members in higher education institutions across the country. Data from 1993, representing approximately 4,300 two-year college faculty members and data from 2004, representing 2,400 two-year college faculty members, were analyzed. The authors were interested in the mean difference between the 1993 and 2004 workloads of the faculty members. The results indicated a significant difference in the amount of time spent on scholarly activities. Faculty members in the 2004 data set spent more time than faculty members in the 1993 data set. Ultimately, the authors offered several suggestions for future research, reiterating that very little has ever been conducted at the community college level.

Teaching Satisfaction and Institutional Service

Teaching Satisfaction. Along with conducting a review of the body of literature on scholarship and SoT, it was also necessary to pay attention to key pieces of literature on *teaching satisfaction* and *institutional service*. Ho and Au (2006) conducted a study on the topic of teaching satisfaction, and as a part of the study, developed a Teaching Satisfaction Scale based on the existing Life Satisfaction Scale (LSS; Diener, Emmons, Larsen, & Griffin, 1985). In the publication in which they discuss the study, the authors define *teaching satisfaction* as “a function of the perceived relation between what one wants from one’s job and what one perceives teaching as offering or entailing. This is the product resulting from attitudinal and affective responses of teachers” (Ho & Au, 2006, p. 172). Additionally, the authors explain the difference between facet scales and global scales, the primary types used by researchers when attempting to measure teaching satisfaction. The researchers note that, of the two, facet scales are more problematic. For one, when scoring such measures, researchers assume that a sum score accurately reflects the parts considered. Also, facet scales often include too many items. Finally, there is no agreed upon number of facets that contribute to a participant’s final score. Ho and Au (2006) also acknowledge that existing global scales tend to measure only the affective aspect of a teacher’s satisfaction, which can also present a problem during research. Ultimately, they sought to develop a global scale as opposed to the more problematic facet scale. The scale that the researchers ultimately developed was a five-item measure. Items had response choices along a five-point scale, ranging from strongly disagree (represented by 1) to strongly agree (represented by 5). The questions were designed to determine how satisfied participants were with their jobs. According to the researchers,

one of the goals of the study was to examine the reliability and score validity of the instrument they developed. The TSS yielded, “good internal reliabilities, construct validities, and criterion-related validities” (Ho & Au, 2006), as compared to two similar scales, the Warr’s Job Satisfaction Scale (WJSS) and the Brayfield-Rothe Job Satisfaction Scale (BRJSS). The researchers were successful in enlisting 202 participants who were teachers in 7 primary and 15 secondary schools in Hong Kong. Overall, the results indicated that there is a negative correlation between teaching stress level and teaching satisfaction.

Institutional Service. In terms of literature which suggests that SoT and institutional service may share a relationship and that institutional service may be a factor that predicts teaching satisfaction, Reynolds (2004) concludes that engaging in the actions that constitute SoT leads to professionalism in two-year college faculty members which, in turn, builds confidence and yields satisfaction. He further notes that a faculty member who engages in SoT becomes, in essence, a “teacher-scholar who gives excellent service to the institution, to students, to the community, and to the profession” (Reynolds, 2004, p. 77).

Discussion

Teachers who engage in SoT on a voluntary basis become more knowledgeable in their subject area, taking on the role of learner, but also become better teachers and can, therefore, more efficiently and effectively convey to their students the knowledge they acquire. Theoretically, this makes educators who engage in SOT constructivists because they construct a learning environment for their students that gives them the opportunity to use what they know in order to effectively process and retain new information.

The literature revealed that teachers engaging in SoT are unique because they acquire and use the knowledge they obtain to not only convey information, but also to enhance the teaching and learning experience for their students. Shulman (1991) labeled this knowledge, which is the result of a combination of content knowledge and teaching practice, as Pedagogical Content Knowledge (PCK). However, the literature further revealed that the use of such knowledge is often stifled at the community college level because of barriers to engagement in scholarly actions due to feelings of inferiority, lack of time, lack of professional support, and lack of monetary support. These findings in the literature suggest that engagement in SoT depends on institutional planning, from developing missions that emphasize scholarship to outlining job duties that include scholarly actions.

The existing body of literature on the topic of *scholarship* also chronicles efforts by educators and researchers to engage in and provide clarity regarding SoT as one of the primary types, dating back to the early 1990s when the term was first coined and shared by Ernest L. Boyer. The Carnegie Academy for the Scholarship of Teaching made the first attempt to clarify the term by defining it as “problem posing about an issue of teaching or learning, study of the problem through methods appropriate to disciplinary epistemologies, application of results, reflection, and peer review” (Vaughan, 1991, p. 11). Based on the fact that scholars still grapple to understand the core meaning of the concept of SoT, the initial attempt to define the term was unsuccessful. Moreover, each of the subsequent attempts to clearly define the term has proven to be futile.

In the same year that the term was introduced in *Scholarship Reconsidered* Bender and Gray (1999) defined SoT as involving a level of critical thought by faculty

members analogous to that required for conducting traditional research. However, their definition did not include the delineation of the specific actions associated with SoT. Kreber (2001a) defined it in terms of comparison, detailing how it differs from excellent teaching. Her definition offered neither a technical meaning of SoT nor the specific actions associated with it. Theall and Centra (2001), unlike Bender and Gray (1999) and Kreber (2001a) did identify specific actions that constitute SoT, but they offered no concrete meaning of the term. Braxton (2008) offered one of the more detailed definitions of the term by noting what SoT *looks like* in action and stating the goals of those actions. Clearly, neither of the definitions of SoT provided by some of the key scholars in the field has been comprehensive enough to result in absolute clarity of the meaning of the concept. This is problematic and made creating an operational definition for the term and a research instrument for this study a significant challenge.

Despite the futility of efforts to provide a clear definition for SoT, researchers have explored the topic from various angles. As previously detailed in this section, some have chosen to seek answers regarding SoT from a practical angle, while others have chosen to conduct what is typically identified as traditional research. Duffy's (2006) publication that chronicles engagement in scholarly activities at a single community college—Middlesex Community College, Bernstein and Bass's (2005) publication that outlines their projects involving faculty members at several institutions, and Kelly Kleese's (2003) study in which she conducted interviews to assess the views of faculty members at an anonymous institution regarding the meaning of *scholarship* all serve as examples of the variety of practical endeavors to examine the engagement in scholarship engagement at community colleges. Mahaffey and Welsh's (1993) study in which they

survey and interview faculty members at a single institution, Midlands Technical College in South Carolina, is the one example of traditional research on the topic of engagement in SoT at the community college level.

Regardless of the method of exploration that educators and researchers have invoked when investigating the topic of engagement in SoT, a review of literature on the topic suggests that there is still much room for additional research. Along with the need for more studies, there is a need for administrators and faculty members to perceive SoT as an important concept and to embrace the knowledge generated as a result of such studies. The study outlined in the subsequent chapters is an effort to address those needs.

CHAPTER III

METHODOLOGY

Overview

This study is an addition to the limited collection of studies on the topic of engagement in SoT by full-time faculty members at community colleges. A review of the existing literature and the personal interest of the researcher regarding the actions of community college faculty members served as impetus for this research endeavor. A similar study, conducted by Mahaffey and Welsh (1993), also served to motivate the researcher.

The primary goal of this study was to determine if engagement in SoT by full-time community college faculty members has a relationship with level of teaching satisfaction and amount of institutional service. The results may help to inform the decisions made by faculty members and administrators regarding future engagement in SoT at community colleges. Included in this section are details of the participants, instrument, design, procedure, and analysis concerning the study.

This was a quantitative study involving SoT as the independent variable and teaching satisfaction and institutional service as dependent variables. The researcher used the survey method to gather information that was analyzed in order to ultimately provide answers to two primary research questions: 1) Is there a relationship between engagement in SoT and the teaching satisfaction of full-time community college faculty members? and 2) Is there a relationship between engagement in SoT and the institutional service of full-time community college faculty members? In addition to using the data to answer these primary questions, the researcher used regression analysis to determine which types

of institutional service seem to be predictors of level of teaching satisfaction and if the educational level of full-time community college faculty members is a predictor of institutional service. Responses to the survey instrument's questions may be a valuable contribution to the field of higher education.

Participants

The researcher collected data from full-time faculty members working at community colleges throughout the United States. Full-time faculty members were targeted because, at community colleges, their primary responsibility is providing instruction for students enrolled in their courses each semester (Cohen & Brawer, 2008). This type of constant, direct contact with students and continuous focus on pedagogy provides these faculty members with numerous opportunities for engagement in SoT. The researcher used convenience sampling in an effort to acquire a sufficient sample of the desired population. The goal, determined by using G Power 3.0 software, was to collect responses from at least 135 participants. However, after two carefully planned attempts to secure participants, the researcher received questionnaires back from only 52 full-time community college faculty members, only 39 of which were fully completed. Four of the respondents indicated that they were not full-time faculty members, a key requirement for completing the survey. Seven of the 52 who returned the questionnaire were unable to complete it because, although employed as full-time faculty members, they had not been working in that capacity for at least three years, another prerequisite for completion. Two respondents did not give their consent to participate in the study.

In order to access members of the target population, the researcher used the e-mail addresses of professional associates employed at various community colleges throughout

the United States and obtained additional e-mail addresses from the official websites of the institutions where the researcher's professional associates are employed.

Survey Instrument

A single online instrument, developed by the researcher and consisting of 53 items, was used to collect data from the identified participants (see Appendix A). In order to establish content validity for the survey instrument, the researcher followed the process outlined by Radhakrishna (2007), which involved researching the background of the primary construct that the questionnaire was designed to measure and developing items accordingly. A review of existing literature was conducted to determine the specific actions that constitute SoT. Based on content provided by Theall and Centra (2001), the researcher concluded that there are five primary categories into which SoT actions should be placed: conducting research, creating publications, participating in continuing education, making a presentation, and recording the specifics of an effective lesson. Thirty two of the instrument's 53 items were created based on these categories. The remaining 15 items addressed the dependent variables of the study, institutional service and teaching satisfaction. The 10 items that asked respondents to provide information about their institutional service were based on primary categories outlined by Reynolds (2004). The five items that inquired about teaching satisfaction were the same ones developed by Ho and Au (2006) in a study during which they established convergent and criterion-related validity. After determining the content of the questionnaire items based on findings in the literature, and after deciding on a format for the instrument, the researcher obtained approval from IRB and from committee professors. According to

Radhakrishna (2007), acquiring the approval of experts after following a clear procedure for instrument development validates it, making it ready for use in a research project.

To determine reliability, the researcher field tested the questionnaire by sending a link to 25 colleagues and requesting that they not only complete the questionnaire but also provide critical feedback. Radhakrishna (2007) notes that field testing an instrument by seeking responses and suggestions from a sample other than the one used in the actual study helps a researcher to determine if it is effective in gathering the desired data. Of the 25 faculty members who were sent a link during the field test, five completed the questionnaire, one of whom offered detailed suggestions. The respondent who offered subjective feedback in the form of an email was a psychology professor who commended the field testing of the instrument but also suggested that a distinction be made between action research and empirical research and that what constituted voluntary and involuntary engagement in SoT be more clearly defined. Because the respondents in the field test, including the one who offered detailed feedback, seemed to answer the questions regarding research type and voluntary and involuntary engagement with no difficulty, the researcher made the decision not to revise the items. Once data had been collected, the researcher tested reliability of the instrument by using SPSS to generate a Cronbach's alpha for each section of items. Field (2009) maintains that this is an effective and popular method to use when determining if the items on an instrument measure a concept with consistency, noting that an alpha of .7 to .8 is normally indicative of reliability. However, Field (2009) also notes that the number of items used to measure a concept can affect the reliability probability: the smaller the number of items on a measure, the lower the Cronbach's alpha and the greater the number of items, the higher

the Cronbach's alpha. Kline (1999) further notes that reliability can be affected by the type of construct being measured. In the case of instruments that are not designed to measure cognitive constructs, a Cronbach's alpha of less than .7 may be acceptable, depending on the construct being measured. For the instrument used in the current study, the items measuring SoT engagement and amount of institutional service had relatively high reliability probabilities, Cronbach's alpha = .71 and .64, respectively. The researcher accepted the five items measuring teaching satisfaction as reliable based on Ho and Au's (2006) report of Cronbach's alpha = .77.

The majority of the items on the data collection tool were categorized according to the various facets of engagement in SoT, identified by the researcher during validation of the instrument. In terms of question type, those soliciting responses regarding engagement in SoT and performance of institutional service were of the "Yes/No" variety. Items that asked participants about their teaching satisfaction were of the Likert type. With the exception of two items concerning teaching demographics at the beginning of the questionnaire, no open-ended questions were included.

The respondents were asked to indicate the frequency with which they had engaged in specific SoT actions in the past three years. To determine the level of engagement for each participant, the researcher focused on the total frequency for items 7-38 and developed a scale with a frequency of "0" indicating *no engagement*, 1-32 indicating *low engagement*, 33-64 indicating *moderate engagement*, and 64 or more indicating *high engagement*.

Regarding institutional service, like engagement in SoT, the researcher was interested in the total frequency for each participant within a three-year time frame.

Service to the institution in a community college setting includes such voluntary or involuntary actions as mentoring a colleague or student, sponsoring a club or organization, serving on a departmental or campus-wide committee, advising students, or assisting with a campus or community event (Reynolds, 2004). A scale similar to the one used to identify level of engagement in SoT was used to determine amount of institutional service for each participant in the study: a frequency of 0 suggested *no institutional service*, a frequency of 1-15 suggested *low institutional service*, a frequency of 16-30 suggested *moderate institutional service*, and a frequency of 31 or greater suggested *high institutional service*. In addition, the researcher was interested in the types of institutional service performed by each participant, with the goal of determining if specific types of service to an institution were predictors of teaching satisfaction.

The items on the questionnaire that inquired about teaching satisfaction were the only ones not developed by the researcher; they were adapted from an existing Teaching Satisfaction Scale (TSS) developed by Ho and Au (2006) and were scored in the manner outlined in the researchers' original study. Specifically, a participant's level of teaching satisfaction was determined by an overall score, ranging from 5 to 25, and based on responses to questions with choices on a Likert-type scale (1-strongly disagree to 5-strongly agree). The lower a participant's score, the less satisfied the participant was with teaching; conversely, the higher a participant's score, the more satisfied the participant was with his or her teaching. For purposes of this study, the researcher created a scale to indicate a low, moderate, and high level of teaching satisfaction. According to the scale, a participant score ranging from 5-10 on Ho and Au's (2006) TSS was considered *low*

satisfaction, 11-16 was considered *moderate satisfaction*, and a score of 17-25 was considered *high satisfaction*.

Design

The researcher used the survey method to conduct the study. This method is commonly used by those conducting research in the field of education because it allows the researcher easy access to a representative sample of the total population. Data were collected from a sample of full-time community college faculty members at institutions throughout the United States and was used to make inferences about the total group.

A primary advantage of the survey method is that it allows the researcher to collect data from a large number of participants with minimal effort. An additional advantage is that it is typically inexpensive or cost-free when compared to other research methods, especially when the researcher elects to use the Internet as the source of distribution and collection of the questionnaire (Mesch, 2012).

Despite the clear advantages, there are also several disadvantages to employing the survey method of research. One major disadvantage is the reluctance of participants to provide truthful responses to sensitive questions for fear of having their identity exposed. Glaser (2012) notes that, "Respondents may be wary to provide researchers with information unless they have confidence that their data will remain confidential" (p. 202). Moreover, according to Fowler (2009), when participants are asked to self-report, there is a tendency to provide responses that they deem to be socially desirable, regardless of whether or not they are valid. Yet another disadvantage is the researcher's difficulty of identifying a rationale for extrapolation of the findings that result from surveying a mere sample of the targeted population. Moreover, a low response rate is often associated with

online surveys (Brubaker & Thomas, 2000). Each of these disadvantages was considered prior to conducting the survey.

Procedure

The initial step in conducting this study was to obtain the required approval from the Institutional Review Board of The University of Southern Mississippi, the institution where the researcher was enrolled as a doctoral student. Once IRB granted approval, the researcher proceeded with conducting the study. Initially, an e-mail correspondence was sent to 150 full-time community college faculty members at institutions in various states. As a part of the message sent out to the potential participants, the researcher conveyed an assurance of anonymity by providing an informed consent form and established a deadline for completing the online questionnaire. Based on the completion rate after three weeks, the researcher sent out a reminder to participants, requesting that they complete the questionnaire by the previously established deadline. Because the response rate within two weeks of the first reminder only increased slightly, the researcher sent out a second reminder. One week after the second reminder, the researcher issued a third and final reminder to participants in order to obtain additional responses. Within 14 days of sending out the final reminder to the first group of potential participants, the researcher sent out 100 e-mails to a second group of colleagues, seeking participation in the survey.

Qualtrics, a robust online survey management system, was used to keep track of the data obtained from the participants. The information collected was secured with the researcher's unique institutional user name and password. The researcher used this information to gain initial and subsequent access to the system. When data collection was

completed, the researcher downloaded the data from Qualtrics into Statistical Package for the Social Sciences [SPSS Version 22], and conducted an appropriate analysis.

Analysis

To examine the data, the researcher used regression analysis. Field (2009) and Kaltenbach (2012) explain that, with regression, an outcome variable is predicted from one or more predictor variables. When an analysis involves one predictor variable and one outcome variable, simple regression is being utilized. When an analysis involves more than one variable predicting a single outcome variable, it is referred to as multiple regression. Kaltenbach (2012) notes that when using linear regression, whether simple or multiple, variable types must be metric or categorical.

For purposes of this study, the researcher chose simple regression, considering there was one predictor variable and one outcome variable per research question. For the first primary research question, the predictor variable was SoT, with *teaching satisfaction* as the outcome variable. Finding an answer to the second primary research question involved an analysis with SoT as the predictor variable and *institutional service* as the outcome variable. Conducting these analyses illustrated if, and to what extent, each predictor variable was related to each outcome variable. The researcher also used regression to answer the secondary research questions: 1) To what extent do various types of institutional service predict teaching satisfaction? and 2) To what extent does educational level predict institutional service?

CHAPTER IV

ANALYSIS OF DATA

Community Colleges are unique postsecondary institutions in that their primary mission is to provide open access to students and to provide them with optimal instruction once they are enrolled. Consequently, the dominant focus of those employed as full-time faculty members at these two-year institutions is teaching. Engagement in scholarly activities is not required and may not be valued. Therefore, one might inquire as to whether individual faculty members or entire institutions benefit from scholarly actions that are performed in addition to teaching, actions that constitute what Boyer (1990) identified as *scholarship of teaching* (SoT).

The purpose of this study was to determine if engagement in SoT has a relationship with the level of teaching satisfaction and the amount of institutional service of full-time community college faculty members teaching at institutions throughout the United States. The researcher also sought to determine if type of institutional service is a predictor of teaching satisfaction level and if educational level is a predictor of amount of institutional service. Mahaffey and Welsh (1993) conducted a similar study to determine if there was a positive relationship between engagement in scholarly activities and the vitality of community college faculty members. However, participants in their study were limited to one institution, Midlands Technical College in South Carolina. The educators shared their findings three years after conducting the study in “Scholarship and the Vitality of Community College Faculty Members,” noting that those who were identified as teacher-scholars, based on their engagement in and recognition for scholarly activities, self-reported greater vitality.

The initial goal of the survey conducted as part of the current study was to collect questionnaires from full-time community college faculty members representing institutions throughout the United States and to use their responses to answer the research questions. Responses were solicited via e-mail over the course of eight weeks from 250 colleagues, representing 44 different institutions and constituting two separate sample pools. Fifty two participants accepted the invitation to take part in the survey and of those 52, 39 actually completed the questionnaire. Ultimately, seventeen states from various regions of the country were represented: Alabama, Alaska, Arizona, Arkansas, Florida, Illinois, Louisiana, Maryland, Mississippi, Nevada, New York, North Carolina, North Dakota Oregon, South Carolina, Tennessee, and Texas. The researcher accepted the acquired sample and proceeded with the study, basing the decision on knowledge that online surveys typically result in a low response rate and an awareness of the central limit theorem, which states that a sample size of at least 30 for a given population in a study can be trusted to meet the assumption of normality (Field, 2009, p. 156).

Although doing so did not provide answers to the primary and secondary research questions, the researcher analyzed the respondents' demographics. The survey respondents provided demographic information concerning gender, ethnicity, years of experience, academic discipline, years of experience in academic discipline, and educational level. All who completed a questionnaire provided their gender, and of those, 59% were female and 41% were male. Of the 38 respondents who provided their ethnicity, 78% were Caucasian, 13% were African American, 3% were Asian American, 3% were Latin American and 3% identified as "other." One respondent did not indicate ethnicity. In terms of overall teaching experience, 79% had 11 or more years, 13% had 7-

10 years, and 8% had 3-6 years. When responding to the question of how much experience they had in their current discipline, participants provided the following information: 72% had 11 or more years, 15% had 7-10 years, and 13% had 3-4 years.

As indicated by Table 1 below, the survey participants represented a variety of academic disciplines. Biology (13%), English (13%), History (10%), and Communication (8%) were most frequently represented. Reported educational levels were as follows: Thirty six percent as having a Master's degree, 15% as having a Master's degree plus 30 or more hours of graduate work, 38% as having a Doctor of Philosophy (PhD), 3% as having a Jurist Doctorate (JD), 5% as having a Doctorate of Education (EdD), and 3% as having an Educational Specialist (EdS).

Table 1

Current Discipline/Field of Study

Academic Discipline	Frequency
Art	2
Astronomy	1
Biology	5
Business Technology	1
Chemistry	1

Table 1 (continued).

Communication	3
Computer	2
Criminal Justice	1
English	5
Exercise Science	1
Fine Art	1
Foreign Languages	1
History	4
HVAC/R	1
Law and Ethics	1
Maternal-Child	1
Natural Science	1
Philosophy	1
Practical Nursing	1
Psychology	2
Sociology	2
Study Skills	1
Total	39

Two primary research questions were addressed within the current study: 1) Is there a relationship between engagement in the *scholarship of teaching* and the teaching satisfaction of full-time community college faculty members? and 2) Is there a relationship between engagement in the *scholarship of teaching* and the institutional service of full-time community college faculty members? Additionally, two secondary research questions were addressed: 1) To what extent do various types of institutional service predict teaching satisfaction? and 2) To what extent does educational level predict institutional service.

Prior to performing the analysis designed to answer each research question, it was necessary to satisfy several basic assumptions: normality of the error distribution, the presence of linearity, and homogeneity of variance (Field, 2009; Kaltenbach, 2012). Meeting these assumptions, according to Field (2009), increases the probability that the findings based on data from a sample are representative of findings that would be based on data from the population.

To test the assumption of a normal distribution of error among data points, the researcher generated histograms. As seen in Figures 1 and 2 below, the assumption of normality was met for SoT level of engagement and teaching satisfaction, but not for SoT level of engagement and institutional service. The researcher adjusted for normality by removing outliers with a Cook's distance probability greater than .01

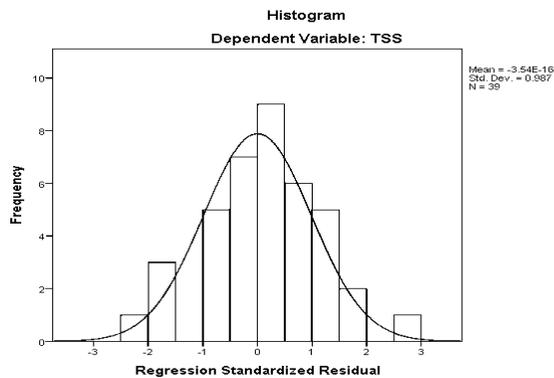


Figure 1. Histogram: Normal Distribution of SoT Level and Teaching Satisfaction Score.

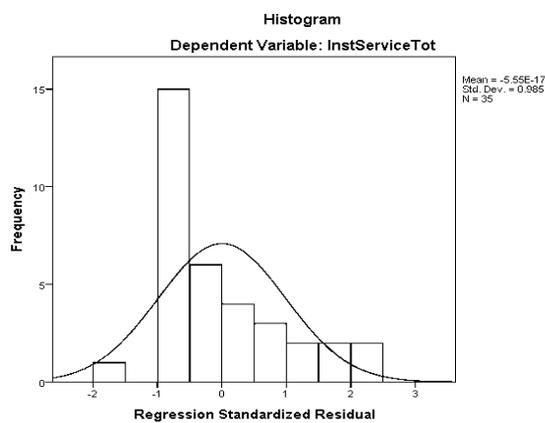


Figure 2. Histogram: Normal Distribution of SoT Level and Institutional Service.

After the test for normality resulted in the removal of outliers, linearity was then determined via the creation of QQ plots for each variable. The visual positioning of actual values, as related to predicted values was observed, and the models for all variables were found to be linear. (See Figures 3-5)

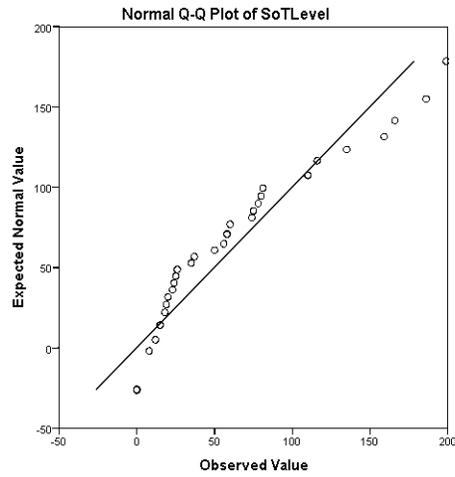


Figure 3. QQ Plot of SoT Level.

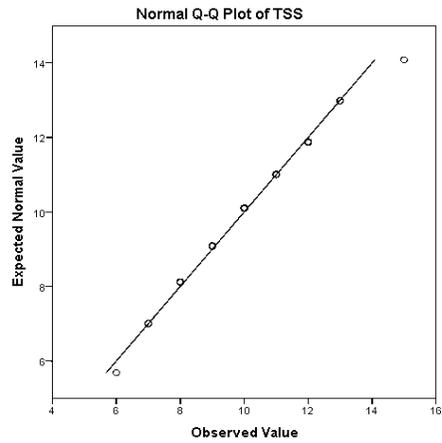


Figure 4. Q-Q Plot of Teaching Satisfaction Scores.

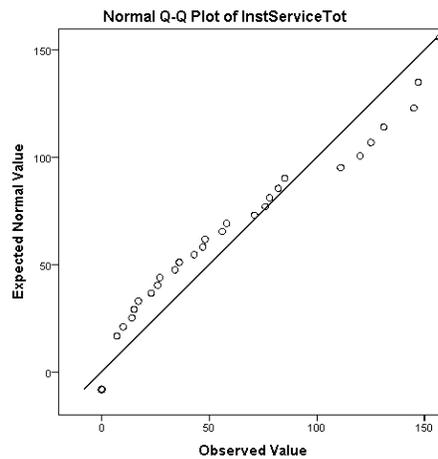


Figure 5. Q-Q Plot of Institutional Service.

Testing for the assumption of homogeneity of variance was accomplished by generating and observing scatter plots of the standardized predicted values as compared to the standardized residual values for each of the models. According to Field (2009), scatter plots with data points that are “randomly and evenly dispersed throughout the plot” are indicative of homogeneity of variance (p. 247). Figures 6 and 7 below indicate that the assumption of homogeneity of variance has been met.

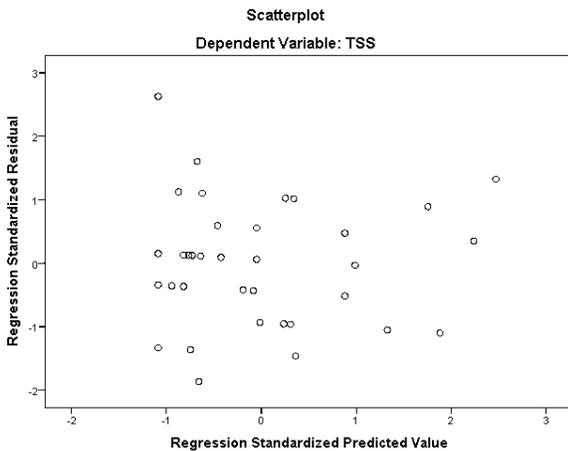


Figure 6. Test for Homogeneity of Variance: SoT and Teaching Satisfaction Scores.

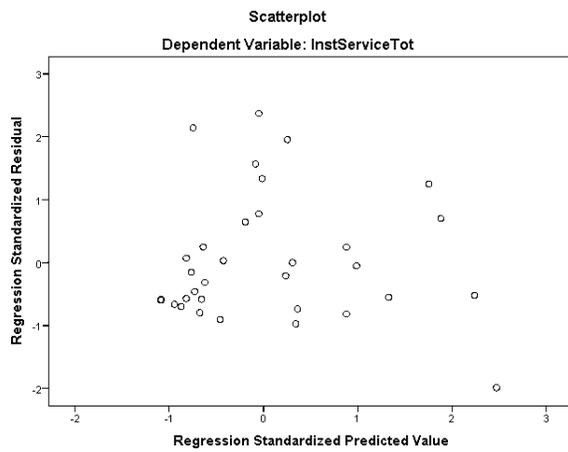


Figure 7. Test for Homogeneity of Variance: SoT and Institutional Service.

To answer the primary research questions, the researcher conducted two linear regression analyses with SoT serving as the independent variable and teaching satisfaction and institutional service serving as the dependent variables, respectively. Regression analysis yielded a Pearson's Product-Moment Correlation Coefficient, which revealed the relationship between the variables of interest. This coefficient, typically referred to as Pearson r , was an actual value between -1 and + 1 and suggested the strength of the correlation between the two sets of variables (Field, 2009). In the case of this study, a value near -1 indicated a strong negative relationship, a value near +1 indicated a strong positive relationship, and a value of 0 indicated no relationship between SoT and teaching satisfaction and between SoT and institutional service. A confidence interval of .95 was established for use during the analyses. A Pearson's r of $p < .05$ was considered to be indicative of a significant relationship between variables, while a Pearson's r with a reliability probability of $p > .05$ was perceived as indicating a relationship between variables that was not significant.

To answer the sub questions regarding which, if any, types of institutional service predict teaching satisfaction and whether or not educational level is a predictor of institutional service, the researcher also used regression. A confidence interval of .95 was established to test both questions. An act of institutional service at a probability level less than .05 suggested that it was a significant predictor of a faculty member's teaching satisfaction level. Likewise, a probability level less than .05 was considered significant when determining the predictability of educational level regarding institutional service.

Results

Primary Research Question One. Regarding the answer to the question of whether or not there is a relationship between engagement in SoT and the teaching satisfaction of full-time community college faculty members, the Pearson r generated from the regression analysis indicated that there was no statistically significant relationship between engagement in SoT and level of teaching satisfaction, $r = .09$; $p > .05$. Although the value of the relationship between the two variables was not statistically significant, it was weakly positive, suggesting that, for the sample, an increase in engagement in SoT by a faculty member resulted in an increase in teaching satisfaction. (See Table 2 below)

Table 2

SoT Level of Engagement/ TSS Model Summary

Model 1	B	β	R	R^2	t	p
Regression	.00	.09	.09	.01	.52	.61

a. Independent Variable: Engagement in SoT

b. Dependent Variable: Teaching Satisfaction Score

Primary Research Question Two. Regarding the answer to the question of whether or not there is a relationship between engagement in SoT and the institutional service of full-time community college faculty members, the r value shown in Table 3 below indicated that there was a statistically significant relationship between engagement in SoT and amount of institutional service, $r = .45$; $p < .05$. In addition to being statistically significant, the nature of the relationship between engagement in SoT and

institutional service was also quite positive, indicating that, for the sample, an increase in engagement in SoT by a faculty member resulted in an increase in institutional service.

(See Table 3 below).

Table 3

SoT Level of Engagement/ Institutional Service Model Summary

Model 1	B	β	R	R ₂	<i>t</i>	<i>p</i>
Regression	.40	.45	.45	.20	2.9	.01

Table 3 (continued).

a. Independent Variable: Engagement in SoT

b. Dependent Variable: Institutional Service

Secondary Research Question One. Table 4 illustrates the predictive value of various types of institutional service on teaching satisfaction level. Results indicated that neither type of institutional service was a statistically significant predictor of level of teaching satisfaction. However, of the types of institutional service reported by respondents, serving as an educational advisor was the most statistically significant predictor, $b = -.26$, $t (-1.25) = .23$, $p > .05$, and serving as a mentor to a colleague outside of the department was the least statistically significant predictor of teaching satisfaction level. $b = -.01$, $t (.05) = .96$, $p > .05$. Regarding types of institutional service explaining teaching satisfaction scores for faculty members, serving on an institutional-wide committee member accounted for the most amount of variance, $R^2 = .09$, $t (-.55) = .59$, $p > .05$.

Table 4

Type of Institutional Service/TSS Model Summary

39. Mentor Inside Dept.	.06	.10	-.03	.00	.32	.75
40. Mentor Outside Dept.	-.00	-.01	-.01	.00	.05	.96
41. Formal Mentor to Student	.02	.07	.15	.02	.19	.85
42. Informal Mentor to Student	.04	.35	.16	.03	1.14	.27
43. Club Sponsor	-.07	-.17	-.23	.05	-.71	.48
44. Committee Member in Dept.	-.02	-.03	-.26	.07	-.10	.92
45. Committee Member at Institution	-.07	-.15	-.30	.09	-.55	.59
46. Educational Advisor	-.02	-.26	-.27	.07	-1.25	.23
47. Assistance with Campus Event	-.10	-.23	-.10	.01	-.79	.44
48. Assistance with Community Event	-.01	-.03	-.01	.00	-.11	.92

Table 4 (continued).

Predictors: Mentor Inside Dept.; Mentor Outside Dept.; Formal Mentor to Student; Informal Mentor to Student; Club Sponsor, Committee Member in Dept.; Committee Member at Institution; Educational Advisor; Assistance with Campus Event; Assistance with Community Event

Secondary Research Question Two. Table 5 illustrates the predictive value of educational level on institutional service. Results of the analysis suggest that type of degree held was not a statistically significant predictor of amount of institutional service, $b = .12$, $t (.72) = .47$, $p > .05$. In addition, educational level only accounted for a very small amount of the variance in amount of institutional service, $R^2 = .01$, $t (.72) = .47$, $p > .05$.

Table 5

Educational Level/Institutional Service Model Summary

Variable	B	β	R	R^2	t	p
Educational Level	12.68	.12	.12	.01	.72	.47

Predictor: Educational Level

CHAPTER V

DISCUSSION

The primary responsibility of college and university employees is to use knowledge obtained from research, collegial interaction, and experience to improve instruction so that it benefits student learning. To accept this responsibility is, for most educators, to engage in *scholarship*. However, for the administrators who are charged with the task of determining and evaluating engagement in scholarly activities, and for those with a desire or obligation to engage in such actions, identifying what constitutes scholarship can be problematic. This is especially the case with SoT. Of the four primary types outlined by Boyer (1990) in *Scholarship Reconsidered*, this type of scholarship continues to be the greatest enigma, even despite attempts by Boyer (1990) and several others (Glassick et al., 1997; Metzler, 1994; Rice, 2002), writing in the decades since, to distinctly delineate the actions, standards, and assessment strategies related to the concept. Others have attempted to bring clarity to the concept of SoT through research endeavors.

Conclusions

In keeping with past scholarly efforts that have explored SoT through research, this study involved identification of actions such as conducting research, creating publications, participating in continuing education, making presentations, and documenting and sharing pedagogical techniques. Theall and Centra (2001) note that these actions are reflective of scholarship. In addition, this study involved an examination of a specific population regarding engagement in SoT and was a unique endeavor, considering that only Mahaffey and Welsh (1993) had explored engagement in SoT by community college faculty members. Comparatively, their study featured only faculty

members employed at one institution, whereas the study detailed here sought representation from full-time faculty members at 44 institutions in various states throughout the country. Moreover, the Mahaffey and Welsh (1993) study sought to determine if engagement in scholarly activities at the community college level seemed to determine faculty members' vitality. No effort was made during their study to determine if engagement in SoT had a relationship with teaching satisfaction or with institutional service. The researcher in the current study made the decision to explore the relationship of SoT engagement to teaching satisfaction and institutional service based on personal experience as a community college faculty member and on Reynolds's (2004) assertions that taking part in scholarly actions ultimately results in personal job satisfaction and service to one's institution.

Based on the results of the analysis for the first primary research question, the researcher concluded that, for the sample used in this study, engagement in SoT by the full-time community college faculty members shared no statistically significant relationship with level of teaching satisfaction. This was in keeping with neither the researcher's initial assumption nor the suggestion by Reynolds (2004) that engagement in SoT leads to a feeling of greater professionalism, which results in increased satisfaction. The results also offer no support for Cohen and Brawer's (2008) declaration that teaching satisfaction at the community college level, especially as compared to the university level, is the product of participation in professional development activities. In fact, of all the participants in the study, none reported having both a high level of engagement in SoT and a high level of teaching satisfaction, and only eight reported having both a

moderate or high level of engagement in SoT associated with a moderate or high level of teaching satisfaction.

The results of the analysis for the second primary research question led the researcher to conclude that although engagement in SoT by the respondents did not share a statistically significant relationship with their teaching satisfaction, it did share a statistically significant relationship with their amount of institutional service. Of those who took part in the study, nine reported having both a high level of engagement in SoT and a high amount of institutional service and 18 reported having both a moderate or high level of engagement in SoT and a moderate or high amount of institutional service.

Based on the data from this study, faculty members who are grappling with the decision of whether or not to engage in SoT might question the personal benefit associated with doing so. Also, community college administrators who must decide if engagement in SoT has institutional benefits may choose to reference the findings of this study during the decision making process.

The researcher further concluded that type of institutional service was not a statistically significant predictor of level of teaching satisfaction for the full-time community college faculty members who took part in the study. The researcher identified and sought responses regarding five types of institutional service: serving as a mentor, sponsoring a student club or organization, serving on a committee, serving as an educational advisor, or assisting with a campus or community event. The data indicated that while neither of the types of institutional service was a statistically significant predictor of teaching satisfaction, serving as an educational advisor was the most

statistically significant predictor and serving as a mentor to a faculty member outside of one's department was the least statistically significant predictor.

Moreover, the findings indicated that educational level was not a statistically significant predictor of institutional service, which raises the question of whether or not continuing education in pursuit of an advanced or terminal graduate degree is a worthwhile endeavor. This question is an especially important one for community colleges, where the vast majority of full-time faculties hold only a master's degree and any degree past the master's level is a prerequisite for neither initial nor continued employment. This result caused the researcher to conclude that Cohen and Brawer's (2008) claim of the doctorate being non-desirable at the community college level may have merit. Their explanation for the claim being that those holding the doctorate degree have been more trained in the area of research than instruction and may be inclined to spend more time on research endeavors than on instructional tasks. At community colleges, where the primary mission is teaching, time spent by faculty members conducting research would likely take away from time that could be spent improving instruction.

The data indicated that participants took part in activities designed to help them improve their instruction at a higher frequency than they took part in either traditional or action research. Specifically, more than half of the participants in the study indicated that they had not conducted any type of research within the past three years.

Finally, of the types of engagement in SoT, participants reported taking part in face-to-face workshops at a higher frequency than any of the others and creating individual or collaborative publications at a lower frequency than any of the others. These

findings confirm the declaration by Cohen and Brawer (2008) that at community colleges, great value is placed on instruction and efforts to improve it through such actions as developing and modifying courses and building and monitoring curricula; publications are typically neither required nor valued. All but seven of those who took part in this study reported engaging in the SoT actions of creating, recording, and sharing the materials, procedures, and assessments of a successful lesson at least once within a three-year time frame. More than half indicated that they had done so more than three times.

Recommendations

Due to the limited number of studies that have been conducted on the topic of engagement in SoT at the community college level, the researcher offers several recommendations. To begin, a study that focuses on engagement in SoT by part-time faculty members at community colleges might prove to be quite useful. Cohen and Brawer (2008) note that part-time instructors make up a significant portion of the overall faculty at community colleges. Dedman and Pearch (2004) note that, over the past 30 years, the number of adjuncts has doubled; he cites several potential reasons for this increase. For one, part-time faculty members are willing to teach courses that full-time faculty members cannot teach or do not want to teach. Also, they are willing to teach courses for far less than it would cost to pay a full-time instructor to teach the same course. Furthermore, adjunct faculty do not receive benefits, saving the institution money overall. Along with providing potential reasons for the large number of part-time faculty, Pearch (2004) explains that adjuncts are provided no support for professional development endeavors and are often isolated from full-time faculty members and from

the institutions where they work, sometimes because of their work schedules. Part-time faculty members represent a contradiction. On the one hand, they are vital to the success of colleges, and on the other hand, they are considered to be expendable labor, likened by the author to migrant workers who are employed on an as-needed basis and often on short notice. Thus, the extent to which they engage or fall short of engaging in SoT and the relationship of their engagement or lack of engagement to various facets of the community college environment may serve as a source of enlightenment to administrators.

The researcher further recommends that future research be directed toward how full-time community college faculty members are affected by engagement or the lack of engagement in SoT by their peers. This would be a logical path of exploration, considering that some of the actions that constitute SoT, such as creating publications, making presentations, and sharing pedagogical technique involve some level of interaction with colleagues.

In addition to focusing on part-time faculty and collegial interaction, researchers might consider designing a study to determine if gender shares a relationship with engagement in SoT. This recommendation is based on the data from the current study which revealed that 59% of the respondents were female and 41% were male. Similarly, researchers who focus on the topic of engagement in SoT in the future may think about exploring its relationship to ethnicity. Data from this study reflected that 78% of the respondents were Caucasian, 13% were African American, 3% were Asian American, 3% were Latin American, and 3% were some other ethnicity.

Other areas of research based on demographics might include taking a look at whether the subject area taught by a full-time community college faculty member is a predictor of engagement in SoT. A researcher might also consider designing a study to determine if years of teaching experience either correlates with or is a predictor of engagement in SoT. The data from the current study regarding the participants' overall teaching experience were as follows: 79% had 11 or more years, 13% had 7-10 years, and 8% had 3-6 years.

Along with recommendations for future studies that focus on engagement in SoT by community college faculty members, the researcher also suggests focusing on other educational environments and other populations regarding the topic of SoT. An ideal environment would be teacher education programs at various institutions and those responsible for developing future faculty members would be an ideal population to target during research. One recommendation would be to conduct a study to determine the attitudes of faculty and administrators in teacher education graduate programs concerning courses that include information about SoT. A survey study might prove useful in collecting such information. This recommendation is based on Kreber's (2001b) suggestion that more emphasis be placed on faculty development regarding SoT engagement.

Another recommendation for research involving teacher education programs is to conduct a study to determine which types of courses might be effective in helping future faculty members to understand the concept of SoT and its associated actions. A Delphi study involving faculty who teach in teacher education programs might yield information that would prove beneficial to a researcher. A Delphi study might work well, as opposed

to a typical survey, because it would allow faculty members to offer unprompted ideas about courses that might be successful in conveying knowledge about SoT and SoT engagement, ultimately leading to specific course development involving SoT.

A further recommendation for future research on the topic of SoT is to conduct action research at the Ernest L. Boyer Center located on the campus of Messiah College in Pennsylvania. Conducting an action research study at this center would place a researcher in the sole environment that contains the primary materials of the educator and scholar who coined the term SoT and introduced it to those in the world of education and beyond. The Boyer Center contains materials that include “manuscripts, audio and visual materials, correspondence, records of appointments, and other artifacts” that document the work of Ernest L. Boyer, a pioneer in American education (Boyer Center). Results of such a study would likely be of great value in the field of education. An extension of research in this area would be to conduct a study to determine if having direct access to the Ernest L. Boyer Teaching and Learning Center results in a higher frequency of engagement in SoT by faculty members at Messiah College as compared to faculty members at nearby community colleges.

Finally, the researcher recommends conducting a survey involving Middlesex Community College, Holyoke Community College, Northern Essex Community College in Massachusetts and Iowa Western Community College in Iowa to determine if and to what extent their faculty members are still engaging in SoTL overall and SoT, specifically. The results of such a study would add valuable information to the body of research on *scholarship* in terms of assessing continued interest in the topic over time. These community colleges were part of a collection of 12 institutions that made up

Communities of Practice: Pooling Educational Resources (COPPER), a cluster group of colleges formed in the late 1990s to early 2000s for the purpose of creating communities that focused on pedagogical practices related to SoTL. However, a researcher choosing to conduct such a study would need to keep in mind that Fitchburg State college, Pine Manor College, Salem State College, and Valencia State College (formerly Valencia Community College), although originally included in COPPER, would not be included in a follow up study that focused on engagement in scholarship at the community college level due to their differing missions.

Summary

Due to the nature of their roles, as defined by Cohen and Brawer (2008), and the primary missions of the institutions where they are employed, full-time community college faculty members inevitably engage in various forms of *scholarship* on a daily basis. However, the fact that their primary responsibility is instruction begs the question of whether or not they are engaging in SoT, as defined by Boyer (1990), and the impact of that engagement. It is a question that teachers ponder personally, and it is one that is often put forth by those who supervise instruction and make institutional decisions. Like the answers to many of the questions posed in the field of education, answers can often be found in various publications. Therefore, the study and associated findings detailed here, regarding engagement in SoT at the community college level, add much-needed detail to the existing body of literature.

Although SoT remains an elusive term, it is an important concept because it encourages faculty members to look more closely at their pedagogical actions and challenges administrators to determine if those actions are merely examples of good

teaching or if they are forms of SoT. If the actions are considered to be engagement in SoT, they may be indicative of how valuable individual faculty members are to the institution as a whole.

APPENDIX A

IRB PROPOSAL

Statement of Project Goals

The goal of this study is to determine if there is a relationship between engagement in the *scholarship of teaching* (SoT) and the teaching satisfaction and institutional service of full-time community college faculty members.

Protocol

a. Procedures

The researcher will make use of the survey research method. Prior to distributing the actual questionnaire, it will be pretested by sending it to 25 colleagues at community colleges in neighboring states. They will be asked to offer feedback regarding the basic content and overall design of the instrument from a respondent's perspective, and the researcher will use their feedback to make necessary adjustments. The researcher will proceed with the planned analysis of the data if at least 100 completed survey instruments are received.

Qualtrics, a survey management system subscribed to by the College of Education and Psychology, will be used to keep track of the data obtained from the participants. When data collection is completed, the researcher will download the data from Qualtrics into Statistical Package for the Social Sciences [SPSS Version 20], and conduct a simple regression analysis. After all data has been collected and analyzed the original questionnaires will be deleted from their online location. However, the researcher may present the results of the study in the form of conference presentations or published articles.

b. Number and Age Range of Sample

Participants will be sought from community colleges throughout the United States and will likely vary in subject area concentration, acquired experience, degree level, ethnic background, racial background, and gender. The researcher will use the institutional e-mail addresses of professional associates and the email addresses of their colleagues, which will be obtained from the official websites of the institutions where the researcher's professional associates are employed to gain access to a sample of the targeted population.

c. Population

Potential participants will include full-time community colleges faculty members over the age of 18 who hold at least a Master's degree in a specific subject area and teach four or five classes of freshman and/or sophomore students each semester at two-year institutions where the Associate of Arts and Associate of Science are the highest degrees awarded.

d. Time

The study will be conducted over the course of six weeks and completion of individual questionnaires will require approximately 30 minutes.

e. Location

The survey will be conducted online. Potential participants will gain access to an informed consent document and the questionnaire by way of a link received in the body of an email. Included in the body of the e-mail message will be a brief introductory statement, including a definition of the *scholarship of teaching* (SoT).

f. Data Gathering Tool

A single online instrument titled “Engagement in the Scholarship of Teaching Community College Faculty,” consisting of 53 items, will be used to collect responses from the identified participants. With the exception of items 49-53, the items were developed by the researcher and are primarily closed-ended; five ask participants to choose from a Likert-type scale. Only two items, included in the demographics section, are open-ended.

g. Special Situations

N/A

h. Collection in Class

N/A

i. Approval Letters

N/A

Benefits

While no direct benefits are anticipated for the survey respondents, responding to the items on the questionnaire will provide them with the benefit of structured reflection regarding their teaching. The researcher will benefit from the survey by reaching conclusions based on the data, thus adding to her personal knowledge on the topic of the *scholarship of teaching*. Likewise, other educators will benefit from the information added to the overall body of knowledge on the topic, as a result of the study.

Risks**a. Possible Risks**

The researcher does not anticipate any physical, psychological, or social risks that could result from taking part in this survey. The only inconvenience that individual participants may experience is the loss of time while completing the data collection instrument.

b. Maintaining Confidentiality/anonymity

Participation will be strictly voluntary and the identity of participants will remain anonymous. To accomplish anonymity for each participant, the researcher will assign an individual number to each completed questionnaire, as opposed to an actual name.

c. Data Storage

The completed questionnaires will be stored in a cyber-location via Qualtrics and secured with the researcher's unique institutional user name and password. After being downloaded to SPSS, the data will be stored on the researcher's laptop, and access will be secured with a personal password.

d. Data Disposition

After a period of 30 days following the established deadline, the original questionnaires will be removed from the online location.

Informed Consent

The researcher will include the informed consent form as a page in Qualtrics that will appear prior to the actual questionnaire, and participants will be required to either accept or decline informed consent in order to gain access to the actual questionnaire.

APPENDIX B
IRB APPROVAL



INSTITUTIONAL REVIEW BOARD

118 College Drive #5147 | Hattiesburg, MS 39406-0001
Phone: 601.266.6820 | Fax: 601.266.4377 | www.usm.edu/irb

NOTICE OF COMMITTEE ACTION

The project has been reviewed by The University of Southern Mississippi Institutional Review Board in accordance with Federal Drug Administration regulations (21 CFR 26, 111), Department of Health and Human Services (45 CFR Part 46), and university guidelines to ensure adherence to the following criteria:

- The risks to subjects are minimized.
- The risks to subjects are reasonable in relation to the anticipated benefits.
- The selection of subjects is equitable.
- Informed consent is adequate and appropriately documented.
- Where appropriate, the research plan makes adequate provisions for monitoring the data collected to ensure the safety of the subjects.
- Where appropriate, there are adequate provisions to protect the privacy of subjects and to maintain the confidentiality of all data.
- Appropriate additional safeguards have been included to protect vulnerable subjects.
- Any unanticipated, serious, or continuing problems encountered regarding risks to subjects must be reported immediately, but not later than 10 days following the event. This should be reported to the IRB Office via the "Adverse Effect Report Form".
- If approved, the maximum period of approval is limited to twelve months. Projects that exceed this period must submit an application for renewal or continuation.

PROTOCOL NUMBER: **13081601**
PROJECT TITLE: **Scholarship of Teaching at Community Colleges**
PROJECT TYPE: **Dissertation**
RESEARCHER(S): **Patrice Williams**
COLLEGE/DIVISION: **College of Education and Psychology**
DEPARTMENT: **Education Studies and Research**
FUNDING AGENCY/SPONSOR: **N/A**
IRB COMMITTEE ACTION: **Exempt Approval**
PERIOD OF APPROVAL: **08/21/2013 to 08/20/2014**

Lawrence A. Hosman, Ph.D.
Institutional Review Board

APPENDIX C

INFORMED CONSENT

**Engagement in the Scholarship of Teaching
Community College Faculty**

This project has been reviewed by the Human Subjects Protection Review Committee, which ensures that research projects involving human subjects follow federal regulations. Any questions or concerns about rights as a research subject should be directed to the chair of the Institutional Review Board, The University of Southern Mississippi, 118 College Drive #5147, Hattiesburg, MS 39406-0001, (601) 266-6820.

Participation in this survey will involve providing responses to an online questionnaire consisting of 53 quick-response items.

Please be informed of the following:

- It will take approximately 30 minutes to complete the questionnaire.
- Your participation is strictly voluntary.
- You will be asked to provide some demographic information.
- Your identity will remain completely anonymous. Numbers, not names, will be used to identify individual questionnaires.
- After all data has been collected and analyzed, participant questionnaires will be deleted from their online location.
- The data and associated results may be used by the researcher for presentations and publications.
- You may contact Patrice A. Williams at patrice.williams@eagles.usm.edu if you have questions related to participation in this study.

Potential Risks

There are no foreseeable risks associated with participating in this study. However, if you should experience any psychological discomfort as a result of the content of the questions, you may end participation at any time, without penalty.

Potential Benefits

Because participants will engage in personal and professional reflection while completing the questionnaire, providing responses will likely result in improved teaching.

Do you give your consent to participate in this study?

_____ Yes, I give consent

_____ No, I decline

APPENDIX D
COVER LETTER E-MAIL

Hello,

I am a doctoral student in the Higher Education Administration program at the University of Southern Mississippi. For my dissertation study, I am conducting a survey on the Scholarship of Teaching (SoT) at community colleges. SoT refers to the methodical and documented study by postsecondary faculty members of either their own teaching or the art of teaching, the results of which are used to improve personal instruction and to help peers improve their instruction. It typically involves specific actions such as conducting research, creating publications, participating in continuing education, making presentations, and recording the materials, procedures, and assessments associated with effective lessons.

My goal is to determine if there is a relationship between engagement in SoT by full-time community college faculty members and their teaching satisfaction and institutional service. By clicking on the link below, you can provide your consent to participate in this study and access a questionnaire on this topic. Providing answers to the items should take no longer than 30 minutes.

Thank you in advance for your participation.

Please provide an answer to each of the following items by selecting the button(s) associated with your desired response. In the past three years have you ...

Item		Y e s	# of times	Voluntary or Involuntary?	N o
Conducted Research					
7.	Explored a topic or phenomenon about your teaching or your students' learning by using the action research method?				
8.	Explored a topic or phenomenon about your teaching or your students' learning by using the empirical research method?				
9.	Explored a topic or phenomenon about your content area by reviewing existing literature?				
Created a Publication					
10.	Authored or co-authored a peer-reviewed article on an academic topic or on teaching or learning?				
11.	Authored or co-authored a practical article on an academic topic or on teaching or learning?				
12.	Authored or co-authored a book chapter on an academic topic or on teaching or learning?				
13.	Authored or co-authored an entire book on an academic topic or on teaching or learning?				
14.	Authored or co-authored a collection of creative items?				
Participated in Continuing Education					
15.	Attended a workshop within your department?				
16.	Participated in an online workshop within your department?				
17.	Attended a workshop at your institution?				
18.	Participated in an online workshop at your institution?				
19.	Attended a workshop or conference at the state level?				
20.	Participated in an online workshop at the state level?				
21.	Attended a workshop or conference at the national level?				
22.	Participated in an online workshop at the national level?				
23.	Attended a workshop or conference at the international level?				
24.	Participated in an online workshop at the international level?				
25.	Taken a graduate course or graduate courses in pursuit of an advanced degree?				
26.	Earned an advanced degree in your discipline while				

	serving in your current position?			
27.	Earned an advanced degree in a different discipline while serving in your current position?			
28.	Earned additional certification in your discipline while serving in your current position?			
29.	Earned additional certification in a different discipline while serving in your current position?			
30.	Served on a committee at the state level?			
31.	Served on a committee at the national level?			
32.	Served on a committee at the international level?			
	Made a Presentation			
33.	Made a presentation at the departmental level?			
34.	Made a presentation at the institutional level?			
35.	Made a presentation at the state level?			
36.	Made a presentation at the national level?			
37.	Made a presentation at the international level?			
	Recorded Specifics of an Effective Lesson			
38.	Created, recorded, and shared the materials, procedures, and assessments of a successful lesson, either individually or collaboratively?			
	Institutional Service			
39	Served as a mentor to a colleague inside your department?			
40	Served as a mentor to a colleague outside of your department?			
41	Served as a formal mentor to a student?			
42	Served as an informal mentor to a student?			
43	Served as advisor/sponsor for a student club or organization at your institution?			
44	Served on a committee at the departmental level?			
45	Served on a committee at the institutional level?			
46	Served as educational advisor for one or more students?			
47	Assisted with a campus event?			
48	Assisted with a community event on behalf of the institution?			

Please indicate the extent to which you agree with each of the following items.

49. The actual experience of being a teacher closely mirrors my ideal.

strongly agree agree disagree strongly disagree

4

3

2

1

50. I consider my teaching conditions to be excellent.

strongly agree	agree	disagree	strongly disagree
4	3	2	1

51. I am content with teaching as my profession.

strongly agree	agree	disagree	strongly disagree
4	3	2	1

52. Teaching has been fulfilling up to this point.

strongly agree	agree	disagree	strongly disagree
4	3	2	1

53. I would change my initial choice of becoming a teacher.

strongly agree	agree	disagree	strongly disagree
4	3	2	1

Thank you for taking the time to complete this questionnaire! Please press the >> button to submit your responses.

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